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Initial Study/Mitigated Negative Declaration/Initial Environmental Checklist

North Tahoe Shared-Use Trail - Segment 1

Placer County, CA

March 2022

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North Tahoe Shared-Use Trail - Segment 1

Placer County, CA

Initial Study/Mitigated Negative Declaration/Initial Environmental Checklist

Prepared for:

County of Placer

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Executive Summary

The County of Placer (County) proposes the North Tahoe Shared-Use Trail - Segment 1 Project (Project) to construct 2.52 miles of paved trail, closing an important gap in the existing active transportation network in the North Lake Tahoe region.

The Lake Tahoe Bikeway project is a core component of the regional transportation improvement strategy being led by the Tahoe Regional Planning Agency (TRPA). The intent is to balance the existing motorized transportation system with a sustainable, cost-effective, non-vehicular paved trail circumnavigating Lake Tahoe. Completion of the proposed Project is part of this vision. The Project is also a component of the Placer County Resort Triangle Trail Network, which identified the goal of connecting the three major north shore communities of Kings Beach, Tahoe City, and Truckee with a trail system. The proposed Project would provide independent utility from possible future trail segments in the North Tahoe area, connecting the North Tahoe Regional Park to the community of Carnelian Bay.

The Project would provide public access to existing recreational trails, enhance accessibility to public land, provide educational and recreational opportunities, and provide a transportation alternative for visitors and residents. Additionally, the Project would enhance safety of bicyclists and connect residential neighborhoods to commercial, tourism, and recreational facilities.

POTENTIAL IMPACTS

Based on the environmental evaluation performed for this Initial Study, the proposed Project would have:

- ***No Impact*** on Energy, Mineral Resources, Land Use and Planning, Population and Housing, and Public Services.
- ***Less Than Significant Impact*** on Air Quality, Cultural Resources, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise, Recreation, Transportation, Utilities and Service Systems, and Wildfire.
- ***Less Than Significant Impact with Mitigation Incorporated*** on Aesthetics, Agricultural and Forestry Resources, Biological Resources, Geology and Soils, and Tribal Cultural Resources.

MITIGATION MEASURES

The County has agreed to implement the following mitigation measures to reduce Project impacts to a "Less than Significant" level:

- ***Mitigation Measure AES-1***: **Incorporate Visual Impact Minimization Design Measures.**
  - Final design of the rock retaining walls shall include natural or natural-appearing wall materials, and colors consistent with the natural palette.
  - The fence railing shall be constructed from natural materials, natural-appearing materials, and colors to match existing soil/vegetation.
  - Existing boulders, groundcover, and shrubs in the trail vicinity shall be retained to ensure that the man-made linear trail will not be visually out-of-place with the adjacent landscape character.
  - Construction plan sheets shall be supplemented with additional details of building materials consistent with existing landscape.
- ***Mitigation Measure FR-1***: **Develop Timber Harvesting Plan and Secure Timberland Conversion Permit from the California Department of Forestry and Fire Protection (CAL FIRE).** The County shall comply with the Operations Requiring Conversion Permit (California Code of Regulations [CCR] § 1104) requirements for conversion of Forestland for installation of public service projects. The County shall retain a Registered Professional Forester to develop a Timber Harvesting Plan. The County shall also obtain a Timberland Conversion Permit from CAL FIRE per CCR § 1103. Tree removal shall occur along the trail corridor and be completed within 1 year of filing with CAL FIRE by a Registered Professional Forester and a Licensed Timber Operator.
- ***Mitigation Measure BIO-1:*** **Conduct Preconstruction Protocol-Level Survey for California Spotted Owl (CSO) in Home Range Core Area (HRCA).** Under the direction of the resource agency biologists, a protocol-level survey for CSO shall be conducted in the spring (i.e., March to May) prior to commencement of construction within the area of the Project boundary that overlaps with the HRCA.
  - A qualified biologist shall follow resource-agency-approved protocols and conduct protocol-level preconstruction surveys within suitable nesting habitat for California spotted owl within 0.5 miles of the Project area. Should CSO be discovered nesting within the Project area, the resource agencies shall be notified, and additional protection measures will be identified. These protection measures are intended to avoid and minimize significant effects to a nest and roosting individuals, which may include creation of a buffer zone, construction monitoring by a biologist, or similar protection measures to avoid impacts during construction activities.

- If an active nest is located, the biologist shall determine, depending on conditions specific to each nest and the relative location and rate of construction activities, if it may be feasible for construction to occur as planned without impacting the breeding effort. The resource agencies shall be consulted to determine if and when construction activities can be initiated.
- The nest(s) may be monitored by a qualified biologist during active construction, if deemed appropriate by resource agencies. If, in the professional opinion of the biologist, construction activities significantly affect the nest and roosting individuals, the biologist shall recommend additional remediation measures such as stop work action. The biologist and resource agencies will determine any additional protection measures working with the project engineer. Construction activities may be halted within the buffer until either the nest is no longer active, or the Project receives approval from the resource agencies to resume work.

- ***Mitigation Measure BIO-2:*** **Obtain and Comply with Conditions of U.S. Forest Service – Lake Tahoe Basin Management Unit (USFS-LTBMU) Special Use Permit (SUP).** Because the project will be constructed through USFS-LTBMU land, the County shall obtain an SUP from the USFS. Should the USFS-LTBMU determine additional protection measures are necessary, the SUP will outline mitigation and conservation requirements as a condition of approval. The County will be required to comply with any conditions identified within the SUP. Compliance with the SUP will ensure potential impacts will be mitigated to less than significant. Additional protection measures may include:
  - Biological monitoring during tree removal and trail construction within the HRCA
  - Identified tree protection and habitat avoidance measures
- ***Mitigation Measures BIO-3*****: Pre-Construction Avian Survey***.* If any construction activities (e.g., grubbing or grading) are scheduled during the bird nesting season (typically defined by California Department of Fish and Wildlife (CDFW) as February 1 to September 1), the County shall retain a qualified biologist to conduct a preconstruction survey of the Project area and 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 preconstruction survey shall be conducted no more than 14 days prior to the initiation of land disturbance or tree removal activities (including staging and equipment storage). Any active nest should not be disturbed until young have fledged or under the direction provided by a qualified

biologist. Any special status species shall not be disturbed without the direction of a qualified biologist. If an active nest is found during construction, disturbance shall not occur without direction from a qualified biologist.

- ***Mitigation Measures BIO-4: Avoid Vegetation Removal During Avian Breeding Season.*** Tree or shrub removal shall occur during the non-breeding season (September 1 through January 31). If it is not possible to avoid tree removal or other disturbances during the breeding season (February 1 through August 31), a qualified biologist shall conduct a pre-disturbance survey for nesting birds in all trees within the operation footprint and within 250 feet of the Project area no more than 30 days prior to the onset of ground disturbance. If nesting birds are detected on the site during the survey, a suitable activity-free buffer should be established around all active nests. The precise dimension of the buffer (up to 250 feet) would be determined in consultation with CDFW at that time and may vary depending on location and species. Buffers should remain in place for the duration of the breeding season or until it has been confirmed by a qualified biologist that all chicks have fledged and are independent of their parents.
- ***Mitigation Measure GEO-1*: Incorporate Geotechnical Study Design Criteria for Slope Stability.**

  1. Site Preparation:
     - Prior to placement of fill, the Contractor shall conduct localized deep removal of topsoil and organics (including root balls). Vegetation and organic debris shall be disposed of offsite or placed in designated non-structural areas as indicated by the *Preliminary Geotechnical Report*.
     - Removal of oversized rock (greater than 6-inches) shall be backfilled with structural fill placed and compacted to at least 90-percent relative compaction (per ASTM D1557).
     - Prior to receiving structural fills or loading, subgrade soils shall be moisture-conditioned to near optimum moisture content and compacted to not less than 90 percent of the soil's maximum density (ASTM D1557) for a maximum of 12 inches. The Contractor shall follow the additional compaction requirements of ASTM D1557 as indicated in the *Preliminary Geotechnical Report*.
     - Any fill placed on a slope steeper than 5:1 shall be keyed and benched per the 'Slope Keying Detail' provided in the *Preliminary Geotechnical Report*.

2. Grading and Filling
    - Incorporate all grading and filling recommendations from the *Preliminary Geotechnical Report*, including requirements for rock fill, structural fill, non-structural fill, and soil compaction requirements pursuant to ASTM D1557.
    - The exterior face of any embankment shall be constructed with an inclination of no steeper than 2:1. The surface of the slope shall be compacted to the same percent compaction as the body of the fill.
    - The Contractor shall conduct density testing of all fills, subgrade, and structural fill in accordance with ASTM D6938 (Standard Test Methods for In-Place Density and Water Content of Soil and Soil Aggregate by Nuclear Methods) as instructed by the *Preliminary Geotechnical Report*.
3. Retaining Walls
    - Clay soils or soils blended with organics shall not be placed in areas to be retained by or supporting retaining structures.
    - Retaining wall structures shall be designed in accordance with recommendations in Table 2 of the *Preliminary Geotechnical Report* (Lateral Earth Pressures) and recommended bearing capacities.
4. Slope Stability and Erosion Control
    - Hillside fill grading shall incorporate bench keying as previously described in Site Preparation.
    - Due care shall be exercised by the Contractor to assure inclement weather and/or construction water during moisture conditions or dust control does not result in an excessively wet subgrade. Where encountered, pumping soils may be scarified and allowed to dry or be removed and replaced with a layer or compacted structural fill or rock fill.
    - If required, the Contractor shall stabilize the subgrade by use of a geomembrane or other stabilization protocol consistent with available means and methods and approved by the County Engineering Department.

- ***Mitigation Measure TCR-1:*** **Continue Consultation with Shingle Springs Band of Miwok Indians (SSBMI) Tribe**. Construction shall cease if a potential cultural resource is inadvertently discovered during construction, and the SSBMI Tribe shall be contacted to continue consultation. Construction shall not resume until consultation is considered

concluded when either of the following occurs, pursuant to Public Resource Code (PRC) 21080.3.2(b)(1): "The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource," or PRC 21080.3.2(b)(2): "A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached."

List of Abbreviations

Abbreviation	*Definition*
AB	Assembly Bill
ADA	Americans with Disabilities Act
APCD	Air Pollution Control District
APE	Area of Potential Effect
ATP	Active Transportation Plan
Basin Plan	Water Quality Control Plan for the Lake Tahoe Basin
Basin Area Plan	Placer County Tahoe Basin Area Plan
BMP	best management practice
CAL FIRE	California Department of Forestry and Fire Protection
CARB	California Air Resources Board
CCR	California Code of Regulations
CDFG	California Department of Fish and Game
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CNEL	Community Noise Equivalency Levels
CO_2e	carbon dioxide equivalent
County	County of Placer
CRHR	California Register of Historical Resources
CSO	California Spotted Owl
CWA	Clean Water Act
dbh	diameter at breast height
EIP	Environmental Improvement Program
EIR	Environmental Impact Report
EPA	United States Environmental Protection Agency

Abbreviation	*Definition*
ESA	Endangered Species Act
ETCC	Environmental Threshold Carrying Capacity
GHG	greenhouse gas
GIS	geographic information system
HRCA	Home Range Core Areas
IEC	Initial Environmental Checklist
IS	Initial Study
lbs	pounds
LOS	Level of Service
LTAB	Lake Tahoe Air Basin
LTBMU	Lake Tahoe Basin Management Unit
MBTA	Migratory Bird Treaty Act
MND	Mitigated Negative Declaration
mph	miles per hour
MSIO	Minimum Scenic Integrity Objective
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NOx	nitrogen oxides
NFS	National Forest Service
NPDES	National Pollution Discharge Elimination System
NPPA	Native Plant Protection Act
NRCS	Natural Resources Conservation Service
NTFPD	North Tahoe Fire Protection District
NTPUD	North Tahoe Public Utility District
PAC	Protected Activity Center
PM	particulate matter
ppm	parts per million

Abbreviation	*Definition*
PRC	Public Resource Code
Project	North Tahoe Shared-Use Trail – Segment 1
RCEM	Roadway Construction Emissions Model
Regional Park	North Tahoe Regional Park
ROG	reactive organic gases
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SCS	Sustainable Communities Strategy
SEZ	Stream Environment Zone
SMAQMD	Sacramento Metropolitan Air Quality Management District
SR	State Route
SSBMI	Shingle Springs Band of Miwok Indians
SQIP	Scenic Quality Improvement Program
SUP	Special Use Permit
SWPPP	Storm Water Pollution Prevention Plan
TMDL	Total Maximum Daily Load
TMPO	Tahoe Metropolitan Planning Organization
TRPA	Tahoe Regional Planning Agency
TRPA Code	TRPA Code of Ordinances
$\mu g/m^3$	micrograms per cubic meter
USDA	United States Department of Agriculture
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
VHFHSZ	Very High Fire Hazard Severity Zones
VMT	vehicle miles traveled

Section 1 Project Information

Type of Information	*Project Details*
1. Project title:	North Tahoe Shared-Use Trail - Segment 1
2. Lead agency name and address:	County of Placer 7717 North Lake Boulevard Kings Beach, CA 96143
3. Contact person and phone number:	Kansas McGahan, P.E. 530-581-6217 kmcgahan@placer.ca.gov
4. Project location:	Tahoe Vista and Carnelian Bay, North Lake Tahoe, California
5. Project sponsor's name and address:	County of Placer 7717 North Lake Boulevard Kings Beach, CA 96143
6. General Plan designations:	Basin Area Plan: Conservation, Recreation
7. Zoning:	Conservation and North Tahoe Recreation
8. Description of project:	Construction of 2.52 miles of shared-use trail
9. Surrounding land uses and setting:	Conservation, residential and recreation
10. Other public agencies whose approval is required:	Tahoe Regional Planning Agency; U.S. Forest Service
11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code Section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of	Native American consultation was initiated by NCE per AB 52. One Tribe, the Shingle Springs Band of Miwok Indians (SSBMI), responded to the consultation request and indicated the Tribe is not aware of any known cultural resources associated with the Project.

significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?	The SSBMI would like to continue consultation as the Project progresses and requested a copy of the records search and completed environmental reports. The Tribe would like to be notified of any inadvertent discoveries during Project implementation.

Section 2 Introduction

2.1 FOCUS OF THE ENVIRONMENTAL REVIEW

2.1.1 California Environmental Quality Act

The County of Placer (County), as the Project sponsor and Lead Agency, in cooperation with the Tahoe Regional Planning Agency (TRPA) as a Responsible Agency, has prepared this Draft Initial Study (IS) pursuant to the California Environmental Quality Act (CEQA) for the proposed North Tahoe Shared-Use Trail - Segment 1 Project (Project). This IS, combined with the TRPA required Initial Environmental Checklist (IEC) discussed below, is an informational document provided to help the public and decision-makers understand the potential effects the Project may have on the environment, and how potential adverse effects may be mitigated. Whereas this document has identified potentially significant impacts that can be reduced to less than significant with the adoption of mitigation measures, a Mitigated Negative Declaration (MND) has been prepared.

The Notice of Intent to Adopt a Mitigated Negative Declaration provides notice to interested agencies and the public that it is the County's intent to adopt an MND and, pending public review, expects to determine from this IS/IEC that the proposed Project would not have a significant effect on the environment as mitigated. This Public Review Draft IS/IEC/MND is subject to modification based on comments received by interested agencies and the public.

2.1.2 Tahoe Regional Planning Agency

The County has prepared this IEC pursuant to the TRPA Code of Ordinances (TRPA Code; TRPA 2020) requirement for environmental documentation. The Code stipulates that TRPA shall use either an IEC checklist or environmental assessment to determine whether an environmental impact statement shall be prepared for a project. For an IEC checklist, the applicant shall submit the following (TRPA Code Section 3.3.1):

a. The applicant shall describe and evaluate the significance of all impacts receiving "yes" answers.

b. The applicant shall describe and evaluate the significance of all impacts receiving "no with mitigation" answers and shall describe in detail, the mitigation measures proposed to mitigate these impacts to a less than significant level.

2.2 SUMMARY OF FINDINGS

The following environmental factors would be potentially affected by this Project, involving at least one impact that would be a "Potentially Significant Impact" without the implementation of mitigation measures:

- Aesthetics
- Agricultural and Forestry Resources
- Biological Resources
- Geology and Soils
- Tribal Cultural Resources

Based on the environmental evaluation performed for this IS/IEC, the proposed Project would have:

- ***No Impact*** on Energy, Mineral Resources, Land Use and Planning, Population and Housing, and Public Services.
- ***Less Than Significant Impact*** on Air Quality, Cultural Resources, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise, Recreation, Transportation, Utilities and Service Systems, and Wildfire.
- ***Less Than Significant Impact with Mitigation Incorporated*** on Aesthetics, Agricultural and Forestry Resources, Biological Resources, Geology and Soils, and Tribal Cultural Resources. The Project would implement mitigation measures as described herein to reduce potential impacts to a Less Than Significant level.

2.3 REQUIRED PERMITS AND ADDITIONAL APPROVALS

2.3.1 Permits

The Project would obtain or comply with the following permits:

- National Pollution Discharge Elimination System (NPDES) Construction Storm Water NPDES Permit for the Tahoe Basin (Order No. R6T-2016-0010 NPDES No. CAG616002)
- TRPA Project Permit
- U.S. Forest Service Lake Tahoe Basin Management Unit (USFS-LTBMU) Special Use Permit
- California Department of Forestry and Fire Protection (CAL FIRE) Timberland Conversion Permit

2.3.2 Responsible Agencies

- TRPA
- USFS-LTBMU
- North Tahoe Public Utility District (NTPUD)

2.4 LEAD AGENCY DETERMINATION

On the basis of this initial evaluation:

__ I find that the proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

X 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 (EIR) 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 EIR is required, but it must analyze only the effects that remain to be addressed.

__ I find that although the proposed Project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed Project, nothing further is required.

_____	_____
Signature	Date
_____	_____
Name	Title

Section 3 Project Description

The County proposes the North Tahoe Shared-Use Trail - Segment 1 Project in order to construct a 2.52-mile paved trail connecting the North Tahoe Regional Park (Regional Park) to the community of Carnelian Bay.

The Project would provide public access to existing recreational trails, enhance accessibility to public land, provide educational and recreational opportunities, and provide a transportation alternative for visitors and residents. Additionally, the Project would enhance safety of bicyclists and connect residential neighborhoods to commercial, tourism, and recreational facilities.

3.1 PROJECT LOCATION AND OWNERSHIP

The Project is in the North Lake Tahoe area of eastern Placer County, California (**Figure 1**). The area of potential effect (APE) (herein referred to as 'Project area') established for the Project comprises 2.52 miles of trail alignment, including a 60-foot buffer on either side of the trail centerline; construction staging; and the secondary construction access off Regency Way, for a total size of 39 acres (**Figure 2**). Western and eastern construction access would occur along existing County Road rights-of-way and are not included in the Project area.

Figure 3 depicts ownership along the proposed trail alignment. The trail would begin at Carnelian Bay Avenue on the west end and terminate at a junction with the existing Pine Drop Trail within the North Tahoe Regional Park in Tahoe Vista. The Regional Park is managed by the NTPUD, and has recreational amenities including restrooms, ball fields, a playground, tennis courts, hiking trails, and frisbee golf. The Regional Park is open to cross-country skiing and operates a sledding hill in the winter. The existing Pine Drop Trail connects the Regional Park west to State Route (SR) 267 in Kings Beach. Enhancements to upgrade current trailhead facilities within the Regional Park are currently being designed and will be implemented by the NTPUD; these activities are not part of this Project.

From the intersection with the Pine Drop Trail , the proposed Project trail alignment exits the park through a series of switchbacks to control grade and user speed. The alignment continues west and southwest through a private parcel (Rutter-Shaffer), utilizing a public easement held by the County. The Rutter-Shaffer easement was granted to the County in 1994 and established a "bicycle path, pedestrian path, and general recreation" easement through the private property. This easement is approximately 1,800 feet long and 120 feet wide. The apex of the trail alignment traverses across a rocky knoll, offering excellent lake views to the south, winding around the knoll through USFS parcels to terminate onto Carnelian Bay Avenue. Carnelian Bay Avenue is an existing, unpaved County-maintained right-of-way that

terminates at SR 267 at Brockway Summit to the north, and at Carnelian Woods Avenue to the south.

In the immediate vicinity of the Project site, there are residential single-family homes to the north and south, the Regional Park on the eastern trail terminus, and additional federal forest managed by the USFS to the west.

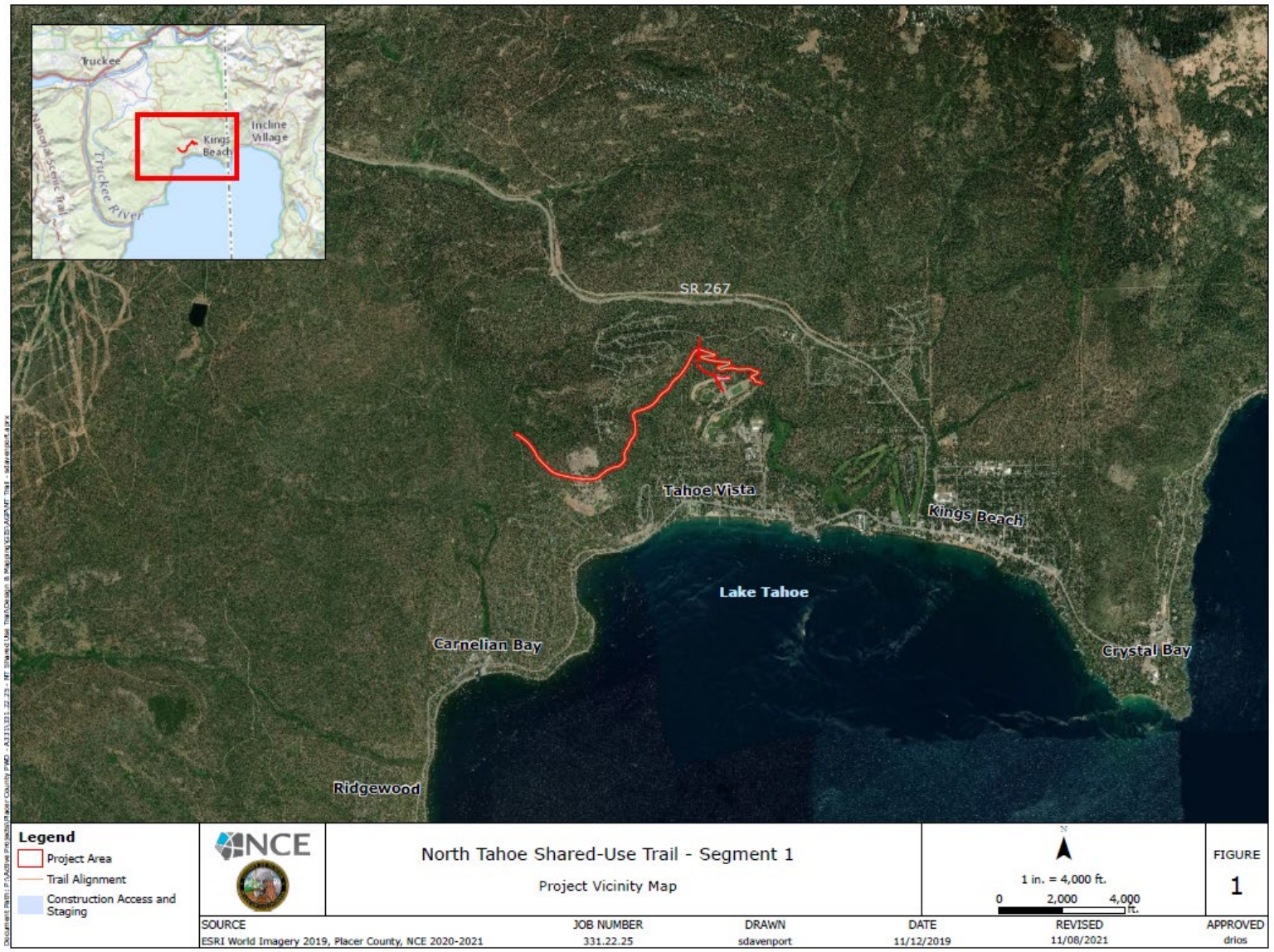

Figure 1. Project Vicinity Map

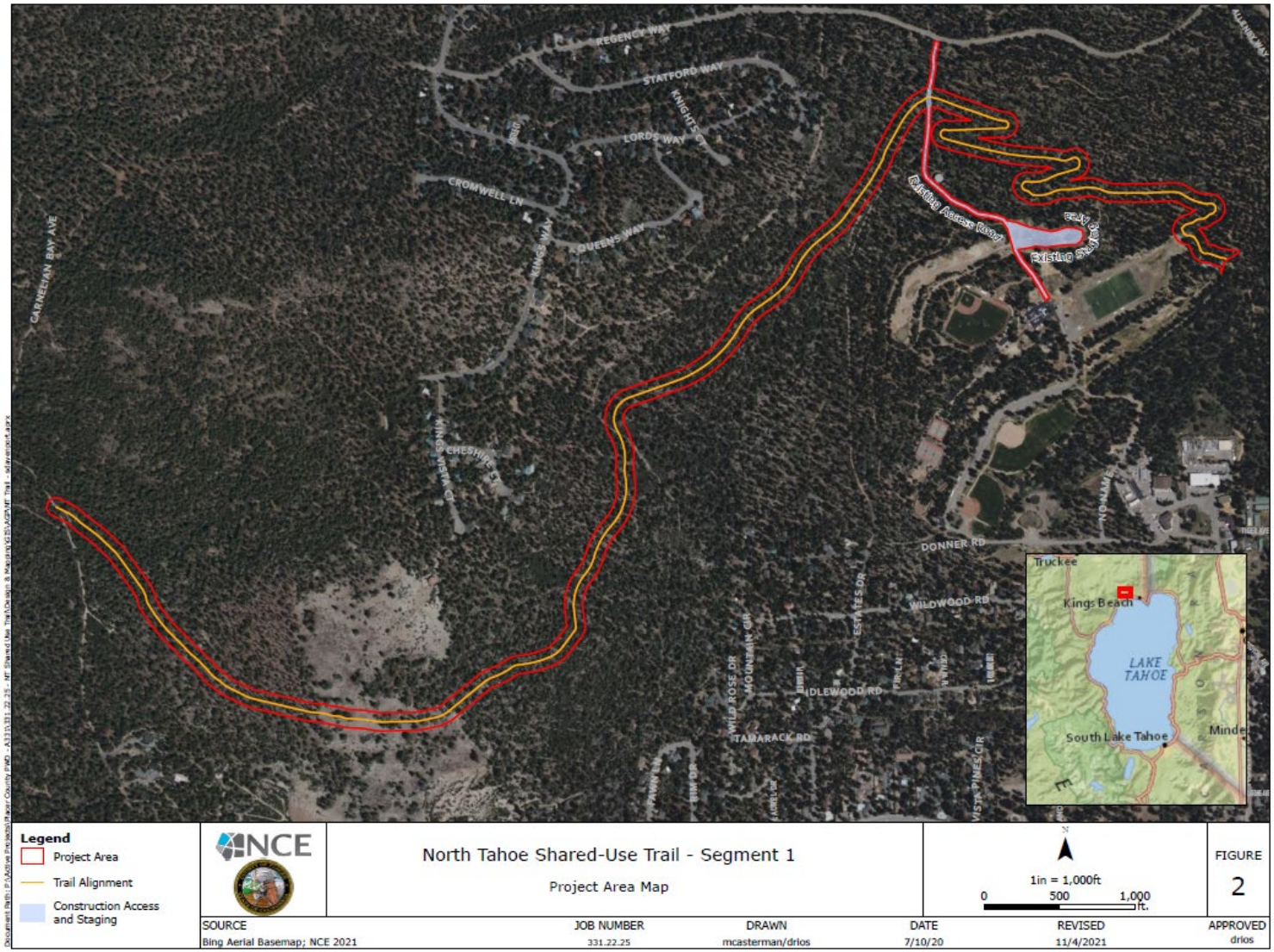

Figure 2. Project Area Map

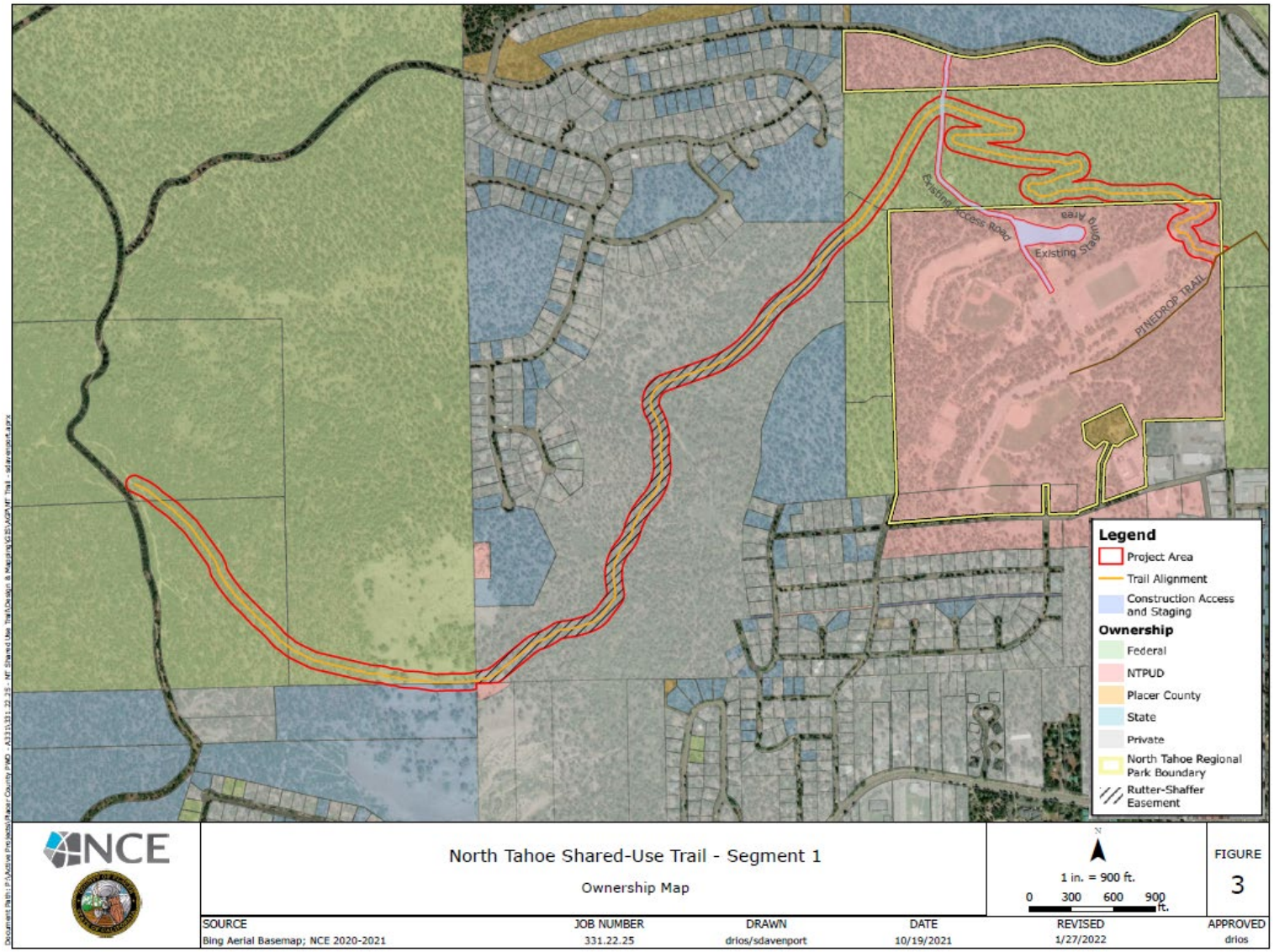

Figure 3. Ownership Map

3.2 LAND USE AND ZONING

The Project is within the limits of the Placer County Tahoe Basin Area Plan (Basin Area Plan). The Basin Area Plan is a component of the Lake Tahoe Regional Plan and the Placer County General Plan and includes the portions of Placer County located within the Lake Tahoe Regional Planning Area, including the north and west shores of Lake Tahoe. Land use designations comply with the TRPA Code; the Basin Area Plan designates the Project area as Recreation and Conservation land uses, and the site is similarly zoned for Recreation by the TRPA (**Figure 4**). There is no mapped stream environment zone (SEZ) based on TRPA's land capability maps (Bailey 1974).

The County is coordinating with the USFS-LTBMU for access to construct and maintain the trail via Special Use Permit on federally held parcels. Access will be granted through a subsequent Decision Memorandum, pending National Environmental Policy Act analysis and approval.

3.3 BACKGROUND

The effort to construct a bike trail between Tahoe City and Tahoe Vista in North Lake Tahoe dates back to 1992. Several iterations of possible trail alignments were mired by competing inter-agency objectives and a lack of funding. While numerous studies were conducted prior to 2007, no environmental analysis was completed or brought forward for adoption. The Placer County Department of Public Works, Tahoe Engineering Division, agreed to implement the proposed trail after adoption of the *Placer County North Tahoe Tourism Master Plan* in 2015 which outlines a vision of the three north shore communities (Tahoe City, Kings Beach, and Truckee) connected via a multi-use trail system. The Project is a segment of the larger vision of a trail system circumnavigating Lake Tahoe.

The Project is identified in the TRPA Environmental Improvement Program (EIP) as Project 03.02.02.0003 (TRPA 2022). The Project would improve Lake Tahoe Basin threshold goals of Sustainable Recreation and Transportation, advancing the EIP Action Priority to build and enhance trail networks. Ultimately, the Project would improve air quality and recreation thresholds.

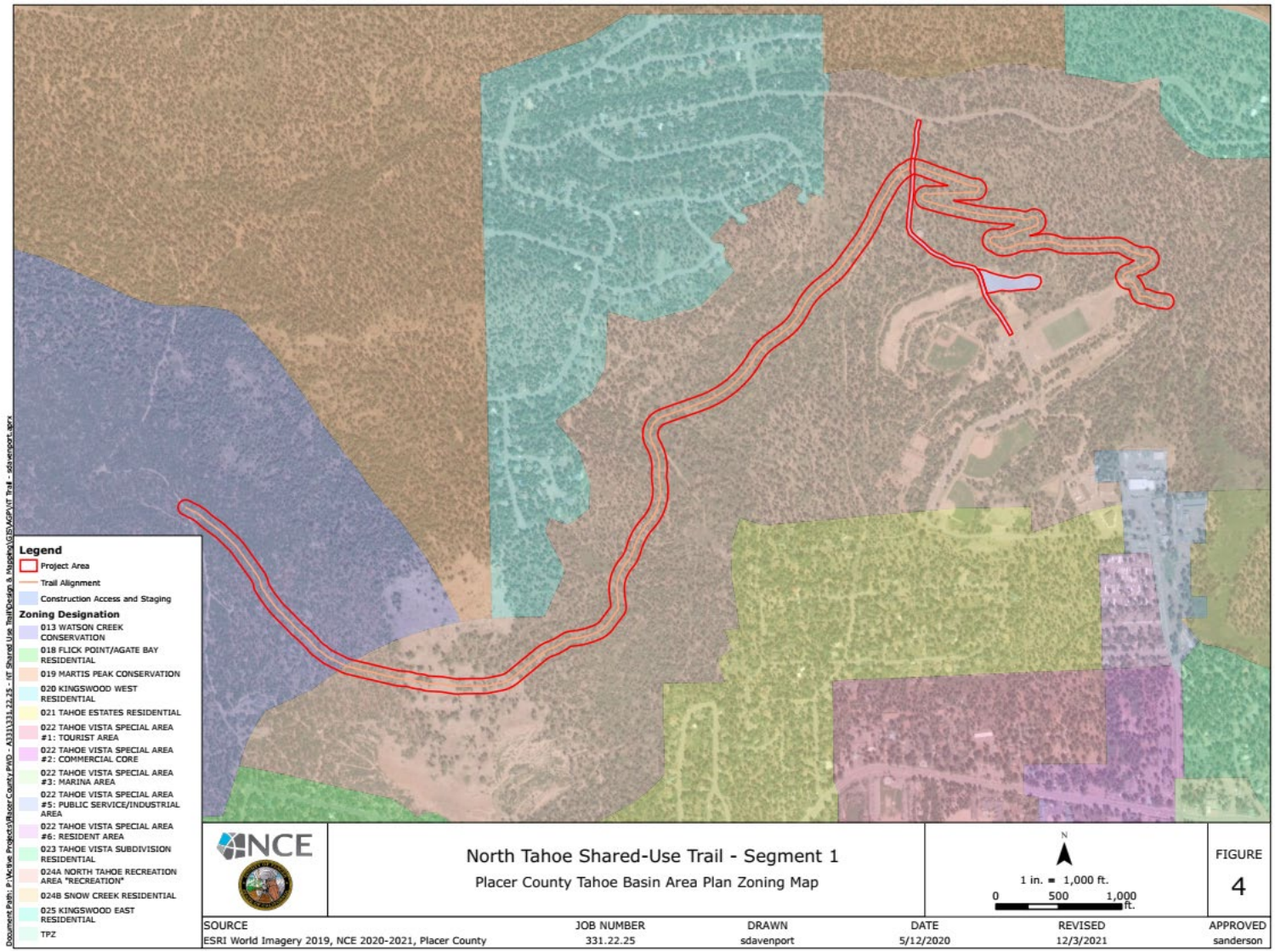

Figure 4. Placer County Tahoe Basin Area Plan Zoning Map

3.4 PROJECT PURPOSE, NEED, AND OBJECTIVES

The primary purpose of the Project is to construct a paved facility that can be used by bicyclists, hikers, commuters, and other recreationalists. This path would provide a new access point into the Regional Park from Carnelian Bay and create a new way to explore the existing trails and open space surrounding the Regional Park.

The Project is needed to provide an alternative transportation linkage between Tahoe Vista and Carnelian Bay and is a segment link within the larger regional trail system. The proposed trail would close a critical gap in the active-transportation system in North Lake Tahoe by providing pedestrians and cyclists the first segment of a continuous path between communities on Lake Tahoe's north shore. Currently, there is an 8-mile gap between the Pine Drop Trail on the east and the Dollar Creek Trail in Tahoe City to the west.

The Project objectives are to:

- Construct an accessible and continuous shared-use trail that establishes a convenient non-auto transportation alternative to SR 28 in the east-west direction.
- Provide a high-quality recreational experience for residents and visitors.
- Establish neighborhood community connectivity with existing recreational trails (Tahoe Rim Trail, FS06) and public easements to provide access to public land.
- Provide an additional emergency access corridor for wildland fire evacuation, emergency rescue, and law enforcement personnel and vehicles.

3.5 EXISTING CONDITIONS

The trail would be located in a primarily undeveloped, forested area. The proposed trail would connect to the existing Pine Drop Trail at the east end of the Regional Park (**Figure 5**). Alignment of trails shown on the figure have not been verified.

3.6 PROJECT FEATURES

The following Project features can be seen on the attached Engineered Plan Drawings, included as **Appendix A**.

Trail Design

The trail would begin at Carnelian Bay Avenue on the west and terminate at a junction point to the existing Pine Drop Trail near the northeast corner of the

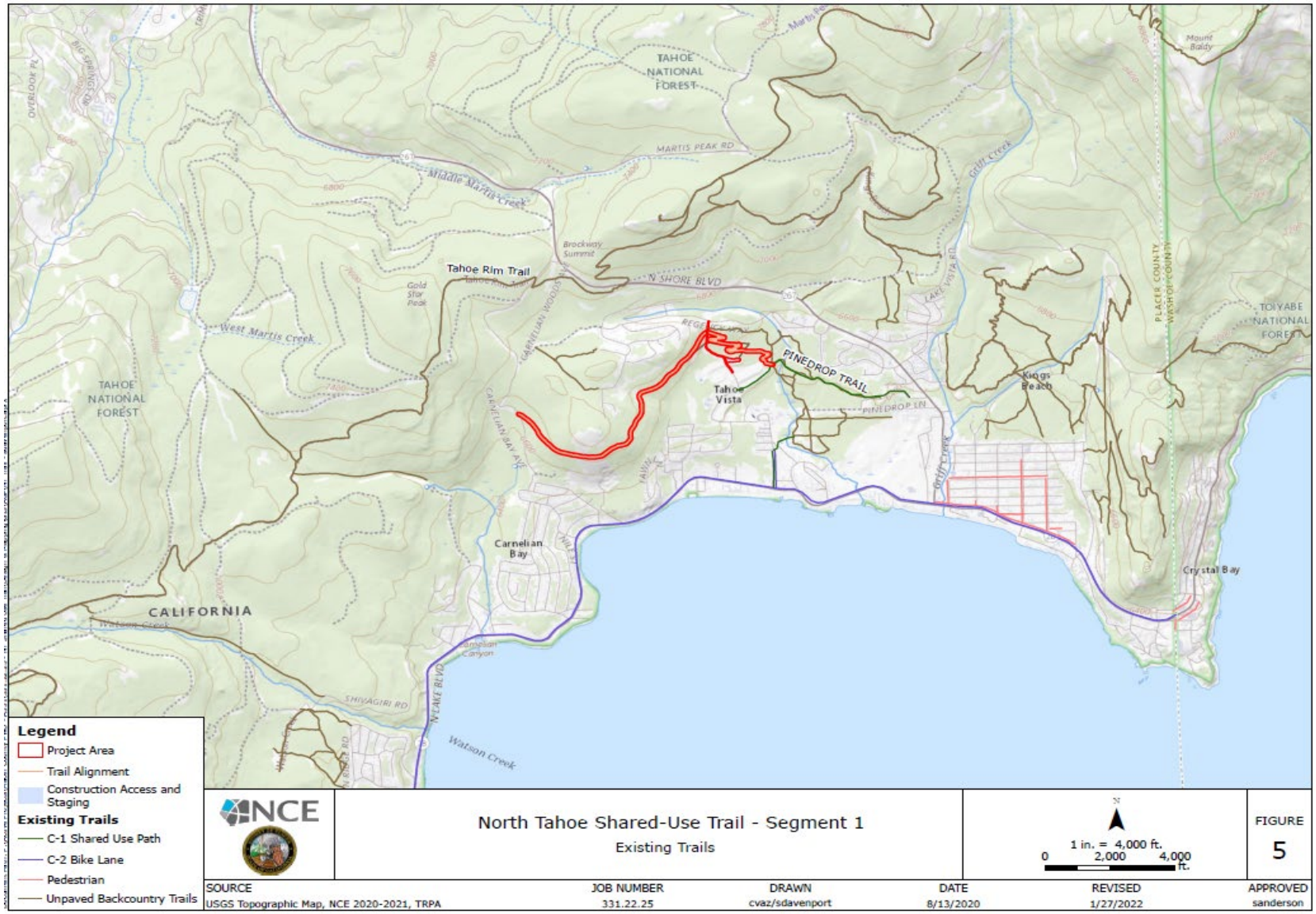

Figure 5. Existing Trails

Regional Park for a total linear distance of 2.52 miles of new paved trail. The trail would measure a minimum of 10 feet and a maximum of 12 feet in width with 1-foot aggregate base shoulders on either side.

At this time, the County is not proposing to maintain the trail for public winter use; however, snow removal or cross-country ski grooming during the winter months may be conducted in the future should operations and maintenance funding be secured. The County will maintain the public easement year-round.

The educational component of the Project includes installation of interpretive signage describing important historical, cultural, ecological, and/or other points of interest. The trail alignment would include a stunning 180-degree viewpoint at the trail apex with views to the south overlooking Carnelian Bay.

The trail design is based on American Association of State Highway Transportation Officials (AASHTO) design guidelines for a shared-use path, as well as Class I California Department of Transportation design standards, where slopes allow. Shared-use paths are the most common type of paved facility provided for shared users in areas with rugged terrain, steep slopes, and rural areas[1]. Applying AASHTO design standards to this Project accomplishes implementation of the Project while reducing overall footprint by minimizing switchbacks and eliminating the need for specialized engineered solutions and construction methods. Ultimately, use of AASHTO design guidelines results in a reduction of trail length required to construct the Project. The trail will include Americans with Disabilities Act (ADA) accessible pullouts where the slope exceeds 5 percent. Pullouts will be constructed every 200 feet at locations with grades up to 8.31 percent, per AASHTO guidelines.

Trail Access

Users would be able to access the trail from Carnelian Bay Avenue via north or south, an existing unpaved access road from Regency Way from Pine Drop Trail via Hwy 267, and at the Regional Park parking lot. No new parking would be constructed as part of the Project.

Tree Removal

A total estimate of 1,000 trees ranging between 6- and 30-inches diameter at breast height (dbh) would be removed along the trail corridor in order to construct the Project. This accounts for roughly 3.5 to 4 acres of tree removal within the Project boundary.

[1] County of Placer. 2019. Department of Public Works, Tahoe Engineering Division Memorandum for the North Tahoe Shared-Use Trail Design. June 18, 2019.

3.6.1 Site Drainage and Erosion Control

The trail would be constructed to prevent erosion using a variety of techniques. These include (but are not limited to) armoring of flow paths along steep slopes, use of retaining walls to stabilize cut slopes, revegetation of disturbed areas, use of pavement for an armored and stabilized trail surface, and non-paved shoulders to allow for runoff infiltration.

Existing Project area drainage patterns will be maintained post-construction. As mentioned, the proposed trail does not cross any drainages or sensitive habitat, such as wetlands or SEZ areas. Construction of a culvert or swale to facilitate existing drainage patterns may be required, pending final design of finished grades. Final placement of these features will be decided as part of the final design phase.

3.6.2 Construction Access and Staging

Construction access would be from either end of the trail alignment including Carnelian Bay Avenue from SR 267 and the Regional Park from Donner Road. It is possible additional access can be gained from an existing unpaved access road through a USFS parcel on Regency Way. A previously used, currently disturbed, construction staging area within the Regional Park has been identified for contractors' use, under direction and agreement of the NTPUD. Clearing and grubbing and linear construction work would occur within the Project area established for the Project, demarked by temporary construction fencing along the alignment.

3.6.3 Construction Schedule

Construction is scheduled to occur in the dry summer months of 2023. Tree removal may occur after September 1, 2022. Construction of the Project would take approximately 65 workdays.

3.6.4 Equipment and Labor Force

Various types of equipment would be needed for the construction of the Project elements along the corridor. General construction equipment used for the Project may include, but is not limited to, backhoes, mini-excavators, asphalt pavers, saw cutting equipment, hand tools, hauling trucks, and water trucks.

A skilled labor force would be required to complete this Project, including saw cutting, grading specialists, and asphalt paving personnel. Grading and compacting crews would prepare the subgrade for paving crews. Final work would involve vegetation stabilization crews.

3.7 CONSTRUCTION CONTROLS

The Project is required to comply with local, state, and federal regulations pertaining to protection of human health, safety, and the environment.

The following required construction controls from local, state, and federal agencies are incorporated into the Project design and are considered a part of the proposed Project.

3.7.1 Air Quality

The Placer County Air Pollution Control District (APCD) District Rule 228: Fugitive Dust, establishes the minimum dust mitigation and control requirements along with the standards to be met from activities that generate fugitive dust. Rule 228's minimum dust mitigation and control requirements must be used for all construction and grading activities.

Per APCD Rule 228, the following minimum dust control requirements are to be initiated at the start of the Project and maintained throughout the duration of the construction or grading activity:

- Unpaved areas subject to vehicle traffic must be stabilized by being kept wet, treated with a chemical dust suppressant, or covered.
- The speed of any vehicles and equipment traveling across unpaved areas must be no more than 15 miles per hour (mph) unless the road surface and surrounding area is sufficiently stabilized to prevent vehicles and equipment traveling more than 15 mph from emitting dust exceeding Ringlemann 2 or visible emissions from crossing the Project boundary line.
- Storage piles and disturbed areas not subject to vehicular traffic must be stabilized by being kept wet, treated with a chemical dust suppressant, or covered.
- Prior to any ground disturbance, including grading, excavating, and land clearing, sufficient water must be applied to the area to be disturbed to prevent emitting dust exceeding Ringelmann 2 and to minimize visible emissions from crossing the boundary line.
- Construction vehicles leaving the site shall be cleaned to prevent dust, silt, mud, and dirt, from being released or tracked offsite.
- When wind speeds are high enough to result in dust emissions crossing the boundary line, despite the application of dust mitigation measures, grading and earthmoving operations shall be suspended.

- No trucks are allowed to transport excavated material off-site unless the trucks are maintained such that no spillage can occur from holes or other openings in cargo compartments, and loads are either covered with tarps or wetted such that material does not touch the cargo compartment less than 6 inches from the top and that no point of the load extends above the top of the cargo compartment.

In addition, the APCD requires actions against wind-driven fugitive dust control, such as surface stabilization, establishment of vegetative cover, or paving to minimize wind-driven dust from inactive disturbed surface areas (Placer County APCD 2017).

3.7.2 Biological Resources and Tree Removal

The Project is required to implement the following applicable TRPA Code standards which protect biological resources, including trees:

- 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.
- Within lands classified by TRPA as conservation or recreation land use, trees larger than 30 inches dbh in the westside forest types and larger than 24 inches dbh in eastside forest types may be removed when it is demonstrated that the removal is necessary for the activity pursuant to 61.3.7.6. Tree removal must meet all other minimum standards per 61.1.6, with substantial removal occurring for activities on project areas of 3 acres or more and proposing the removal of more than 100 live trees 14 inches dbh or larger (61.1.8) or proposing tree removal that as determined by TRPA after a joint inspection with appropriate state or federal Forestry staff does not meet the minimum acceptable stocking standards set forth in subparagraph 61.1.6.H.
- 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.

3.7.3 Cultural Resources

The proposed Project is subject to the regulations and standards established in the National Historic Preservation Act, the California Register of Historical Resources (Public Resources Code [PRC] § 5024.1(a)), PRC §5097.5), and the TRPA Code. The County is required to ensure implementation of the following applicable regulations and standards that protect cultural resources:

- PRC § 5024.1(a), PRC § 5097.5 outline authoritative processes for resources listed in California Register of Historical Resources, such as a person shall not knowingly and willfully excavate upon, or remove, destroy, injure, or deface, any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, rock art, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over the lands.
- TRPA Code: 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.
- 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 would notify the Native American Heritage Commission (NAHC), which would 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.

3.7.4 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 NPDES Construction Storm Water NPDES Permit for the Tahoe Basin (Order No. R6T-2016-0010 NPDES No. CAG616002).

As part of the SWPPP, the contractor will be required to prepare and adhere to a Temporary Best Management Practices Plan and a Spill Contingency Plan that will be approved by the County. The plan would designate best management practices (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 downgradient 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.
- Disturbed areas shall be stabilized with mulch until vegetation is reestablished.
- Tracking controls will be used.
- Parking will be allowed only on paved and existing disturbed areas.

3.7.5 Greenhous Gas (GHG) 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 include measures to improve fuel efficiency, limit emissions, use green energy sources, and recycle 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 [CCR}, 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.

3.7.6 Hydrology and Water Quality

As discussed above, the Project shall develop and implement a Project-specific SWPPP, including a Temporary BMP Plan, and a Spill Contingency Plan.

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 RWQCB.

Additionally, TRPA Code 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 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 Section 4.9, Hazards and Hazardous Materials). Project contractors would be responsible for storing on-site materials and temporary BMPs capable of capturing and containing pollutants.
- 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.

Section 4 Environmental Evaluation

The following sections evaluate the potential adverse impacts of the Project in compliance with CEQA and TRPA. Appendix G of the CEQA Guidelines (California Natural Resources Agency 2019) provides a sample checklist with a series of questions designed to enable the lead agency, Placer County, to identify Project impacts with respect to 20 environmental topics; this IS generally follows this checklist. Topics from the TRPA Initial Environmental Checklist are included in the corresponding section with the CEQA checklist.

Except where a specific threshold has been adopted by a public agency and is specified in the sections below, such as an air quality threshold, Appendix G of the CEQA Guidelines are used as thresholds of significance for the CEQA checklist questions.

Potential environmental impacts are described as follows:

- **Potentially Significant Impact**: An environmental impact that could be significant and for which no feasible mitigation is known.
- **Less than Significant Impact with Mitigation Incorporated**: An environmental impact that requires the implementation of mitigation measures to reduce that impact to a less than significant level.
- **Less than Significant Impact**: An environmental impact may occur; however, the impact would not exceed significance thresholds.
- **No Impact**: No environmental impacts would result from implementation of the Project.

The TRPA IEC similarly groups answers into one of the following categories:

- **Yes**
- **No**
- **No with Mitigation**
- **Data Insufficient**

4.1 AESTHETICS

4.1.1 Environmental Setting

The proposed trail alignment is located in a forested area in the community of Tahoe Vista, between Kings Beach and Carnelian Bay. A majority of the Project area crosses through undeveloped forested areas that surround low density residential neighborhoods. The eastern and western ends of the Project area (totaling approximately 8,000 linear feet) are located within the General Conservation Management Area as defined in the LTBMU Land Management Plan (USDA 2016). This management area consists of National Forest Service (NFS) lands that do not have any other special designation that specifically defines their use; management is prescribed by USFS staff to attain forest-wide desired conditions (Hauge Brueck Associates [HBA] 2021).

Within the Project area, development has occurred at the two ends including public roadways, recreational trails, and infrastructure at the Regional Park (eastern end). Informal mountain bike trails have been created in the Project area and cross the proposed trail alignment in numerous locations. With one exception, the Project area is not readily visible from publicly-accessible offsite locations. A portion of the western section of the proposed trail alignment crosses a lightly forested hillside area that is visible from both SR 28 and Lake Tahoe. Views of Lake Tahoe are provided from the proposed trail alignment Project area. The Project area also provides for distant forest views.

4.1.2 Regulatory Setting

U.S. Forest Service – Lake Tahoe Basin Management Unit

Land Management Plan

The U.S. Forest Service manages scenic quality on their lands. The goal of scenic resource management on all National Forest Service (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 for inventorying, evaluating, and managing scenic resources on NFS lands. More recently the Scenery Management System 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…." (USDA 2016).

The Land Management Plan includes minimum scenic integrity objectives for LTBMU lands, i.e., 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 located north of the Regional Park 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. NFS lands located on the western end of the Project area are assigned a "moderate" MSIO rating, which is defined as landscapes where the valued landscape character "appears slightly altered." Noticeable deviations must remain visually subordinate to the landscape character being viewed.

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

Tahoe Regional Planning Agency

The Project is located within the jurisdictional limits of the TRPA. The TRPA established a baseline inventory of the scenic resources in the Lake Tahoe Basin in 1982. The Basin was divided up into separate roadway, shoreline, and recreation area scenic units, and each unit was given a scenic resource rating and threshold. Scenic resource thresholds were developed using an inventory of subcomponents for specific types of scenic resources within each roadway, shoreline, and recreation area unit. The TRPA prepared a Scenic Quality Improvement Program for the Lake Tahoe Basin (SQIP) (adopted in 1989) to set forth a comprehensive threshold attainment program to improve the overall scenic quality of the built environment

in the roadway and Lake Tahoe shoreline views that do not meet scenic quality thresholds.

Recommendations in the SQIP that are applicable to the Project area include revegetation of the rocky slide area just north of SR 28 at the eastern end of Roadway Unit 19 (Flick Point). Revegetation would provide visual cover for the barren slopes and existing development and provide erosion control.

The Regional Park and central section of the trail alignment are not identified as sensitive scenic resources in either the Tahoe Basin Area Plan or the TRPA Regional Plan. As such, there are no additional scenic resource indicators associated with the Project.

4.1.3 CEQA Checklist Summary

Except as provided in Public Resources Code Section 21099, would the project:

CEQA Question	Impact Determination
a) Have a substantial adverse effect on a scenic vista?	Less Than Significant Impact with Mitigation Incorporated
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings, within a state scenic highway?	No Impact
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	Less Than Significant Impact with Mitigation Incorporated
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	No Impact

4.1.4 Answers to CEQA Checklist Questions

Except as provided in Public Resources Code Section 21099:

a) Would the project have a substantial adverse effect on a scenic vista?

Less Than Significant Impact with Mitigation Incorporated

A Visual Resources Technical Memorandum was prepared by Hauge Brueck and Associates in 2021, assessing the anticipated visual and scenic impacts of the proposed trail. The following information is a summary analysis of anticipated Project impacts. The full *Visual Resources Technical Memorandum* (Hauge Brueck Associates, LLC. [HBA] 2021) is included as **Appendix B**.

There are no designated scenic vistas within the Project area; however, a portion of the Project area can be seen from SR 28 and Lake Tahoe. The Regional Park and central section of the trail alignment are not identified as sensitive scenic resources in either the Tahoe Basin Area Plan or the TRPA Regional Plan. Trail construction within the central section of the Project area would not be noticeable off-site as no perceptible change would occur from off-site viewing locations as a result of constructing a shared-use trail within the forested setting. Likewise, sections of the trail located in the Regional Park (eastern end of the Project area) and near the connection to Carnelian Bay Avenue would not be visible from off-site locations. The trail connection within the Regional Park would be visible to Regional Park users, but would be consistent with existing recreational facilities, parking lots, roadways and therefore would not create a change to the landscape character (HBA 2021).

Therefore, the focus of the analysis on visual and scenic resources is a portion of the western section of the proposed trail alignment that crosses a lightly forested hillside area (**Photo 1**) visible from both SR 28 and Lake Tahoe (**Photo 2** and **Photo 3**) (HBA 2021). NFS lands located on the western end of the project area are assigned a "moderate" MSIO rating, which is defined as landscapes where the valued landscape character "appears slightly altered." Noticeable deviations must remain visually subordinate to the landscape character being viewed.

Trail construction requires grading, rock retaining wall installation, and the removal of trees along the corridor within the excavation limits for the trail. Construction would begin at the trails' intersection with Carnelian Bay Avenue, then travel east generally along hillside contours through an undisturbed forested area to a natural forest clearing visible from offsite locations (see Photos 2 and 3).

Photo 1. Western Section of the Project Area Near Steeply Sloped Talus Field

Photo 2. View of the Project Area, Talus Field from SR 28 (looking north)

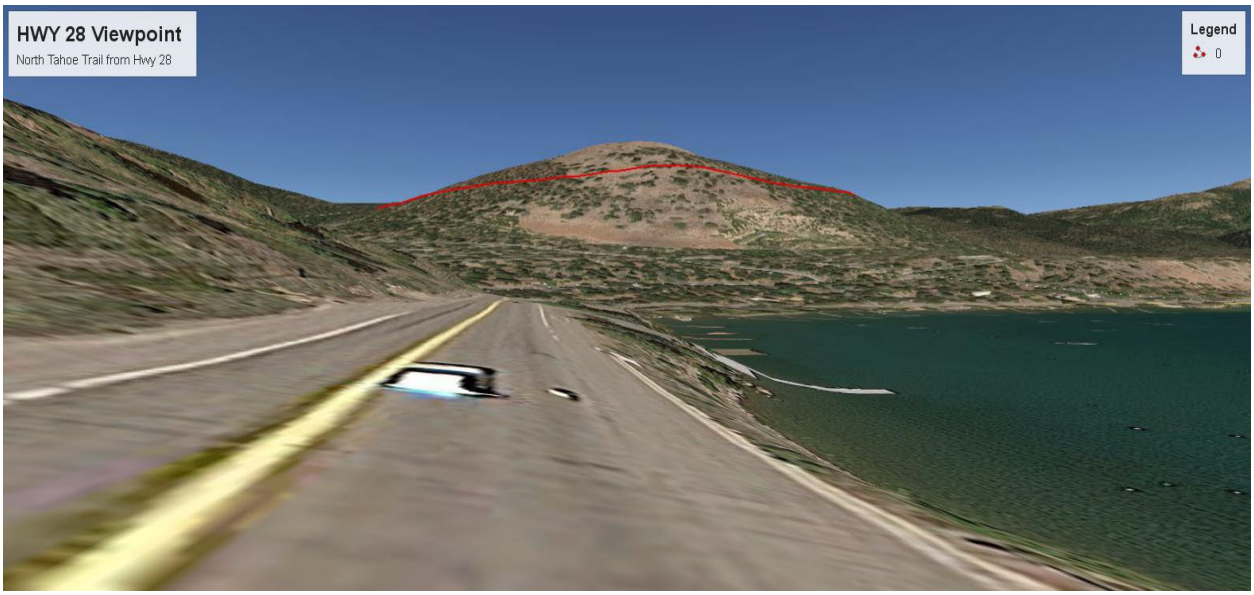

Photo 3. Projection of Trail Alignment from SR 28 (looking north)

As previously discussed, a majority of trail construction would not be visible from off-site locations due to intervening topography and vegetation. Grading and the rock retaining wall structures on both the cut and fill slope sides of the pathway would be visible from a short stretch of SR 28 while traveling north (Photo 3) and from nearby Lake Tahoe viewpoints (Flick Point and Agate Bay) (HBA 2021).

Tree removal and construction of the pathway's 4- to 6-foot-tall rock retaining walls would create a noticeable deviation to the existing landscape character of the lightly forested hillside area by modifying existing vegetation patterns, line, color and form; the linear pathway construction would stand out compared to the existing mostly unaltered landscape character of the forested hillside and would be evident but not dominant in degree of change. The visible components of the pathway (rock retaining walls and split rail fencing) would introduce man-made features to the lightly forested hillside that currently includes only naturally occurring forest openings. The change would be consistent with the scenic integrity goals for the applicable NFS lands (moderate rating) because the existing landscape character "appears slightly altered." With the moderate MSIO rating, construction of the pathway can result in noticeable deviations as long as it remains visually subordinate to the slightly altered landscape character of the site.

Conclusions included in the Visual Resources Technical Memorandum indicate mitigation is necessary to ensure that deviations from existing conditions remain visually subordinate to the existing landscape character, and that TRPA travel route ratings are not therefore adversely affected. The goal of final trail design is to construct a trail that fits quietly into the natural landscape. Final trail design will be subtle and complementary to the dominant beauty of the mountain setting; however, because final design has not been completed,

Mitigation Measure AES-1 is required to ensure the trail will be visually subordinate to the surrounding landscape and reduce the amount of deviation from the existing natural setting.

***Mitigation Measure AES-1*: Incorporate Visual Impact Minimization Design Measures.**

- Final design of the rock retaining walls shall include natural or natural-appearing retaining wall materials, and colors consistent with the natural landscape.
- Low-profile fence railing shall be constructed from natural materials and colors to match existing soil/vegetation.
- Existing boulders, groundcover, and shrubs in the trail vicinity shall be retained to ensure that the man-made linear trail will not be visually out-of-place with the adjacent landscape character.
- Construction plan sheets shall be supplemented with additional details of building materials consistent with existing hillside ground cover, boulders, and soils.

Finding: Implementation of Mitigation Measure AES-1 would reduce potentially significant impact to scenic resources by requiring constructed elements to incorporate design features that minimize visual impact to existing landscape conditions.

b) Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact

According to the California Department of Transportation, a Scenic Corridor is an area of land generally adjacent to and visible from the highway. Although major highways run through the Basin, the Project area is located within an undeveloped area and contains no designated California scenic highways or corridors. Because the Project is not located within a designated state scenic highway corridor, there would be no impact.

c) In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less Than Significant Impact with Mitigation Incorporated

Refer to response to CEQA a) above. The Project intends to mitigate for impacts to existing visual character and quality of public views of the site and its surroundings by incorporating measures that ensure deviations from existing conditions remain visually subordinate to the existing landscape character, and that TRPA roadway and shoreline travel route ratings are therefore not adversely affected.

Finding: With implementation of the Mitigation Measure AES-1 design measures, the Project would not conflict with the applicable zoning and other regulations governing scenic quality, as presented in the Regulatory Setting section. Therefore, additional mitigation would not be required.

d) Would the project create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?

No Impact

There are no new sources of lighting or glare associated with the Project. There would be no impact on day or nighttime views in the area.

4.1.5 TRPA Checklist

TRPA Questions – Light and Glare	Answers	Discussion
7a) Would the project include new or modified sources of exterior lighting?	No	The Project does not propose new or modified sources of exterior lighting. There would be no impact.
7b) Would the project create new illumination, which is more substantial than other lighting, if any, within the surrounding area?	No	Refer to discussion for CEQA item d). There is no lighting or illumination of the trail proposed for the Project.
7c) Would the project cause light from exterior sources to be cast off-site or onto public lands?	No	Refer to discussion for CEQA item d). There is no lighting or illumination of the trail proposed for the Project.
7d) Would the project create new sources of glare through the siting of the improvements or through the use of reflective materials?	No	There are no trail features proposed with reflective materials (e.g., glass or metal) that would create glare.

TRPA Questions – Scenic Resources/Community Design	Answers	Discussion
18a) Would the project be visible from any state or federal highway, Pioneer Trail or from Lake Tahoe?	No, with Mitigation	As discussed in the response to CEQA a) above, the Project would be visible from SR 28; however, scenic thresholds would be maintained with implementation of **Mitigation Measure AES-1**.
18b) Would the project be visible from any public recreation area or TRPA designated bicycle trail?	Yes	The new trail would be visible from the North Tahoe Regional Park, and from existing trails as seen on **Figure 5**. Once constructed, the trail would be

TRPA Questions – Scenic Resources/Community Design	Answers	Discussion
		consistent with other nearby recreational use areas such as the park.
18c) 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?	No	The proposed Project will not block or modify the existing view of Lake Tahoe or other scenic vistas; the Project includes construction of overlook areas to view Lake Tahoe thereby increasing public access to Lake Tahoe views.
18d) Would the project be inconsistent with the height and design standards required by the applicable ordinance or Community Plan?	No	The proposed Project does not involve the construction of any structures or buildings.
18e) Would the project be inconsistent with the TRPA Scenic Quality Improvement Program (SQIP) or Design Review Guidelines?	No	Refer to the attached *Visual Resources Technical Memorandum* (**Appendix B**). The proposed Project is consistent with SQIP recommendations and would comply with TRPA's Design Review Guidelines.

4.2 AGRICULTURAL AND FORESTRY RESOURCES

4.2.1 Environmental Setting

According to the Basin Area Plan, and TRPA Conceptual Regional Land Use Map, the Project area is designated as recreation and conservation (USFS-LTBMU lands on the west end of the trail alignment). The Project area contains forestland, as defined by PRC §12220 (g): "Forest land" 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. The Project area does not contain timberland or zoned Timberland Production, as defined by Government Code Section 51104(g).

According to the California Important Farmland Finder, there is no farmland of regional or state importance within vicinity of the Project (California Department of Conservation 2016) and no Williamson Act contracts on or near the Project site.

The Project area is in an area considered both 'eastside forest type' and 'westside forest type' per TRPA, as the delineation line crosses the trail corridor near the USFS-LTBMU's boundary with private owned lands.

4.2.1 Regulatory Setting

State

Public entities removing 3 acres or more for public service projects must develop a Timber Harvest Plan by a Registered Forestry Professional and obtain a Timber Conversion Permit from CAL FIRE (14 CCR § 1104).

TRPA

Within lands classified by TRPA as conservation or recreation land use, trees larger than 30 inches dbh in the westside forest types and larger than 24 inches dbh in eastside forest types may be removed when it is demonstrated that the removal is necessary for the activity pursuant to Code Section 61.3.7.6. Tree removal must meet all other minimum standards per Code Section 61.1.6, with substantial removal occurring for activities on project areas of three acres or more and proposing the removal of more than 100 live trees 14 inches dbh or larger (61.1.8) or proposing tree removal that as determined by TRPA after a joint inspection with appropriate state or federal Forestry staff does not meet the minimum acceptable stocking standards set forth in subparagraph 61.1.6.H.

4.2.2 CEQA Checklist Summary

Would the project:

CEQA Question	Impact Determination
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	No Impact
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	No Impact
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code (PRC) § 12220(g)), timberland (as defined by PRC § 4526), or timberland zoned Timberland Production (as defined by Government Code § 51104(g))?	Less Than Significant Impact with Mitigation Incorporated
d) Result in the loss of forest land or conversion of forest land to non-forest use?	Less Than Significant Impact with Mitigation Incorporated
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	Less Than Significant Impact

4.2.3 Answers to CEQA Checklist Questions

a) 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 non-agricultural use?

No Impact

As discussed in the Environmental Setting section, the Project area is not located in an area of 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. Additionally, the Project does not propose features that would result in a change in land use; therefore, the Project would have no impact on farmland or change to non-agricultural use.

b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact

The Williamson Act, also known as the California Land Conservation Act of 1965, enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive property tax assessments which are much lower than normal because they are based upon farming and open space uses as opposed to full market value (California Department of Conservation 2019).

There is no agricultural use, Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) in the vicinity therefore, there are no Williamson Act contracts in the vicinity. Because there are no agricultural zoning designations and no Williamson Act contracts associated with the Project, there would be no impact.

c) Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code (PRC) § 12220(g)), timberland (as defined by PRC § 4526), or timberland zoned Timberland Production (as defined by Government Code § 51104(g))?

d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?

Less Than Significant Impact with Mitigation Incorporated

As discussed in the Environmental Setting, the Project area is located on lands designated as recreation and conservation within forest lands owned by the U.S. Forest Service. There is no zoning for timberland production associated with the Project area. Although tree removal is required to construct the trail, tree removal is spread out along the proposed linear trail corridor and not within a concentrated area and would not result in rezoning. This accounts for roughly 3.5-4 acres of tree removal within the Project area, calculated by multiplying the length of trail corridor by the width of trail and shoulders.

As stated in the Project Description, trees 24-inch or larger trees within eastside forest type and trees larger than 30 inches dbh in westside forest type are located within the footprint of the proposed trail and cannot be avoided to implement the EIP Project. TRPA Code Section 61.3.7.A.6 allows for removal of trees larger than 24 inches dbh in eastside forest type and trees larger than 30 inches dbh in westside forest type when required to implement EIP projects. As stated in the Project description, the proposed Project is included in TRPA's EIP program as a sustainable recreation and transportation project (EIP #03.02.02.0003). Therefore, the Code findings for removal of trees larger than 24 inches dbh can be made for TRPA permitting purposes.

Because the Project requires more than 3 acres of tree removal the Project may result in a conversion of timberland to non-timberland use. **Mitigation Measure FR-1** would ensure compliance with CCR and CAL FIRE requirements to develop a Timber Harvesting Plan and secure a Timber Conversion Permit from CAL FIRE.

Mitigation Measure FR-1: **Develop Timber Harvesting Plan and Secure Timberland Conversion Permit from the California Department of Forestry and Fire Protection (CAL FIRE).** The County shall comply with the Operations Requiring Conversion Permit (CCR § 1104) requirements for conversion of Forestland for installation of public service projects. The County shall retain a Registered Professional Forester to develop a Timber Harvesting Plan. The County shall also obtain a Timberland Conversion Permit from CAL FIRE per CCR § 1103. Tree removal shall occur along the trail corridor and be completed within 1 year of filing with CAL FIRE by a Registered Professional Forester and a Licensed Timber Operator.

Finding: With implementation of the Mitigation Measure FR-1, the Project would not conflict with the applicable regulations governing Public Agency conversion of timber resources to non-timber use. Therefore, additional mitigation would not be required.

e) 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?

Less Than Significant Impact

Refer to responses a-d. There is no farmland associated with the Project. The County must comply with CCR requirements for converting more than 3 acres of timberland to non-timberland use as discussed in **Mitigation Measure FR-1** above; and therefore, no additional mitigation would be necessary.

4.3 AIR QUALITY

4.3.1 Environmental Setting

The Project is located within the Placer County portion of the Lake Tahoe Air Basin (LTAB). Mobile sources of air pollution, mainly motor vehicles, are among the most significant sources of pollution and greenhouse gases in the Tahoe Basin. The LTAB is affected by both the rate and location of pollutant emissions and by meteorological conditions that influence movement and dispersal of pollutants. Atmospheric conditions such as wind speed, wind direction, air temperature gradients, and existing air pollutant sources coupled with local topography affect the dispersion of air pollution and air quality in the LTAB.

Most airborne pollutants in the LTAB come from three sources related to populated areas that generate airborne anthropogenic materials: road dust, vehicle exhaust, and chimney smoke. Undeveloped areas in the LTAB produce airborne dust and smoke from natural sources like forest fires as well as direct and indirect effects of land management practices (i.e., controlled burns). In addition, airborne materials generated in downwind areas, including the San Francisco Bay area and the Central Valley, are carried upwind to the LTAB by the region's prevailing winds. As a result of the various potential emission sources, air quality regulations in the LTAB focus on the following air pollutants: ozone, carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), fine particulate matter (PM_{10} and $PM_{2.5}$), and lead. These pollutants are commonly referred to as "criteria air pollutants."

According to the TRPA Environmental Threshold Carrying Capacities (ETCC) (see **Table 1**), the indicators for carbon monoxide, ozone, particulate matter, and vehicle miles traveled (VMT) are in non-attainment. For other criteria pollutants, the LTAB is either in attainment or unclassified for the remaining national, state, and regional standards.

Air quality within the LTAB is regulated by several agencies including the United States Environmental Protection Agency (EPA), CARB, Placer County APCD, and TRPA. These agencies develop rules, regulations, policies, and/or plans to achieve the goals and directives imposed through legislation. Summary descriptions of the applicable agency regulations are provided in the following subsections.

TRPA Active Transportation Plan

The 2018 Active Transportation Plan (formerly Bike and Pedestrian Plan) is a technical update prepared to help inform development of the 2020 Regional Transportation Plan (RTP). The Active Transportation Plan aims at improving transportation options for bicyclists and pedestrians as one of the most effective ways to conserve and restore Lake Tahoe’s environment, revitalize the economy, enhance recreation opportunities, and improve public health. The plan outlines

challenges and solutions to existing mobility issues and identifies priority projects to be implemented (TRPA 2018).

Placer County Basin Area Transportation Plan

Chapter 5 of the Basin Area Plan contains a Transportation Plan, intended to develop an improved pedestrian, bicycle, and transit options in accordance with the 2012 Lake Tahoe Sustainable Communities Strategy (SCS) that was adopted in accordance with the California Senate Bill 375 (Sustainable Communities and Climate Protection Act). Pedestrian and bicycle users within the Plan area are accommodated through a network of both on-road and off-road facilities. Multi-purpose trails provide for much of the connectivity within the area. As automobile use strongly influences both air quality and noise thresholds, the Plan focuses on enhancing alternative transportation opportunities in an area that heavily relies on automobile transportation (Placer County and TRPA 2016).

Also included within the Transportation Plan is a detailed discussion of air quality attainment and greenhouse gas reduction objectives associated with implementing transportation improvements. A common goal of the Basin Area Plan, Regional Transportation Plan, and Tahoe Metropolitan Planning Organization (TMPO), is to limit greenhouse gas emissions from vehicle use, improve air quality, and reduce noise by transitioning to a more walkable development pattern in Town Centers by improving pedestrian, bicycle, and transit facilities (Placer County and TRPA 2016).

4.3.2 Regulatory Setting

Air Quality Standards

Air quality within the LTAB is regulated by several agencies including TRPA, EPA, CARB, and the County. These agencies develop rules, regulations, policies, and/or plans to achieve the goals and directives imposed through legislation.

The EPA is responsible for implementing the federal Clean Air Act (1970), including establishing health-based National Ambient Air Quality Standards (NAAQS) for air pollutants. NAAQS established for criteria pollutants under the Clean Air Act are ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, $PM_{10,}$ and $PM_{2.5}$, and lead. The standards set for criteria pollutants are periodically reviewed and revised as applicable.

In California, CARB is responsible for implementing the California Clean Air Act (1988) and has established California Ambient Air Quality Standards, which are to date more restrictive than the national standards. In general, the CARB works with local agencies to develop policies, guidance, and regulations related to state and federal ambient air quality standards; coordinates with local agencies on transportation plans and strategies; and provides assistance to local districts and

transportation agencies to meet air quality standards established under both the federal and California clean air acts.

Local - TRPA

TRPA takes air quality into consideration in its planning and permitting activities to ensure compliance with state and district air quality standards for projects in the LTAB. Because TRPA's authority is granted directly from Congress, TRPA has the authority to adopt air quality and other environmental quality thresholds, and to enforce ordinances designed to achieve those thresholds. **Table 1** below describes the ETCC for the LTAB.

Table 1. Tahoe Regional Planning Agency Air Quality Thresholds of Significance

Pollutant	Construction Threshold Pollutant
Reactive Organic Gases (ROG)	82 lbs/day
Nitrogen Oxides (NOx)	82 lbs/day
Carbon Monoxide	8-hour average: 6 ppm 1-hour average: 20 ppm
PM_{10}	Annual arithmetic mean: 20 µg/m^3 24-hour average: 50 µg/m^3
$PM_{2.5}$	Annual arithmetic mean: 12 µg/m3 24-hour average: 50 µg/m^3
Ozone	8-hour average: 0.07 ppm 1-hpur average: 0.08 ppm

lbs/day = pounds per day
ppm = parts per million
µg/m^3 = micrograms per cubic meter

Local - APCD

The Placer County APCD CEQA Handbook (2017) recommends use of the Roadway Construction Emissions Model (RCEM) to estimate emissions associated with linear construction projects. The RCEM is a spreadsheet-based model that is able to use basic project information (e.g., total construction months, project type, total project area) to estimate exhaust emissions from heavy-duty construction equipment, haul trucks, and worker commute trips associated with linear construction projects, as well as fugitive dust. Results of the model quantifies construction related criteria air pollutant emissions and GHG emissions for construction projects.

Significance thresholds adopted by the Placer County APCD for the construction phase of projects is as follows:

- reactive organic gases [ROG (lbs/day): 82
- NOx (lbs/day): 82
- PM_{10} (lbs/day): 82
- GHG (metric tons CO_2e/year): 10,000

Projects that exceed the short-term construction threshold of 82 pounds per day of ROG, NOx and/or PM must mitigate the air quality impacts (Placer County APCD 2017).

4.3.3 CEQA Checklist Summary

Would the project:

CEQA Question	Impact Determination
a) Conflict with or obstruct implementation of the applicable air quality plan?	No Impact
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	Less Than Significant Impact
c) Expose sensitive receptors to substantial pollutant concentrations?	Less Than Significant Impact
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Less Than Significant Impact

4.3.4 Answers to CEQA Checklist Questions

a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

No Impact

Projects that could generate emissions in excess of the Placer County APCD and the TRPA ETCC recommended significance thresholds would be considered to potentially conflict with or obstruct implementation of the applicable air quality plan. 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. As discussed in the Environmental Setting, a common goal of the Basin Area Plan and Regional Transportation Plan is to limit greenhouse gas emissions from vehicle use, improve air quality, and reduce noise by transitioning to a more walkable development pattern by improving pedestrian,

bicycle, and transit facilities. The trail, once constructed, would provide a linkage to adjacent area trails, and close a gap in the active transportation system between Kings Beach, Tahoe Vista, and Carnelian Bay.

The APCD has identified the most common sources of emissions from construction projects as site preparation, grading, and general construction use of heavy equipment. The emissions generated from these activities include the following:

- Combustion emissions: (ROG, diesel particulate matter, NOx, CO, SOx) from mobile heavy-duty diesel and gasoline powered equipment, portable auxiliary equipment, and worker commute trips
- Fugitive dust (PM_{10}) from soil disturbance, including grading and land clearing

Short-term construction-generated emissions are not projected to exceed applicable thresholds of significance due to the short duration required for construction and adherence to applicable County and TRPA requirements as discussed in the construction controls, Section 3.7.1, Air Quality, and 4.3.4(b), below. The Project is required to comply with APCD Rule 228, Fugitive Dust, which establishes the minimum dust mitigation and control requirements along with the standards to be met from the activities that generate fugitive dust. Rule 228's minimum dust mitigation and control requirements must be used for all grading and construction activities. Implementation of these controls is anticipated to reduce construction emissions to less than significant.

Thus, implementation of the Project would not conflict with nor obstruct implementation of applicable air quality plans.

b) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Less Than Significant Impact

The Project has the potential to produce air pollutant emissions during construction activities, but also has the potential to reduce area emissions during operations by encouraging non-motorized trips.

Construction Emissions

Construction of the Project would result in short-term increases in emissions caused by typical construction activities, such as grading and excavation, and vehicle exhaust from construction equipment. Increased emissions would consist of ROG, NO_2 and emissions of PM_{10}, CO, SO_2 and NOx. Emissions of ozone-precursors could result from the operation of both on and off-road motorized vehicles and equipment.

Anticipated construction equipment to be used for the proposed Project includes a backhoe, loader, excavator, haul truck, and water truck. Project construction is scheduled for summer 2019 or 2020 and is expected to last approximately 30 days.

Emissions of airborne PM would be dependent on the amount of ground disturbance associated with site preparation activities and could result in increased concentrations of PM_{10}.

Project Screening - Emissions

Emissions modeling was conducted for the construction phase of the Project using the RoadMod (RCEM) Model (version 9.0.0). Results of emissions modeling are presented in

Table 2.

Construction of the Project would result in short-term increases in emissions caused by typical construction activities, such as grading and excavation, and vehicle exhaust from construction equipment. Increased emissions would consist of ROG, NOx, PM_{10} and $PM_{2.5}$, CO, SOx, and NOx. Emissions of ozone-precursors could result from the operation of both on and off-road motorized vehicles and equipment.

Inputs to the RCEM model included the construction year, total expected duration, proposed equipment usage, and total road length constructed. Other model inputs such as soil import and export, and concrete and asphalt truck trips were input to the model. The model predicts emissions of ozone precursor pollutants (i.e., ROG and NOx) and particulate matter (i.e., PM_{10} and $PM_{2.5}$). Conservative estimates for all model inputs were used to present a 'worst-case' scenario of emissions generated by construction of the Project.

Table 2 displays a summary of conservative estimates for the average daily emissions estimates from work associated construction of the trail. The results of the RCEM emission calculations are included in **Appendix C**. The emissions presented are based on the best information available at the time of calculations.

Table 2. Estimated Construction Emissions for Project Construction

Scenario	ROG	NOx	Total PM_{10} (exhaust + dust)	Total $PM_{2.5}$ (exhaust + dust)
Total construction emissions (tons)	0.04 tons	0.44 tons	0.86 tons	0.19 tons
Maximum (lbs/day)	2.4 lbs/day	19.75 lbs/day	40.98 lbs/day	9.14 lbs/day

Table Notes:

*Assumes 120 workdays total (one 4-month construction season)
lbs/day = pounds per day
NOx = nitrogen oxides
PM = particulate matter; number refers to size of PM in microns in diameter or smaller
ROG = reactive organic gases

Vehicle Miles Traveled

As discussed in the Environmental Setting, VMT, a TRPA air quality threshold indicator, is in non-attainment. According to the TRPA ATP, VMT is linked to emission of nitrogen oxides, particulate matter, hydrocarbons, and greenhouse gas. Shared-use paths can both reduce VMT (as people shift from their cars to biking and walking) and contribute to VMT (as some may elect to drive to a path as a recreation amenity). To quantify potential impacts, LSC Consultants, with assistance from Alta Planning and Design, developed a Tahoe Bicycle Trail User Model that accounts for both the vehicle trip generation and reduction attributable to bicycle facilities. Estimates from the model indicate that if the full network were constructed, biking and walking trips would reduce VMT by approximately 8,500 miles on a peak summer day. This translates into a reduction of approximately 1,400 metric tons per year of carbon dioxide, a key greenhouse gas.

Because the path would be constructed in proximity to population centers and connected into the existing trail network, the Project is anticipated to reduce VMT and therefore other criteria air pollutants for which the area is non-attainment. Further discussion on VMT is located in Section 4.17, Transportation.

c) Would the project expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact

Sensitive receptors include, but are not limited to, hospitals, schools, daycares, elderly housing, and convalescent facilities. These are areas where the people or institutions with people that are particularly susceptible to illness from

environmental pollution, such as the elderly, very young children, people already weakened by illness (e.g., asthmatics), and persons engaged in strenuous exercise (Bay Area Air Quality Management District 2017). The nearest sensitive receptor may be the Park should those persons mentioned above be present in the area during construction; however, most trail construction would occur over 600 feet away from the park facility.

It was determined through use of RCEM model that the emissions generated during Project construction would be less than significant due to the temporary nature of activities and minor use of emissions generating equipment. Additionally, the Project design incorporates required construction controls that protect against significant amounts of pollutants from being generated by the Project during construction, including fugitive dust control, should persons susceptible to pollution be present within the Project area. Project effects on sensitive receptors would therefore be less than significant.

d) Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less Than Significant Impact

During construction, operations may periodically generate odors from exhaust emissions, ground disturbance, and paving operations. Odors created by construction operations would be temporary and would dissipate rapidly from the source with an increase in distance and due to the linear nature of construction activities. Due to the Project site occurring away from residential and town center areas, significant numbers of persons would not be affected by construction odors. The impact would be less than significant.

4.3.5 TRPA Checklist – Air Quality

TRPA Questions	Answers	Discussion
2a) Would the proposed project result in substantial air pollutant emissions?	No	As shown in CEQA item b) above, the project would not result in significant air pollution emissions.
2b) Would the proposed project result in deterioration of ambient (existing) air quality?	No	As discussed in CEQA item b), the Project would emit temporary emissions associated with construction activities. Because construction is temporary in nature, and post-construction of the shared use path is anticipated to have beneficial impact on air quality due to reduction in VMT, the Project would not result in a deterioration of ambient air quality.

4.4 BIOLOGICAL RESOURCES

4.4.1 Environmental Setting

The proposed trail alignment is located in a primarily undeveloped, forested environment. The proposed alignment does not cross waterways, SEZ, wetlands, or riparian habitat as discussed in the following subsections.

Botanical Resources

Vegetation types were initially identified with the CALVEG Alliances geographic information system (GIS), then verified based on reconnaissance level surveys conducted by NCE in 2019 and 2020. The Project area encompasses five distinct habitat types: Sierran mixed conifer – pine alliance, Jeffrey pine alliance, montane chaparral, perennial grasslands, and urban or developed (**Appendix D**, Figure 2). **Appendix D** contains the full *Botanical Baseline Report* (NCE 2021a).

Botanical surveys were conducted by NCE on August 30, 2019, July 8, 2020, and October 23, 2020, by conducting walking transect surveys across the Project area to identify plant communities and habitat types that may support special status species. In addition, the survey focused on plant identification to a level that allowed for the determination of rarity and listing status. During field surveys, the phenology of vegetation on site was appropriate for identification of special status species.

No special status plant species were identified within the Project area during the botanical field surveys and no recorded occurrences of special status plant species within the Project area were found during database research (NCE 2021a).

Invasive species

A database review, field survey, and *Invasive Plant Risk Assessment* (NCE 2021b) was prepared for the Project to identify noxious and invasive species within the Project area and, if present, provide treatment options for populations encountered within the Project area.

The field survey found no non-native/invasive plant species in the Project area, but found one non-native/invasive plant species outside of and adjacent to the Project area: cheatgrass (*Bromus tectorum).* The full *Invasive Plant Risk Assessment* is included as **Appendix E**, which contains construction minimization measures to be implemented in the event invasive species are encountered.

Wildlife

A *Wildlife Baseline Report* (NCE 2021c) was prepared as an initial baseline assessment for wildlife resources to determine potential Project effects on wildlife special status species for the Project. The full report is located in **Appendix F**. The report summarizes the literature review and research findings, field assessment

data, and potential impacts to special status species in the Lake Tahoe Basin within and adjacent to the Project area. For the purposes of analysis, the term special status species encompasses those species designated as federally threatened or endangered by the U.S. Fish and Wildlife Service (USFWS); those designated as state endangered, threatened, or rare by the State of California (California Department of Fish & Wildlife [CDFW]; USFS-LTBMU Sensitive Species; and TRPA special interest species.

The following site-specific references and background information was reviewed:

- California Natural Diversity Database
- CALVEG GIS layers
- USFWS Information for Planning and Conservation
- TRPA Special Interest Species Location Data
- TRPA Threshold Evaluation
- California Wildlife Habitat Relationship
- State and Federally Listed Endangered and Threatened Animals of California
- LTBMU Sensitive Species

In summary, suitable habitat does exist within 0.5 miles of the APE for Sierra Nevada yellow-legged frog, bald eagle, California spotted owl, northern goshawk, osprey, mule deer, Sierra marten, Sierra Nevada mountain beaver, Sierra Nevada snowshoe hare, and Sierra Nevada red fox. Of these, bald eagle, California spotted owl, northern goshawk, osprey, mule deer, Sierra marten, and Sierra Nevada snowshoe hare have a moderate likelihood of occurring within the Project area as suitable habitat is present and they are known to occur in this vicinity. Sierra Nevada yellow-legged frog is not expected to occur within the Project area. Although suitable habitat does exist within 0.5 miles of the Project, aquatic and riparian habitat requirements for migration, breeding, and foraging are lacking within the Project area. The remaining species with suitable habitat are not expected to occur as they have very isolated populations, specific habitat requirements, and/or are sensitive to human disturbances. These include Sierra Nevada mountain beaver, and Sierra Nevada red fox. Project activities will not affect the ability of birds or mammals in the area to forage, move, or breed. This Project will not interrupt the movement of species in the region, and habitat values will remain high within and adjacent to the location of the Project.

California Spotted Owl and Northern Goshawk

The USFS-LTBMU manages Protected Activity Centers (PACs) for California spotted owl and northern goshawk. California spotted owl PACs include the best available 300 acres of habitat on National Forest Service lands in as compact a unit as

possible surrounding a territorial owl's activity center. Northern goshawk PACs include the best available 200 acres of forested habitat on National Forest Service lands in the largest contiguous patches possible and surrounding all known and newly discovered breeding territories detected on National Forest Service lands. PACs are managed to meet the life history requirements of spotted owls and goshawks. Management activities that would modify the habitat in these areas so that it trends away from desired conditions are prohibited (U.S. Department of Agriculture [USDA] 2012).

A PAC for California spotted owl exists adjacent to, but not within, the APE west of Carnelian Bay Avenue. There are no northern goshawk PACs within 1 mile of the trail alignment.

The USFS-LTBMU also manages Home Range Core Areas (HRCAs) for California spotted owl. HRCAs on the USFS LTBMU include 1,000 acres of the best available and contiguous California spotted owl habitat in the closest proximity to an owl activity center. USFS-LTBMU has designated a California spotted owl HRCA, associated with the adjacent PAC that encompasses approximately half a mile of the trail alignment on the trail's west side (**Figure 6**).

Based on habitat observed within the survey area, presence of a California spotted owl PAC adjacent to the western edge of the Project area, and the western segment of trail occurring within an HRCA, there is moderate likelihood for California spotted owl to occur within the Project area during Project activities. Suitable nesting habitat is absent within the Project area, but owls may use the area for foraging (NCE 2021c).

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 contains potential corridors for the movement of animals due to areas of contiguous forest to the north.

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

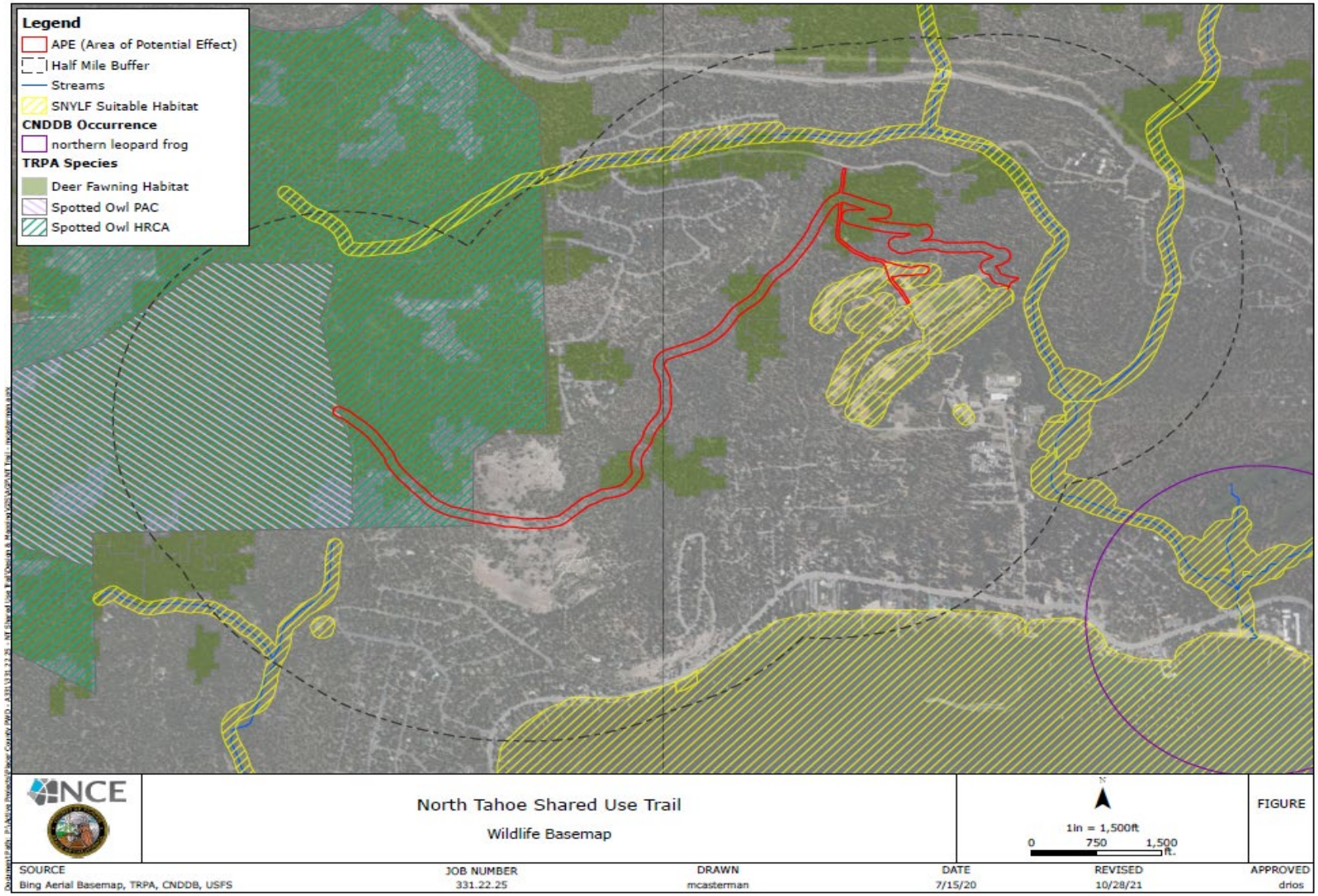

Figure 6. Wildlife Basemap and Spotted Owl HRCA

regulates SEZ within the Tahoe Basin under the Clean Water Act's 208 Plan program.

The Project area does not contain any SEZ lands (TRPA Land Capability Class 1B) (**Figure 7**).

4.4.2 Regulatory Setting

Federal

Endangered Species Act

The federal Endangered Species Act (ESA) protects plants and wildlife that are listed as endangered or threatened by the USFWS. Section 9 of the ESA prohibits the taking of endangered wildlife, where taking is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct" (50 Code of Federal Regulations [CFR] 17.3). This statute also governs removing, possessing, maliciously damaging, or destroying any endangered plant on federal land and removing, cutting, digging-up, damaging, or destroying any endangered plant on non-federal land in knowing violation of state law.

Under Section 7 of the ESA, federal agencies are required to consult with the USFWS and/or National Oceanic and Atmospheric Administration–National Marine Fisheries Service if their actions, including permit approvals or funding, could adversely affect a federally listed species (including plants) or its critical habitat.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) makes it unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, or kill migratory birds. The law applies to the removal of nests (such as swallow nests on bridges) occupied by migratory birds during the breeding season. California Fish and Game (CDFG) Code (Section 3500) also prohibits the destruction of any nest, egg, or nestling.

State

California Native Plant Protection Act

The Native Plant Protection Act (NPPA) of 1977 (CDFG Code Sections 1900-1913) was created in order to "preserve, protect and enhance rare and endangered plants in this State." The NPPA is administered by CDFW. The Fish and Wildlife Commission has the authority to designate native plants as "endangered" or "rare" and to protect endangered and rare plants from take. The California ESA provided further protection for rare and endangered plant species, but the NPPA remains part of the CDFG Code.

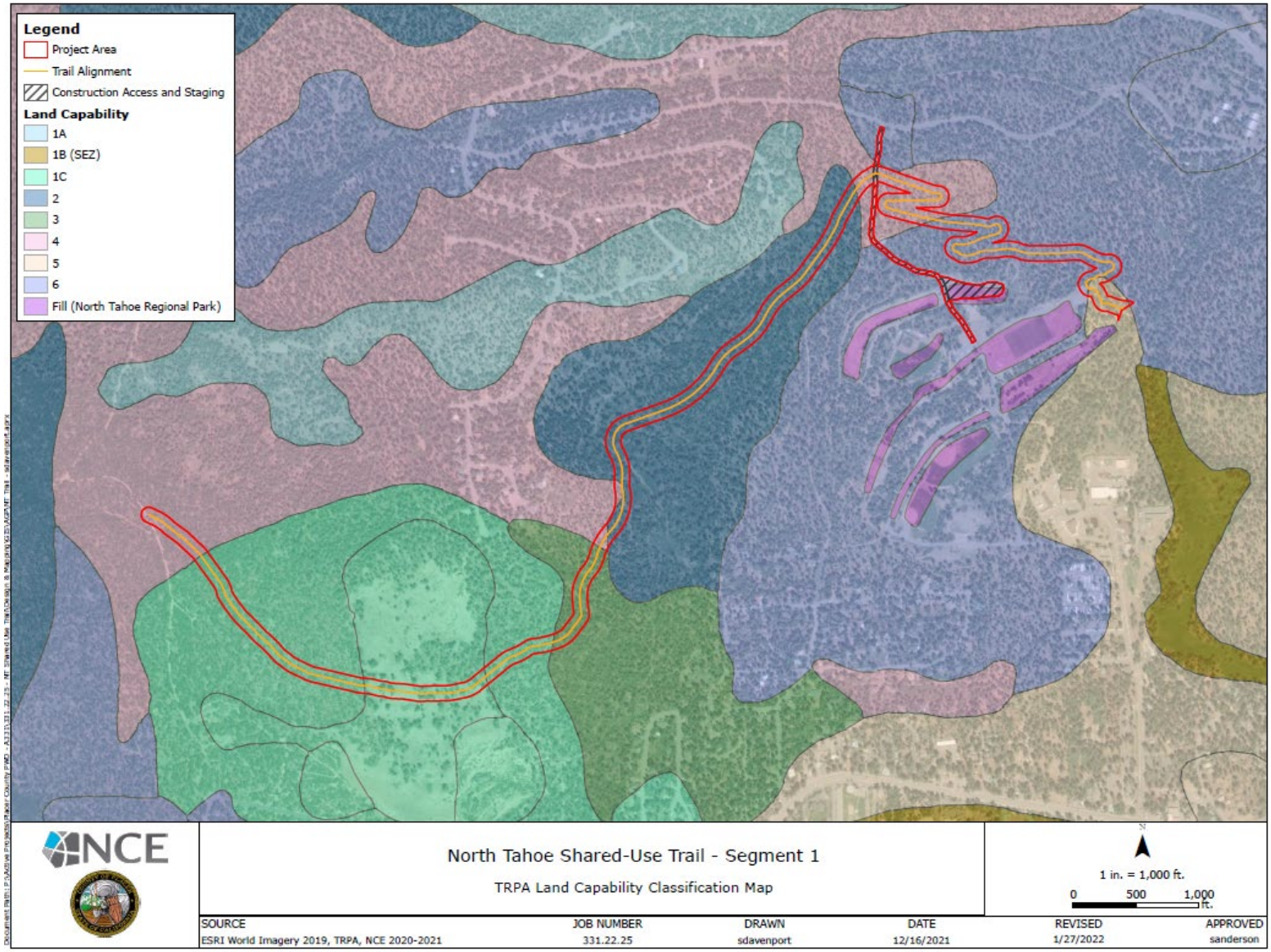

Figure 7. TRPA Land Capability Classifications

TRPA – Tree Removal

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

Within lands classified by TRPA as conservation or recreation land use, trees larger than 30 inches dbh in the westside forest types and larger than 24 inches dbh in eastside forest types may be removed when it is demonstrated that the removal is necessary for the activity pursuant to 61.3.7.6. Tree removal must meet all other minimum standards per 61.1.6, with substantial removal occurring for activities on project areas of three acres or more and proposing the removal of more than 100 live trees 14 inches dbh or larger (61.1.8), or proposing tree removal that as determined by TRPA after a joint inspection with appropriate state or federal Forestry staff does not meet the minimum acceptable stocking standards set forth in subparagraph 61.1.6.H.

TRPA – Threshold Disturbance Zones

TRPA has identified Threshold Disturbance Zones for particular special interest species including northern goshawk. Uses, projects, or activities outside existing urban areas and within the disturbance zone of special interest, threatened, endangered, or rare species shall not, directly or indirectly, significantly adversely affect the habitat or cause the displacement of extirpation of the population (TRPA Code, Chapter 62, Subsection 62.4.2). The disturbance zone for goshawks is the 500 acres of best suitable habitat surrounding a population site, which shall include a 0.25-mile radius around each nest site (TRPA Code, Chapter 62, Subsection 62.4.1A).

4.4.3 CEQA Checklist Summary

Would the project:

CEQA Question	Impact Determination
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies or regulations, or by the California Department of Fish & Wildlife (CDFW) or U.S. Fish & Wildlife Service (USFWS)?	Less Than Significant Impact with Mitigation Incorporated
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS?	No Impact

c) 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?	No Impact
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	Less Than Significant Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	Less Than Significant Impact
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	Less Than Significant Impact

4.4.4 Answers to CEQA Checklist Questions

a) 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 & Wildlife (CDFW) or U.S. Fish & Wildlife Service (USFWS)?

Less Than Significant Impact with Mitigation Incorporated

Northern Goshawk

The closest TRPA Threshold Disturbance Zone for northern goshawk is 0.75 miles east (outside) of the trail alignment and Project boundary; therefore, the Project would not result in impacts to TRPA Threshold Disturbance Zones and significant impact to Northern Goshawk is not anticipated. No mitigation is necessary.

California Spotted Owl (CSO)

As discussed in the Environmental Setting, based on the presence of a California spotted owl PAC adjacent to the western edge of the Project area, and the western segment of trail occurring within a LTBMU designated HRCA, there is moderate likelihood for CSO to occur within the Project area. CSO are a State 'Candidate Threatened' species, federal USFS-LTBMU Sensitive Species, and further protected under the MBTA. Suitable nesting habitat is absent within the Project area, but owls may use the area for foraging.

Per the USFS's *Conservation Strategy for the California Spotted Owl* (Conservation Strategy), noise associated with nonmotorized recreation does not seem to pose a threat to spotted owls, and chainsaw noises at least 350 feet from a nest do not appear to decrease reproductive success nor increase stress hormones in the

species (USDA 2019). Therefore, general construction activities associated with the trail and future operational / recreation use of the trail through HRCA habitat is unlikely to negatively impact CSO that may occur in the area. Additionally, the Conservation Strategy states that tree thinning and minor reductions in canopy cover generally do not result in adverse impacts and may maintain habitat quality in the short term and also provide long-term benefits to the species (USDA 2019). Therefore, tree removal itself is not anticipated to be a significant reduction in suitable habitat as tree removal would be spread out along a linear area and there is an abundance of sierran mixed conifer habitat adjacent to the trail and within the region.

However, it is unknown if the HRCA territory will be occupied by a breeding pair or if there will be an active nest nearby during construction. As a result, tree removal may result in a potentially significant impact to CSO should they be present. To mitigate potential impacts during construction, **Mitigation Measures BIO-1 and BIO-2** are necessary and will include conducting preconstruction protocol-level surveys and following established regulatory agency protocol, as described below.

***Mitigation Measure BIO-1*: Conduct Preconstruction Protocol-Level Survey for CSO in HRCA Zone.** Under the direction of the resource agency biologists, a protocol-level survey for CSO shall be conducted in the spring (i.e., March to May) prior to commencement of tree removal within the area of the Project boundary that overlaps with the HRCA.

- A qualified biologist shall follow resource-agency-approved protocols and conduct protocol-level preconstruction surveys within suitable nesting habitat for California spotted owl within 0.5 miles of the Project area. Should CSO be discovered nesting within the Project area, the resource agencies shall be notified, and additional protection measures will be identified. These protection measures are intended to avoid and minimize significant effects to a nest and roosting individuals, which may include creation of a buffer zone, construction monitoring by a biologist, or similar protection measures to avoid impacts during construction activities.
- If an active nest is located, the biologist shall determine, depending on conditions specific to each nest and the relative location and rate of construction activities, if it may be feasible for construction to occur as planned without impacting the breeding effort. The resource agencies shall be consulted to determine if and when construction activities can be initiated.
- The nest(s) may be monitored by a qualified biologist during active construction, if deemed appropriate by resource agencies. If, in the professional opinion of the biologist, construction activities significantly affect the nest and roosting individuals, the biologist shall recommend additional remediation measures which may include stop work action. The biologist and

resource agencies will determine any additional protection measures working with the Project Engineer. Construction activities may be halted within the buffer until either the nest is no longer active, or the Project receives approval from the resource agencies to resume work.

Mitigation Measure BIO-2: **Obtain and Comply with Conditions of USFS-LTBMU Special Use Permit.**

Because the project will be constructed through USFS-LTBMU land, the County is shall obtain a Special Use Permit from the USFS. Should the USFS-LTBMU determine additional protection measures are necessary, the SUP will outline mitigation and conservation requirements as a condition of approval. The County will be required to comply with any conditions identified within the SUP. Compliance with the SUP will ensure potential impacts to CSO will be mitigated to less than significant. Additional protection measures may include:

- Biological monitoring during tree removal and trail construction within the HRCA
- Identified tree protection and habitat avoidance measures

Findings: Implementation of Mitigation Measures BIO-1 and BIO-2, which requires a preconstruction protocol-level survey to identify presence of species, the protection of active occupied habitat, and approval of the Project by USFS-LTBMU Special Use Permit that would outline additional required conservation and mitigation if necessary, would avoid potentially significant impacts to CSO from occurring.

Migratory Birds

The Project area and adjacent lands contain trees which may provide habitat for migratory birds. Migratory birds are protected under the MBTA, and birds of prey are also protected in California under provisions of the State Fish and Game Code, Section 3503.5. Both make it illegal to "take" protected species except under the terms of a permit. It is possible that nesting habitat could be disturbed during construction due to tree removal, noise, and vibrations from construction equipment. This would be a potentially significant impact on migratory birds and/or birds of prey.

Implementation of **Mitigation Measures BIO-3 and BIO-4** would reduce potentially significant impacts to migratory birds and nesting birds to less than significant.

Mitigation Measure BIO-3: **Pre-Construction Avian Survey.** If any construction activities (e.g., grubbing or grading) are scheduled during the bird nesting season (typically defined by CDFW as February 1 to September 1), the County shall retain a qualified biologist to conduct a preconstruction survey of the

Project area and 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 preconstruction survey shall be conducted no more than 14 days prior to land disturbance or tree removal. Any active nest should not be disturbed until young have fledged or under the direction provided by a qualified biologist. Any special status species shall not be disturbed without the direction of a qualified biologist. If an active nest is found during construction, disturbance shall not occur without direction from a qualified biologist.

***Mitigation Measure BIO-4*: Avoid Vegetation Removal During Avian Breeding Season.** Tree or shrub removal shall occur during the non-breeding season (September 1 through January 31). If it is not possible to avoid tree removal or other disturbances during the breeding season (February 1 through August 31), a qualified biologist shall conduct a pre-disturbance survey for nesting birds in all trees within the operation footprint and within 250 feet of the Project area no more than 30 days prior to the onset of ground disturbance. If nesting birds are detected on the site during the survey, a suitable activity-free buffer should be established around all active nests. The precise dimension of the buffer (up to 250 feet) would be determined in consultation with CDFW at that time and may vary depending on location and species. Buffers should remain in place for the duration of the breeding season or until it has been confirmed by a qualified biologist that all chicks have fledged and are independent of their parents.

Finding: Implementation of Mitigation Measures BIO-3 and BIO-4 would reduce potentially significant impacts to migratory birds to less than significant.

b) 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 CDFW or USFWS?

No Impact

Sensitive natural communities are those that are listed in the CDFW's California Natural Diversity Database due to the rarity of the community in the state or throughout its entire range. During the August 30, 2019, survey, no sensitive natural communities, including SEZ or riparian habitats were identified within or adjacent to the Project area. Thus, the proposed Project should have no impact on any riparian habitats or other sensitive natural communities.

c) 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?

No Impact

There are no wetlands located within the Project area. There would be no impact.

d) 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?

Less Than Significant Impact

There are no waterways within the Project area, therefore there would be no impact to fish species.

Wildlife corridors

Due to the Project area's forested setting, wildlife species (including birds) may use the area as a wildlife corridor. The trail would be constructed at near-grade and would not include any above ground structures with potential to impede mammal migration through the area. As discussed above, the Project would implement measures to protect migratory bird species from significant impact during construction; no additional mitigation is necessary.

Wildlife nursery sites

Project activities would not affect the ability of birds or mammals in the area to forage, move, or breed and the Project would implement measures to protect CSO breeding habitat should nesting sites be encountered during construction. This Project would not interrupt the movement of species in the region, and habitat values will remain high within and adjacent to the location of the Project (NCE 2021c).

e) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less Than Significant Impact

As discussed in the Project description, the Project proposes to remove approximately 1,000 trees ranging from 6-30" dbh in a linear corridor approximately 3.5-4 acres in size to construct the trail.

TRPA Code Section 61.3.7.A.6 allows for removal of trees larger than 24 inches dbh in eastside forest type when required to implement EIP projects. As stated in the Project description, the proposed Project is included in TRPA's EIP program as a sustainable recreation and transportation project (EIP #03.02.02.0003). Additionally, the County would obtain a CAL FIRE Public Agency Right-of-Way

exemption for tree removal as discussed in Section 4.2.3, Agriculture and Forestry Resources.

Therefore, the proposed Project would not conflict with local policies and ordinances protecting biological resources including tree preservation policy or ordinances.

f) 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?

Less Than Significant Impact

As discussed throughout this section, a portion of the trail would be constructed within a USFS-LTBMU 'home range core area' for the California spotted-owl. However, because the Project would implement mitigation to protect the species during construction and must secure and comply with conditions associated with a Special Use Permit, impacts to the HRCA are anticipated to remain less than significant.

4.4.5 TRPA Checklist

TRPA Questions – Vegetation	Answers	Discussion
4a) Would the proposed project result in removal of native vegetation in excess of the area utilized for the actual development permitted by the land capability/IPES system?	No	The Project transverses land capability classes 1c, 2, 3, and 6 (see Figure 7). Vegetation removal would occur only where necessary to construction the trail and would not result in excess removal in the area utilized for the development, permitted by land capability classes. Tree removal is allowable per TRPA Code exemptions for EIP projects.
4b) Would the proposed project result in removal of riparian vegetation or other vegetation associated with critical wildlife habitat, either through direct removal or indirect lowering of the groundwater table?	No	Refer to discussion for CEQA b). There is no riparian habitat associated with the Project. Additionally, there is no designated critical habitat associated with the Project (NCE 2021c).
4c) Would the proposed project result in the introduction of new vegetation that would require excessive fertilizer or water, or would provide a barrier to the normal replenishment of existing species?	No	No plantings are proposed for the Project. No impact would occur.
4d) Would the proposed 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)?	No	The Project requires tree removal to construct the trail in a forest environment; however, tree removal would be spread out along a linear footprint and is minimized to the extent necessary to construct the trail. As discussed in Section 4.2, Agricultural and Forestry Resources, significant impact to forest lands through conversion of forest land to non-forest use would not occur and no changes to the diversity or

TRPA Questions – Vegetation	Answers	Discussion
		distribution of species would occur as a result of constructing the trail.
4e) Would the proposed project result in the reduction of the numbers of any unique, rare or endangered species of plant?	No	No, as discussed in the Environmental Setting no unique, rare or endangered species of plant are associated with the Project area.
4f) Would the proposed project result in removal of stream bank and/or backshore vegetation, including woody vegetation such as willows?	No	No, as discussed in the Environmental Setting, there are no waterways or associated riparian species within the Project area.
4g) Would the proposed 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?	Yes	Yes, the Project would transect lands designated by TRPA as Conservation and Recreation land use; however, the Project is an EIP project and therefore findings for tree removal can be made per TRPA Code Section 61.3.7.A.6.
TRPA Questions – Wildlife	**Answers**	**Discussion**
5a) Would the proposed 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)?	No	Construction and recreation use of a trail is not anticipated to 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).
5b) Would the proposed project result in reduction of the number of any unique, rare or endangered species of animals?	No, with Mitigation	Refer to CEQA a) above, which concludes the level of impact after mitigation to special status species is less than significant.

TRPA Questions – Vegetation	Answers	Discussion
5c) Would the proposed project result in introduction of new species of animals into an area, or result in a barrier to the migration or movement of animals?	No	No new species of animals or plants are proposed as part of the Project. Refer to CEQA d) above which concludes impact to migratory corridors or movement of animals would remain less than significant.
5d) Would the proposed project result deterioration of existing fish or wildlife habitat quantity or quality?	No, with Mitigation	The Project would impact protected habitat for the CSO. Refer to CEQA a) above, which concludes after mitigation the level of impact to CSO habitat quantity or quality remains less than significant.

4.5 CULTURAL RESOURCES

4.5.1 Environmental Setting

The County established a 39-acre Project area, referred to as the APE for cultural resources. An investigation was conducted to locate, describe, and evaluate cultural and historic resources present within the APE. Most of the surface in the APE has been previously disturbed and therefore the Project is considered to have little potential to affect historic properties upon implementation (NCE 2021d). There are no standing structures present within the APE.

A records search was conducted at the North Central Information Center and the USFS-LTBMU for resources within the APE, and resources in the vicinity around the APE (archival study area). Archival research indicated one previously recorded heritage resource was present within the APE. The present inventory resulted in the recordation of three additional resources and three isolated artifacts.

Based on NCE's evaluation, no historic resources are present within the Project's APE that are listed on or are eligible for listing on either the National Register of Historic Places or California Register of Historic Places.

A full accounting of the methods and findings are located in **Appendix G**, *Heritage Resource Inventory Report*.

4.5.2 Regulatory Setting

Federal

36 CFR § 800.4 - Identification of historic properties requires federal agencies (in this case the Forest Service) to consult with Tribes and identify and evaluate the significance of historic resource when present.

State

California Register of Historical Resources

The California Register of Historical 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 must be considered during the CEQA process.

Local

The TRPA Code (TRPA 2020), Section 67.3 – *Resource Projection*, outlines requirements for the accidental discovery of resources during construction (Subsection 67.3.1).

4.5.3 CEQA Checklist Summary

Would the project:

CEQA Question	Impact Determination
a) Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines § 15064.5?	No Impact
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines § 15064.5?	Less Than Significant Impact
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	Less Than Significant Impact

4.5.4 Answers to CEQA Checklist Questions

a) Would the project cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines § 15064.5?

No Impact

As discussed in the Environmental Setting, results of NCE's *Heritage Resource Inventory Report* (2021d) indicate no historic resources meeting the criteria for listing on either the National Register of Historic Places or California Register of Historic Places are present within the evaluated APE. As a result, the Project would not impact properties listed on or eligible to the National Register or California Register, historic resources that meet criteria outlined in Section 5024.1 of the California PRC or Chapter 67.6 of the TRPA Code of Ordinances, and "no historic properties will be affected," per 36 CFR Part 800.4(d)(1). Therefore, no impact would occur.

b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines § 15064.5?

Less Than Significant Impact

No cultural resources were identified within or adjacent to the APE. Based on the archival research and site reconnaissance conducted as part of the cultural resource's investigation, the Project area has a low potential to contain undocumented cultural resources. However, in the event that cultural resources are found during construction, the Project will comply with existing state and TRPA

regulations that govern the procedures and treatment for unanticipated finds during construction activities. Therefore, potential impacts to archaeological resources would remain less than significant and additional mitigation is not necessary.

c) Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

Less Than Significant Impact

Based on the prehistoric and historic uses of the area and the prior ground disturbance within the APE, and minimal construction depths, human remains are not expected to be discovered during construction activities. Additionally, as stated in Construction Controls Section 3.7.3, Cultural Resources, the Project is required to comply with the following provisions, should human remains be encountered during construction:

If cultural resources are discovered during Project implementation, Project personnel shall halt all activities in the immediate area and notify the Project Engineer, the Washoe Tribe, and a qualified archaeologist to determine the appropriate course of action. Archaeological resources are not to be moved or taken from the Project site and work should not resume until authorized. Should human remains be encountered while engaged in construction activities, work must cease in the immediate area and the contractor must immediately report the finding to the County Coroner, Washoe Tribe, California OHP, USFS, and other designated officials. The California OHP office will consult with the tribe on the disposition of the remains and any associated artifacts.

The likelihood of disturbing human remains during construction are considered very low, and procedures are in place to protect remains if uncovered. Therefore, the potential for the Project to disturb human remains is less than significant.

4.5.1 TRPA Checklist – Archaeological/Historical

TRPA Questions	Answers	Discussion
20a) Would the proposed project result in an alteration of or adverse physical or aesthetic effect to a significant archaeological or historical site, structure, object or building?	No	Refer to CEQA item a). There are no significant archaeological or historical structures, objects, or buildings identified within the APE.
20b) 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?	No	Refer to CEQA item a) and b), and Tribal Cultural Resources, Section 4.18, below.
20c) Is the property associated with any historically significant events and/or sites or persons?	No	Refer to CEQA item a). The Project area is not associated with any historically significant events or persons, as discussed in the HRIR (**Appendix G**).
20d) Does the proposed project have the potential to cause a physical change which would affect unique ethnic cultural values?	No	Refer to CEQA item b) and Tribal Cultural Resources, Section 4.18, below. The proposed Project would not have an impact or physical change which would affect unique ethnic cultural values.
20e) Would the proposed project restrict historic or pre-historic religious or sacred uses within the potential impact area?	No	The research conducted for the HRIR identified no known historic or pre-historic religious or sacred uses of the area.

4.6 ENERGY

4.6.1 Environmental Setting

The Project does not contain existing energy uses or sources. There is currently no energy being used in the Project area. The nearest use of energy is at the Regional Park for outdoor lighting.

The goal of conserving energy implies the wise and efficient use of energy. The means of achieving this goal include:

- Decreasing overall per capita energy consumption,
- Decreasing reliance on natural gas and oil, and
- Increasing reliance on renewable energy resources.

TRPA has adopted a Regional Plan for energy, which includes the following goal:

Goal E1 – Promote energy conservation programs and development of alternative energy sources to lessen dependence on scarce and high-cost energy supplies (TRPA 2012).

4.6.2 CEQA Checklist Summary

Would the project:

CEQA Question	Impact Determination
a) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	No Impact
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	No Impact

4.6.3 Answers to CEQA Checklist Questions

a) Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

No Impact

The Project does not require energy resources to operate the trail. Energy for the Project would be required temporarily during construction but would not require additional capacity on a local or regional scale. As discussed in Section 3.7, the Project must implement the measures listed in the Sacramento Metropolitan Air Quality Management District's "Basic Construction Emission Control Practices" (2019) and in the "Guidance for Construction GHG Emissions Reductions" (2016),

which include the use of BMPs to reduce use of fossil fuels and increase energy efficiency of construction vehicles.

Once constructed, the Project has the potential to reduce cumulative fuel consumption by providing for a non-vehicular pedestrian and bicycle trail network.

Because the Project has the potential to reduce overall fuel use once constructed, and would comply with construction efficiency requirements, the Project would not result in wasteful, inefficient, or unnecessary consumption of energy resources.

b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

No Impact

The California Air Resources Board has set a goal to increase energy efficiency and derive 50% of electricity in 2030; the proposed trail Project would have no effect on this program. Additionally, the Project would not conflict or obstruct the goals and policies of the TRPA Regional Plan for energy:

> Goal E1 – *Promote energy conservation programs and development of alternative energy sources to lessen dependence on scarce and high-cost energy supplies.*

Because the Project will conform with the Goals and Policies of the Regional Plan and state of California energy goals, there would be no impact.

4.6.4 TRPA Checklist

TRPA Questions – Natural Resources	Answers	Discussion
9a) Would the proposed project result in substantial increase in the rate of use of any natural resources?	No	The Project does not require continued use of natural resources once constructed. As discussed in CEQA item a), the Project is anticipated to reduce the amount of fossil fuel use once the Project is constructed by providing for a transportation alternative.
9b) Would the proposed project result in substantial depletion of any non-renewable natural resource?	No	The Project would require temporary use of fuel and energy to construct the Project. Once operational, the shared use trail is anticipated to reduce overall vehicular use of fuel by providing for a non-vehicular trail. There are no operational uses of energy associated with the Project.

TRPA Questions – Energy	Answers	Discussion
15a) Would the proposed project result in the use of substantial amounts of fuel or energy?	No	The Project would require temporary use of fuel and energy to construct the Project. Once operational, the shared use trail is anticipated to reduce overall vehicular use of fuel by providing for a non-vehicular trail. There are no

TRPA Questions – Energy	Answers	Discussion
		operational uses of energy associated with the Project.
15b) Would the proposed project result in substantial increase in demand upon existing sources of energy, or require the development of new sources of energy?	No	The Project would not result in a new need or use of energy, and therefore would not result in a substantial increase in demand upon existing sources or require the development of a new source.

4.7 GEOLOGY AND SOILS

4.7.1 Environmental Setting

The Project area lies on the northwestern side of Lake Tahoe. The Project area varies in elevation between 6,500 and 6,700 feet above mean sea level. The topography of the Project area is mountainous with steep terrain and generally slopes from the north (upgradient) to the south (downgradient) towards Lake Tahoe. Slopes along the Project alignment typically range between 10 and 20-percent, but some areas have steeper slopes up to 40-percent. Angular cobble and boulder float is present along the majority of the alignment, particularly in the area of the talus slope in the western portion of the proposed trail alignment (Wood Rogers 2020). Project area topography can be seen on **Figure 8** below.

A geotechnical study of the proposed trail alignment was conducted by Wood Rogers in 2020. The objectives of this study were to explore, test, and assess general soil, geology, and groundwater conditions pertaining to design and constructability of the trail, and, to provide recommendations associated with the design and construction of the Project.

Findings of the geotechnical study are presented in the subsections below; the full *Preliminary Geotechnical Report* is included as **Appendix H**.

Regional Geologic Setting

The Project area is at the margin of two geologic regions: the Sierra Nevada and Basin and Range Geomorphic Regions. The Project area is located at the western edge of the Basin and Range geomorphic province, which is characterized by north-south trending mountain ranges separated by broad valleys. The Sierra Nevada geomorphic province begins just west of the Project area. The Lake Tahoe Basin is a typical fault-bounded basin surrounded by uplifted ranges; surrounding ranges consisting predominantly of granitic rocks that intruded older Mesozoic (60 to 225 million years ago) to Paleozoic (225 million to 600 million years ago) sedimentary and volcanic rocks. Younger volcanic rocks bound much of the north end of the Lake Tahoe basin.

The Project area itself is mapped as Pliocene and to a lesser extent, Miocene Andesite, and basaltic andesite flows. The eastern portion of the Project area is mapped as Quaternary (Holocene) lake deposits, consisting of thinly bedded sandy silts and clays.

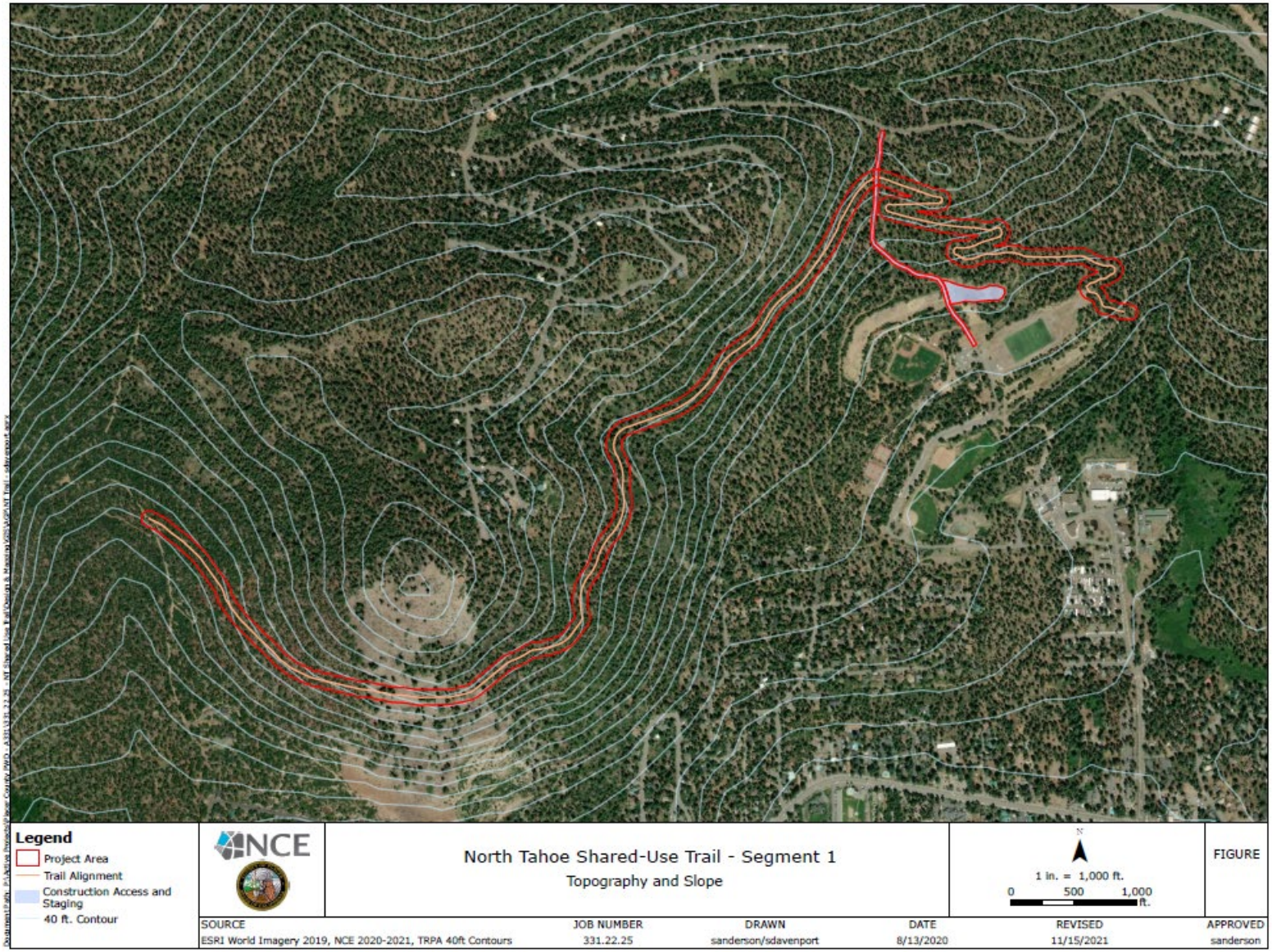

Figure 8. Topography and Slope

Seismicity and Faulting

The Project site is within a seismically active region, within the Sierra Nevada-Great Basin seismic belt. Active faults are considered to be those that have moved during the past 11,000 years, and generally only active faults are considered in evaluating seismic risk for building construction.

The U.S. Geological Survey Quaternary Faults Map was accessed to review the proximity of any active faults as previously characterized. The closest mapped faults are located approximately 0.6 miles to both the south and west of the proposed trail alignment and are aged as 'Undifferentiated Quaternary active' (<1.6 million years); the faults are part of the Agate Bay fault (Wood Rogers 2020).

The protocol for examining potential fault rupture has been established by the Alquist-Priolo Earthquake Fault Zoning Act. As part of this Act, the State Geologist is responsible for establishing regulatory zones around active fault zones. The Project area does not lie within or proximity to any of the existing Alquist-Priolo fault zones; therefore, the potential for ground rupture would be considered remote (Wood Rogers 2020).

Slope Instability

On the western end of the proposed trail alignment, the southern facing talus slope has slopes ranging between 10 and 30-percent. Based on the geophysical surveys completed for the Project, and public data available from the USDA's Natural Resources Conservation Service (NRCS), the hillsides consist dominantly of bedrock. Given the proximity of bedrock and relatively shallow slopes, the potential for slope instability due to seismic activity is considered remote (Wood Rogers 2020).

Liquefaction

Liquefaction is a loss of soil shear strength that can occur during a seismic event if excessive pore water pressure between the soil grans is induced by cyclic shear stresses (Wood Rogers 2020). A liquefaction screening test was performed during the geotechnical investigation, which involved shear wave velocity measurements. Due to the competent nature of the near surface bedrock, and lack of shallow groundwater, the risks of liquefaction inducted settlement and related lateral spreading are considered negligible.

Groundwater

The Site is located within the North Lahontan Hydrologic Region as defined by the Lahontan RWQCB and the California Department of Water Resources. Shallow groundwater is not anticipated in the Project area due to steep, rocky terrain, and lack of seeps, springs, or other water resources.

Soils

Soils in the Lake Tahoe Region were formed mainly in alluvium derived from igneous intrusive rock, like granodiorite, and igneous extrusive rock, mostly andesitic lahar. Much of the soil in the Basin is deep, well drained, nutrient-rich, and able to support forests and other vegetation (Placer County 2021).

There are eight NRCS soil units mapped within the Project area. The soil units that can be found in the Project area are classified as Jorge-Tahoma complex, Jorge very cobbly loam extremely stony, Jorge very cobbly fine sandy loam rubbly, Kingsbeach stony sandy loam, and volcanic rock outcrop, Tahoma-Jorge complex.

These soil units have a moderate to high corrosion of steel and concrete. The soil units can be described as very rocky, well drained with low surface runoff.

Findings of the geotechnical study indicate soil surface units observed during the investigation consist of granular soils that are non-plastic or exhibit low plasticity, typically consistent with the NRCS mapped soil units (Wood Rogers 2020). Clay soils are mapped in some of the units at approximately three feet below ground surface.

4.7.2 CEQA Checklist Summary

Would the project:

CEQA Question	Impact Determination
a) Could the project directly or indirectly cause potential substantial adverse effects, including 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.	Less Than Significant Impact with Mitigation Incorporated
ii. Strong seismic ground shaking?	Less Than Significant Impact with Mitigation Incorporated
iii. Seismic-related ground failure, including liquefaction?	Less Than Significant Impact with Mitigation Incorporated
iv. Landslides?	Less Than Significant Impact

	with Mitigation Incorporated
b) Result in substantial soil erosion or the loss of topsoil?	Less Than Significant Impact
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	Less Than Significant Impact
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	No Impact
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	No Impact
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	No Impact

4.7.3 Answers to CEQA Checklist Questions

a) Would the project directly or indirectly cause potential substantial adverse effects, including 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?

Less Than Significant Impact with Mitigation Incorporated

Based on results of the geotechnical study, slope stability design considerations are recommended to be incorporated into trail design to address impact of potential landslides, seismic influence, and other slope stability concerns during and post-construction. The following recommendations (as presented in **Mitigation Measure GEO-1** below) are intended to reduce risks of structural distress related to consolidation or expansion of native soils and/or structural fill per the findings of the Project's *Preliminary Geotechnical Report*.

Mitigation Measure GEO-1: **Incorporate Geotechnical Study Design Criteria for Slope Stability.**

1. Site Preparation:
    - Prior to placement of fill, the Contractor shall conduct localized deep removal of topsoil and organics (including root balls). Vegetation and organic debris shall be disposed of offsite or placed in designated non-structural areas as indicated by the *Preliminary Geotechnical Report*.
    - Removal of oversized rock (greater than 6-inches) shall be backfilled with structural fill placed and compacted to at least 90-percent relative compaction (per ASTM D1557).
    - Prior to receiving structural fills or loading, subgrade soils shall be moisture conditioned to near optimum moisture content and compacted to not less than 90-percent of the soil's maximum density (ASTM D1557) for a maximum of 12-inches. The Contractor shall follow the additional compaction requirements of ASTM D1557 as indicated in the *Preliminary Geotechnical Report*.
    - Any fill placed on a slope steeper than 5:1 shall be keyed and benched per the 'Slope Keying Detail' provided in the *Preliminary Geotechnical Report*.
2. Grading and Filling
    - Incorporate all grading and filling recommendations from the *Preliminary Geotechnical Report*, including requirements for rock fill, structural fill, non-structural fill, and soil compaction requirements pursuant to ASTM D1557.
    - The exterior face of any embankment shall be constructed with an inclination of no steeper than 2:1. The surface of the slope shall be compacted to the same percent compaction as the body of the fill.
    - The Contractor shall conduct density testing of all fills, subgrade, and structural fill in accordance with ASTM D6938 (Standard Test Methods for in-Place Density and Water Content of Soil and Soil Aggregate by Nuclear Method) as instructed by the *Preliminary Geotechnical Report*.
3. Retaining Walls
    - Clay soils or soils blended with organics shall not be placed in areas to be retained by or supporting retaining structures.
    - Design retaining wall structures in accordance with recommendations in Table 2 of the *Preliminary Geotechnical Report* (Lateral Earth Pressures) and recommended bearing capacities.

4. Slope Stability and Erosion Control
    - Hillside fill grading shall incorporate bench keying as previously described in Site Preparation.
    - Due care shall be exercised by the Contractor to assure inclement weather and/or construction water during moisture conditions or dust control does not result in an excessively wet subgrade. Where encountered, pumping soils may be scarified and allowed to dry or be removed and replaced with a layer or compacted structural fill or rock fill.
    - If required, the Contractor shall stabilize the subgrade by use of a geomembrane or other stabilization protocol consistent with available means and methods and approved by the County Engineering Department.

With incorporation of **Mitigation Measure GEO-1**, which requires incorporating Site Preparation, Grading and Filing, Retaining Wall, and Slope Stability and Erosion Controls as recommended by the *Preliminary Geotechnical Report*, the Project would not result in direct or indirect substantial adverse effects including risk of loss, injury, or death.

b) Would the project result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact

Construction of the Project has potential to cause soils erosion and loss of topsoil during earth moving construction activities. As discussed in the Project Description, the trail would be permanently stabilized to limit erosion using a variety of techniques. These include (but are not limited to) armoring of flow paths along steep slopes, use of retaining walls to stabilize cut slopes, revegetation of disturbed areas, use of pavement for an armored and stabilized trail surface, and non-paved crushed rock shoulders to allow for runoff infiltration.

As outlined in Section 3.7, Construction Controls, the Project is required to implement erosion and sediment BMPs that would prevent significant soil loss or erosion during construction. Additionally, implementation of the Project SWPPP would further reduce potential for erosion and topsoil loss during construction.

Implementation of **Mitigation Measure GEO-1**, which requires incorporation of slope stability and erosion design considerations for trail construction would ensure the Project, once constructed, does not result in substantial soil erosion or the loss of topsoil; therefore, additional mitigation would not be required, and potential impacts to soil erosion or topsoil would be less than significant.

c) 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?

Less Than Significant Impact

As discussed in the Environmental Setting and item a) above, the Project area contains subgrade soils with high rock content that may not be suitable for construction of the trail without placement of fill or compaction. With implementation of **Mitigation Measure GEO-1**, the Contractor is required to incorporate site preparation, slope stabilization, and design criteria to ensure the Project area and constructed trail is stabilized from potential impact of landslide, lateral spreading, subsidence, liquefaction, or collapse. These measures include compliance with compaction requirements pursuant to ASTM D1557, fill density testing in accordance with ASTM D6938, use of slope keying and benching, among others, to mitigate the potential for off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.

d) Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

No Impact

The Project area does not contain expansive soils as defined in Table 18-1-B of the Uniform Building Code (1994). As discussed in the Environmental Settings section, soils within the Project area are primarily composed of alluvium derived from igneous intrusive rock, like granodiorite, and igneous extrusive rock, mostly andesitic lahar and are not susceptible to expansion. There are eight NRCS soil units mapped within the Project area. The soil units can be described as well drained, with a slow to moderate permeability, and with low surface runoff, Therefore, there would be no impact.

e) 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?

No Impact

The Project does not propose the use of septic tanks and would not require use of alternative wastewater disposal services; therefore, there would be no impact from these systems.

f) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

No Impact

There are no known unique paleontological resources or geologic features associated with the Project area, and therefore, no paleontological resources or unique geologic features will be directly or indirectly destroyed by the Project.

4.7.4 TRPA Checklist – Land

TRPA Questions	Answers	Discussion
1a) Would the proposed project result in compaction or covering of the soil beyond the limits allowed in the land capability or Individual Parcel Evaluation System (IPES)?	No	The Project proposes to construct a paved trail within land capability classes1c, 2, 3, and 6. Trail construction would occur over a linear footprint and would not result in compacted or coverage of soil beyond the limits allowed in the land capability or IPES.
1b) Would the proposed project result in a change in the topography or ground surface relief features of site inconsistent with the natural surrounding conditions?	No	The shared use trail would be constructed near at grade of the existing site topography and would not construct features inconsistent with natural surrounding conditions.
1c) Would the proposed project result in unstable soil conditions during or after completion of the proposal?	No	Paving of the shared use trail would help ensure the area is stabilized from erosion due to frequent pedestrian and bicycle use. The site will be stabilized during construction through use of temporary BMPs.
1d) Would the proposed project result in changes in the undisturbed soil or native geologic substructures or grading in excess of 5 feet?	No	The Project does not require excavation of greater than 5 feet. There would be no impact.
1e) Would the proposed project result in the continuation of or increase in wind or water erosion of soils, either on or off the site?	No	As discussed in CEQA b), the Project would incorporate BMPs during construction to prevent an increase in wind or stormwater erosion of soils; once constructed the trail would be permanently stabilized due to use of pavement to stabilize the trail surface.

TRPA Questions	Answers	Discussion
1f) 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?	No	There are no such features within the Project area. There would be no impact.
1g) Would the proposed project result in exposure of people or property to geologic hazards such as earthquakes, landslides, backshore erosion, avalanches, mud slides, ground failure, or similar hazards?	No, with Mitigation	Refer to CEQA a), which concludes potential impacts from geologic instability to be less than significant after mitigation.

4.8 GREENHOUSE GAS EMISSIONS

The term greenhouse gas is used to describe atmospheric gases that absorb solar radiation and subsequently emit radiation in the thermal infrared region of the energy spectrum, trapping heat in the Earth's atmosphere. Greenhouse gases of concern include carbon dioxide, methane, nitrous oxide, and fluorinated gases. Unlike emissions of criteria and toxic air pollutants, which have local or regional impacts, emissions of greenhouse gases have a broader, global impact.

Greenhouse gases differ by the amount of heat each traps in the atmosphere, known as global warming potential. Carbon dioxide is the most significant greenhouse gas, so amounts of other gases are expressed relative to carbon dioxide, using a metric called "carbon dioxide equivalent (CO_2e)." The global warming potential of carbon dioxide is assigned a value of 1, and the warming potential of other gases is assessed as multiples of carbon dioxide. Generally, estimates of all greenhouse gases are summed to obtain total emissions for a project or given time period, usually expressed in metric tons or million metric tons CO_2e.

4.8.1 Environmental Setting

California's GHG reduction requirements aim to reduce vehicle miles traveled to improve air quality by reducing GHG emissions from automobiles (APCD 2017). GHG planning guidance for the Lake Tahoe Basin is outlined in the TMPO RTP/Sustainable Communities Strategy (SCS) which anticipates reducing GHG emissions 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 trail connectivity such as this Project).

Trails provide the transit, biking, and walking infrastructure needed to help residents and visitors reach popular destinations quickly and easily with minimal environmental impact. These efforts seek to reduce peak congestion, preserve the environment, and improve the overall travel experience (Placer County 2017).

Lake Tahoe Active Transportation Plan

The 2018 Active Transportation Plan (formerly Bike and Pedestrian Plan) is a technical update prepared to help inform development of the 2020 RTP. The Active Transportation Plan aims at improving transportation options for bicyclists and pedestrians as one of the most effective ways to conserve and restore Lake Tahoe's environment including reduction of vehicle emissions, revitalize the economy, enhance recreation opportunities, and improve public health. The plan outlines

challenges and solutions to existing mobility issues and identifies priority projects to be implemented (TRPA 2018).

4.8.2 Regulatory Setting

Federal

The EPA has no regulations or legislation enacted specifically addressing GHG emissions reductions and climate change at the project level. In addition, the EPA has not issued explicit guidance or methods to conduct project-level GHG analysis.

State

The State of California has taken several legislative steps including Assembly Bills (AB) and Executive Orders to reduce increases in GHG emissions. CARB is the lead agency in the development of reduction strategies for greenhouse gases in California (CARB 2017). California's GHG reduction requirements aim to reduce vehicle miles traveled, thereby improving air quality by reducing GHG emissions from automobiles.

Local

GHG planning guidance for the Lake Tahoe Basin is outlined in the 2017 RTP/SCS, which anticipates reducing GHG emissions 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 mobility improvements such as this Project (TRPA 2017).

4.8.3 CEQA Checklist Summary

Would the project:

CEQA Question	Impact Determination
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Less Than Significant Impact
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Less Than Significant Impact

4.8.4 Answers to CEQA Checklist Questions

a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant Impact

Because the Project's main components are to construct a shared-use trail, the Project does not propose any actions that would result in long-term GHG emissions or overall increases in GHGs from operational sources.

VMT is a TRPA air quality threshold indicator. VMT is linked to emission of nitrogen oxides, particulate matter, hydrocarbons, and greenhouse gas. Shared-use paths can both reduce VMT (as people shift from their cars to biking and walking) and contribute to VMT (as some may elect to drive to a path as a recreation amenity). To quantify potential impacts, LSC Consultants, with assistance from Alta Planning and Design, developed a Tahoe Bicycle Trail User Model that accounts for both the vehicle trip generation and reduction attributable to bicycle facilities. Estimates from the model indicate that if the full network were constructed, biking and walking trips would reduce VMT by approximately 8,500 miles on a peak summer day. This translates into a reduction of approximately 1,400 metric tons per year of carbon dioxide, a key greenhouse gas (TRPA 2010).

The study concludes that Lake Tahoe paths with greater proximity to population centers and popular destinations have the greatest potential to reduce VMT; therefore, as operational, the Project is anticipated to have a beneficial impact on GHG.

Construction Emissions

The Project would result in short-term, temporary increases in GHG emissions during construction due to equipment and vehicle use at the site, for the period of 180 days. During the construction period heavy equipment, such as excavators and haul trucks, and worker commute would generate GHGs. As discussed in Section 3.7, Construction Controls, the Project is required to 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, minimize idling, limit emissions, use green energy sources, and recycling of materials. Because the generation of GHG emissions is temporary during construction only, and the Project would additionally implement BMPs during construction, impacts would remain less than significant.

Operational

The Project is anticipated to have a beneficial impact on GHG emissions by providing opportunities for alternative transportation use. There are no operational contributions of GHG emissions associated with the Project.

Since the Project would contribute to emissions temporarily, would be below the significance threshold of 10,000 metric tons of CO2e per year and would incorporate construction controls to minimize impacts to GHGs, and is anticipated to reduce VMT once constructed, the Project's impact to GHG emissions would be less than significant.

b) Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less Than Significant Impact

As discussed in the Environmental Setting, the Active Transportation Plan developed by the TRPA/TMPO contains directive to build out the shared-use trail network in the Tahoe Basin to reduce VMT and help meet TRPA threshold for GHG.

Additionally, during construction, given that emissions would be short-term over the course of 180 days, increases in GHG emissions that could be attributed to the Project would not result in a significant impact on the environment. The GHG emissions generated during construction would not be considered significant and would not limit the State's ability to attain the goals identified in AB 32 because impacts would be temporary and are below the significance threshold amount. Once operational, the Project would help attain the State's goals defined in AB 32; therefore, impacts during construction are less than significant, and beneficial once constructed.

4.9 HAZARDS AND HAZARDOUS MATERIALS

4.9.1 Environmental Setting

NCE conducted a search of the Project site on the State Water Resources Control Board's Geotracker website and the Department of Toxic Substances Control EnviroStor website. There are no hazardous sites located within or adjacent to the Project area. The search revealed that most hazardous waste sites in the region (pursuant to Government Code 65962.5) are located southeast of the Project area, along State Route 28 (SR 28).

4.9.2 CEQA Checklist Summary

Would the project:

CEQA Question	Impact Determination
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Less Than Significant Impact
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	Less Than Significant Impact
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	No Impact
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	No Impact
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	No Impact
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	No Impact
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	Less Than Significant Impact

4.9.3 Answers to CEQA Checklist Questions

a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less Than Significant Impact

The Project's use of hazardous materials is limited to fuels and other maintenance-related chemicals to run equipment machinery. New asphalt materials would be used to construct the new trail.

Transport and use of hazardous materials are anticipated to be minimal. The use, storage, and management of fuels and other vehicle-related chemicals as well as construction materials would be managed according to the on-site SWPPP. For example, the SWPPP requires that equipment fueling and maintenance, if performed at the job site, must be performed in a designated area utilizing secondary containment with a spill kit nearby. No disposal of hazardous materials is anticipated as part of this Project, and no dewatering is required during construction. Implementation of the required SWPPP would ensure impacts during construction remain less than significant. There are no operational uses of hazardous materials associated with the Project.

b) 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?

Less Than Significant Impact

As described above (a), hazardous materials used as part of the proposed Project would only occur during construction and is expected to be minimal. The required on-site SWPPP would manage use of fuels and chemicals and would outline requirements for sill procedures should a spill occur; significant hazards would not occur.

c) 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?

No Impact

The nearest school to the Project area is Kings Beach Elementary School, located approximately 4 miles to the northeast of the Project area. As discussed above, hazardous materials used as part of the proposed Project are anticipated to be limited during construction only. Construction-related vehicles and equipment would produce routine emissions that would be temporary and less than significant. For a discussion on air quality, see Section 4.3, Air Quality.

d) Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Impact

EnviroStor is the Department of Toxic Substances Control's data management system for tracking cleanup, permitting, enforcement and investigation efforts at hazardous waste facilities and sites with known contamination or sites where there may be reasons to investigate further, also known as the Cortese List. There are no hazardous material sites identified by Envirostor in the vicinity of the Project.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

No Impact

The nearest airport, Truckee Tahoe Airport, is over 13 miles from the Project site. The Project area is not located within a comprehensive land use planning area, and the Project does not involve habitable improvements that would be sensitive to airport operations.

f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Impact

The Project involves the construction of a shared-use trail between the Regional Park in Tahoe Vista and Carnelian Bay. Emergency response and evacuation would be maintained throughout construction and implementation of the trail would not interfere with an adopted emergency or evacuation plan.

The trail may serve the community as an additional egress route connector out of the Tahoe basin during emergencies.

g) Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Less Than Significant Impact

The Project involves the construction of paved shared-use trail in order to establish a convenient, shared-use transportation alternative and provide recreational experience for residents and visitors. As discussed in Section 4.20, Wildfire, portions of the Project are located within a very high fire hazard severity zone. The North Tahoe Fire Department Emergency Preparedness and Evacuation Guide outlines evacuation routes and procedures in the event of a disaster. As discussed above, the trail may serve the community as an additional egress route connector during an emergency such as a wildland fire.

4.9.4 TRPA Checklist

TRPA Questions – Risk of Upset	Answers	Discussion
10a) Would the proposed 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?	No	Refer to CEQA item a). Use and storage of typical construction materials would occur during construction of the Project. Materials will be used, stored, and disposed of in accordance with federal, state, and local laws including Lahontan RWQCB use of Project SWPPP. Use of the Project SWPPP would protect against significant risk associated with hazardous materials use during construction. The Project once constructed, would not require the use of hazardous substances. There are no radiation uses associated with the Project.
10b) Would the proposed project involve possible interference with an emergency evacuation plan?	No	The Project proposes to construct a trail in an area currently lacking connectivity to adjacent trails and roads used as egress in the event of an emergency. The Project, once constructed, has potential to improve emergency evacuation by providing for an additional paved trail with connection to egress areas.

TRPA Questions – Human Health	Answers	Discussion
17a) Would the proposed project result in creation of any health hazard or potential health hazard (excluding mental health)?	No	As discussed throughout this document, the Project is not anticipated to create human health hazard, including either through significant contributions to air quality/GHGs, impact on sensitive receptors, release

TRPA Questions – Human Health	Answers	Discussion
		of hazardous materials during construction, or other impacts to the environment which may impact human health. All impacts have been identified as less than significant, and once constructed, the trail has potential for beneficial impacts to human health.
17b) Would the proposed project result in exposure of people to potential health hazards?	No	Refer to discussion above. The Project would not expose people to potential health hazards.

4.10 HYDROLOGY AND WATER QUALITY

4.10.1 Environmental Setting

Watershed and Water Quality

The Project area is in the Lake Tahoe Basin within the Lahontan RWQCB, designated Region Number 6, which sets policy on implementing state and federal water quality law. The Lake Tahoe Basin is included on the 2016 Clean Water Act (CWA) Section 303(d) list of impaired water bodies due lack of transparency and lack of clarity, and a Total Maximum Daily Load (TMDL). TMDL has been developed for Lake Tahoe. requirements are in effect for nitrogen, phosphorus, and fine sediment particles.

Existing beneficial uses for the Tahoe Basin include Municipal and Domestic Supply (MUN), Ground Water Recharge (GWR), Water Contact Recreation (REC-1), Non-contact Water Recreation (REC-2), Commercial and Sportfishing (COMM), Cold Freshwater Habitat (COLD), Wildlife Habitat (WILD), and Spawning, Reproduction, and Development (SPWN).

The Project is located within the Agate Bay hydrological area. NCE conducted multiple site visits in 2017, 2018, and 2019 to identify if hydrological resources are present in the Project area. Results of these field visits conclude there are no hydrological resources, including wetlands, present within the Project area. The *Aquatic Resources Survey Memorandum* (NCE 2021e) documenting these efforts is included as **Appendix I**.

Groundwater

Results of the aquatic resource survey also indicate a lack of shallow groundwater resources within the Project area due to no hydric soils, no SEZ habitat, and no mapped or identified wetlands, seeps, or springs within the Project area.

Flood, Tsunami and Seiche Hazards

The area is delineated on Federal Emergency Management Agency map panels 06061C0360H and 06061C0355H, effective 11/2/2018. The Project area is located within in Zone X, which are areas of minimal flood hazard defined as areas with future conditions 1% Annual Chance Flood Hazard.

Tsunamis, or seiches as they are called when they occur within an enclosed body of water, can also be generated within Lake Tahoe by the numerous faults crossing through the basin. The potential for both tsunami and seiche-related waves up to 30 feet can occur along the shores of Lake Tahoe (TRPA 2012).

4.10.2 Regulatory Setting

Federal

Clean Water Act and NPDES Permit

Section 402 of the CWA requires NPDES permits for stormwater discharges from municipal storm drain systems. The Water Quality Control Plan for the Lake Tahoe Basin (Basin Plan; Lahontan RWQCB 2019) is the Water Board's planning document. The Water Board issues the municipal stormwater NPDES permits to address stormwater impairments and recommend actions. Stormwater discharges into the County's municipal stormwater drainage system are regulated by the Lahontan RWQCB under the Municipal Regional Stormwater NPDES Permit, Order No. R2-2015-0049.

State

Construction General Permit

Construction projects within the Lake Tahoe Hydrologic Unit must comply with the Construction General NPDES Permit for the Lake Tahoe Basin (R6T-2011-0019) and implement a Stormwater Management Plan. Because the proposed Project would disturb more than 1 acre, it is also subject to the statewide Construction General Permit Order 2009-0009-DWQ, which regulates stormwater leaving construction sites. Under this order, site owners must notify the state and implement a SWPPP prepared by a Qualified SWPPP Developer. The SWPPP must outline measures that would protect hydrology and water quality resources, including groundwater, from negative impacts during construction through implementation of BMPs and monitoring the effectiveness of BMPs. This permit is administered by the State Water Resources Control Board and overseen by the Lahontan RWQCB.

Local – TRPA

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.

4.10.3 CEQA Checklist Summary

Would the project:

CEQA Question	Impact Determination
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	Less Than Significant Impact

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	Less Than Significant Impact
c) 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;	Less Than Significant Impact
ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	Less Than Significant Impact
iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	No Impact
iv. impede or redirect flood flows?	No Impact
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	No Impact
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	No Impact

4.10.4 Answers to CEQA Checklist Questions

a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Less Than Significant Impact

During construction of the Project, grading, excavation, and general ground disturbing activities may have the potential to result in sediment laden, polluted runoff discharging from the Project site and impacting downgradient water courses. The Project is not anticipated to encounter groundwater during construction, therefore, no impacts to groundwater quality are anticipated (Wood Rogers 2020).

As discussed in the Project description, the County is required to implement an approved SWPPP and Stormwater Management Plan to protect against polluted runoff leaving the site during construction. Various monitoring and reporting activities would be established by TRPA and Lahontan RWQCB depending on the Project's risk level.

Because the Project is required to comply with TRPA and state requirements for protection of surface and groundwater quality during construction, implementation of the Project and 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.

b) Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less Than Significant Impact

The Project would not use groundwater for construction water supply and would not encounter groundwater during construction of the trail. The Project would add approximately 4 acres of impervious area across a long linear footprint, which is not substantial. Therefore, the proposed Project would not have a substantial effect on groundwater recharge or management of the groundwater basin.

c) 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:

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

Less Than Significant Impact

The proposed Project would not significantly alter existing drainage patterns and would only increase impervious area by approximately 4 acres. The proposed Project would not cause substantial erosion or siltation. Erosion related to construction activities would be controlled through the SWPPP and Stormwater Management Plan to prevent erosion and siltation.

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

Less Than Significant Impact

The proposed Project may slightly increase surface runoff within the Project area. The Project would be constructed in an area designated as open space and will be surrounded by native vegetation on all sides. Additionally, the unpaved 1-foot shoulders of the trail would offer opportunities for infiltration of runoff from the trail surface as well as decrease velocities of runoff. Therefore, the Project would have a less than significant impact on surface runoff.

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?

No Impact

The proposed Project would construct a paved shared-use trail between Carnelian Bay Ave. and the North Tahoe Regional Park, in order to enhance accessibility, and recreational opportunities by creating a transportation alternative within the community.

The Project will not create or contribute to runoff water to the existing stormwater drainage system within the vicinity. Polluted runoff related to construction activities would be controlled by the SWPPP.

iv) Impede or redirect flood flows?

No Impact

The proposed shared-use trail is not located within a floodway; therefore the trail structure is not anticipated to impeded or redirect flood flows as only surface runoff from precipitation events would be present. The Project area is located within in Zone X, which are areas of minimal flood hazard. Therefore, there would be no impact.

d) In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?

No Impact

Flood Hazard

The Project is not located in a designated flood hazard zone. There would be no impact.

Tsunami and Seiche Hazard

A seiche that affects the Project area is unlikely to occur as it is more than 30 feet from the lake. The incorporation of required controls during construction such as the SWPPP, Spill Prevention Plan would minimize the potential to release pollutants during construction due to inundation.

e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

No Impact

The Lake Tahoe Basin Plan sets forth water quality standards for the surface and ground waters of the region. The Project is not anticipated to conflict with water quality standards and would therefore not obstruct implementation of a water quality control plan.

The Project would not conflict with implementation of the Basin Plan as it would not adversely affect beneficial uses of the Lake or contribute to an exceedance of water quality objectives established to protect beneficial uses. The Project is proposing to install permanent water quality features and use BMPs to improve water quality and meet County, TRPA, and federal standards. These water quality features include relocating the existing stormwater basin on the golf course property and routing as much of the runoff as possible to the stormwater basin. Therefore, implementation of the Project would result in an improvement in stormwater runoff quality associated with road-based pollutants compared to the existing condition.

4.10.5 TRPA Checklist – Water Quality

TRPA Questions	Answers	Discussion
3a) Would the proposed Project result in changes in currents, or the course or direction of water movements?	No	The proposed Project would not change currents, or the course or direction of water movements as no aquatic features are located within the Project area.
3b) Would the proposed 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?	No	Refer to CEQA item c). The Project would not significantly alter existing natural drainage patterns and would only increase impervious areas by approximately 4 acres across a 12-foot-wide linear footprint.
3c) Would the proposed project result in alterations to the course or flow of 100-year flood waters?	No	Refer to CEQA item d). The Project would not alter the course of flow of the 100-year flood waters.
3d) Would the proposed project result in change in the amount of surface water in any water body?	No	The Project will not change the amount of surface water in any water body within the vicinity.
3e) Would the proposed 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?	No	Refer to discussion for CEQA item a). During construction, the Project would implement SWPPP and Stormwater Management Plan procedures in order prevent polluted stormwater from leaving the site during construction activities. There would be no direct discharges to surface waters associated with the Project.
3f) Would the proposed project result in alteration of the direction or rate of flow of ground water?	No	Refer to discussion for CEQA item b). The Project will not alter the direction or rate of the flow of groundwater within the Project area. During

TRPA Questions	Answers	Discussion
		construction, the Project would implement SWPPP procedures to prevent contaminants from entering groundwater.
3g) Would the proposed 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?	No	Refer to discussions for CEQA items a) and b). The Project proposes to construct a shared-use trail. The Project will not add or withdrawal groundwater quality within the vicinity. During construction, the Project would implement SWPPP procedures to prevent contaminants from entering groundwater.
3h) Would the proposed project result in substantial reduction in the amount of water otherwise available for public water supplies?	No	Construction water needs would have a minor effect on the use of water available for public water supplies.
3i) Would the proposed 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?	No	Refer to CEQA item d). The proposed Project lies within an area of minimal flood hazard and would have no impact on a designated floodplain or flood zone.
3j) Would the proposed project result in the potential discharge of contaminants to the groundwater or any alteration of groundwater quality?	No	Refer to discussion for CEQA item a). The Project does not propose to encounter groundwater during construction, and the Project SWPPP and Stormwater Management Plan would prevent polluted runoff from affecting water quality.
3k) Is the project located within 600 feet of a drinking water source?	No	The proposed Project is not located within 600 feet of a drinking water source. There would be no impact.

4.11 LAND USE AND PLANNING

4.11.1 Environmental Setting

The Project is located on land managed by the USFS-LTBMU, the Regional Park, and the County. The Project is located within the Basin Area Plan land use area. The Basin Area Plan is a component of the Lake Tahoe Regional Plan and the Placer County General Plan. The Basin Area Plan helps the County with Lake Tahoe environmental restoration efforts and guides land-use regulations in the County's portion of the Lake Tahoe Basin.

The Basin Area Plan and TRPA designates the Project area as Conservation and Recreation land use.

4.11.2 CEQA Checklist Summary

Would the project:

CEQA Question	Impact Determination
a) Physically divide an established community?	No Impact
b) 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?	Less Than Significant Impact

4.11.3 Answers to CEQA Checklist Questions

a) Would the project physically divide an established community?

No Impact

The primary purpose of the Project is to construct a paved, shared use trail between the Regional Park in Tahoe Vista and Carnelian Bay. The Project would not physically divide an established community but would provide opportunities for greater connectivity between communities.

b) 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?

Less Than Significant Impact

The trail would be constructed through TRPA's Conservation and Recreation land use areas, as well as through a portion of USFS-LTBMU owned and managed forest land.

Construction of the Project must receive approval from the USFS-LTBMU and secure a Special Use Permit; therefore, the Project must comply with USFS-LTBMU policy and regulation prior to receiving approvals for construction.

The Project would comply with the County and TRPA land use plan, policies, and regulations adopted for the purpose of avoiding or mitigating environmental effects by implementing controls to protect or avoid impacts to sensitive resources and mitigating any impacts to less than significant levels, as described in the other sections of this initial study. Construction of the trail would be consistent with Conservation and Recreation land use designation.

Because the Project would comply with USFS-LTBMU, County, and TRPA land use plan, policies, and regulations, as well as regulations administered by the permitting agencies adopted for the purpose of avoiding or mitigating environmental impacts, the proposed Project would not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

4.11.4 TRPA Checklist – Land Use

TRPA Questions	Answers	Discussion
8a) Would the proposed project include uses which are not listed as permissible uses in the applicable Plan Area Statement, adopted Community Plan, or Master Plan?	No	Construction of the trail would be a permissible use within TRPA's Conservation and Recreation land use areas.
8b) Would the proposed project expand or intensify an existing non-conforming use?	No	Construction of the trail, considered a special use by USFS-LTBMU, would not expand or intensify an existing nonconforming use because the Project is a new use and not an existing non-conforming use. A shared-use trail conforms with land use designations of the Project area.

4.12 MINERAL RESOURCES

4.12.1 Environmental Setting

Minerals are any naturally occurring chemical element or compound, or groups of elements and compounds, formed from inorganic processes and organic substances including, but not limited to, coal, peat, and oil-bearing rock, but excluding geothermal resources, natural gas, and petroleum. Within the Tahoe Basin the extraction for mineral resources is not permitted (Placer County and TRPA 2016). The Project area contains no mineral resources of value to the region or residents of the State of California, nor does it include the substantial use of any non-renewable natural resources.

4.12.2 CEQA Checklist Summary

Would the project:

CEQA Question	Impact Determination
a) 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?	No Impact
b) 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?	No Impact

4.12.3 Answers to CEQA Checklist Questions

a) 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?

No Impact

According to the State Mining and Geology Board and the General Plan, there are no state or regionally valuable mineral resources within the Project boundary. The proposed Project would therefore not result in the loss of a known mineral resource.

b) 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?

No Impact

According to the State Mining and Geology Board and the Basin Plan there are no resource recovery sites associated with the Project; therefore, there would be no impact.

4.13 NOISE

4.13.1 Environmental Setting

Noise is defined as a sound or series of sounds that are intrusive, objectional, or disruptive to daily life. Different land uses have different acceptability levels in terms of noise disturbance. For example, industrial uses have a higher noise threshold than residential uses. Noise standards provide a means of assessing exposure and compatibility based on specific uses. There are no existing sources of noise generation within the Project area. Noise generators in the vicinity of the Project include the Regional Park, and vehicular traffic along neighborhood streets.

Chapter 5 of the Basin Area Plan identifies automobile use as a strong influencer of noise threshold attainment and looks to reduce noise by transitioning to a more walkable development pattern in town centers and improving pedestrian, bicycle, and transit facilities (Placer County 2021).

4.13.2 Regulatory Setting

TRPA

The TRPA Code (Chapter 68: Noise Limitations) establishes noise limits for areas within TRPA's jurisdiction. Community noise levels shall not exceed levels existing on August 26, 1982, where such levels are known. TRPA prescribes the development standards for the Kings Beach Residential Subdistrict, which set the maximum community noise equivalent level at 55 Community Noise Equivalency Levels (CNEL).

Project construction between 8:00 a.m. and 6:30 p.m. is exempt from noise limitations per TRPA Code.

Placer County

The Placer County Code Noise Ordinance 9.36.030 established the following noise limit exemptions and allowable hours for construction activities:

Construction (e.g., construction, alteration or repair activities) between the hours of six a.m. and eight p.m. Monday through Friday, and between the hours of eight a.m. and eight p.m. Saturday and Sunday provided, however, that all construction equipment shall be fitted with factory installed muffling devices and that all construction equipment shall be maintained in good working order.

4.13.3 CEQA Checklist Summary

Would the project result in:

CEQA Question	Impact Determination
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Less Than Significant Impact
b) Generation of excessive groundborne vibration or groundborne noise levels?	Less Than Significant Impact
c) 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?	No Impact

4.13.4 Answers to CEQA Checklist Questions

a) Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less Than Significant Impact

During construction, workers and persons recreating in the area would be temporarily exposed to minor ground borne vibration and noise generated by construction equipment, such as compaction equipment, excavators, backhoes, and loaders. No pile driving is anticipated for the Project, which is the primary source of ground borne vibrations and noise during construction.

Because generation of ambient noise would be temporary during construction, and the Project is primarily being constructed in uninhabited area and would comply with the TRPA Noise Ordinance requirements for construction projects, the Project would not result in ambient noise levels in excess of established standards set forth in the TRPA or County Code.

b) Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact

Groundborne vibration is described in terms of frequency and amplitude. Unlike sound, there is no standard way of measuring and reporting amplitude. Construction vibration is generally associated with pile driving and rock blasting.

Occasionally, large bulldozers and loaded trucks can cause perceptible vibration levels at close proximity.

During construction, workers and persons residing in the area would be temporarily exposed to minor groundborne vibration generated by construction equipment, such as compaction equipment, excavators, backhoes, and loaders. No pile driving is anticipated for the Project. Construction activities would result in intermittent exposure of groundborne vibration to the Project area. However, because impacts would be temporary and would comply with the TRPA Code, the impacts would be less than significant.

c) 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?

No Impact

There are no airports within 2 miles of the Project site. The area is served by the Truckee Tahoe Airport, located approximately 14 miles to the northeast. The closest private airport is the Crystal Bay/Kings Beach Hang Gliderport located approximately 7 miles northeast from the Project site. Therefore, the Project would not expose construction workers to excessive aircraft noise.

4.13.5 TRPA Checklist – Noise

TRPA Questions	Answers	Discussion
6a) Would the proposed project result in increases in existing Community Noise Equivalency Levels CNEL beyond those permitted in the applicable Plan Area Statement, Community Plan or Master Plan?	No	Refer to discussion for CEQA item a). The Project would be constructed during TRPA and County exempt hours in an uninhabited area. There are no long-term, operational sources of severe noise associated with the Project.
6b) Would the proposed project result in exposure of people to severe noise levels?	No	Refer to CEQA items a) through c). Increases in noise are anticipated to be temporary during construction and would not be severe. TRPA has adopted additional best construction practices policies regarding noise generation. The TRPA Standard Conditions of Approval for Grading Projects 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. Because the Project is required to obtain and comply with the TRPA standard conditions of approval, Project operations would result in no severe noise events. Therefore, the Project would not result in a significant impact.

TRPA Questions	Answers	Discussion
6c) Would the proposed project result in exposure of people to severe noise levels?	No	The Project would be constructed during TRPA and County exempt hours for construction, staging would be located away from sensitive receptors per TRPA standards, and all construction equipment shall be fitted with factory installed muffling devices and maintained in good working order per the County Noise Ordinance. Additionally, blasting and pile driving are not anticipated to be required to construct the Project. Therefore, single event noise levels in excess of the noise threshold are not anticipated to occur.
6d) Would the proposed project result in the placement of residential or tourist accommodation uses in areas where the existing CNEL exceeds 60 dBA or is otherwise incompatible?	No	The Project does not propose residential or tourist accommodations as part of the Project. There would be no impact.
6e) Would the proposed project result in the placement of uses that would generate an incompatible noise level in close proximity to existing residential or tourist accommodation uses?	No	The Project would be constructed in a primarily uninhabited forested area. Once operational, use of the trail would not generate noise such that ambient noise would rise above existing conditions. Therefore, the Project would not generate an incompatible noise level.
6f) Would the proposed project result in exposure of existing structures to levels of ground vibration that could result in structural damage?	No	Refer to CEQA item b). There are no structures in close proximity to Project construction. The Project would not expose structures to ground vibrations capable of resulting in structural damage.

4.14 POPULATION AND HOUSING

4.14.1 Environmental Setting

The proposed Project lies between the communities of Tahoe Vista and Carnelian Bay. As of 2020, Tahoe Vista had an estimated population of 1,158 residents and an estimated housing stock consisting of 1,587 dwelling units. Carnelian Bay had an estimated population of 451 residents and an estimated housing stock of 959 dwelling units (California Department of Finance 2015 -2019). There are no dwelling units within the Project area. Dwelling units are present in the Cedar Flat subdivision, located east of the southern terminus of the Project area.

TRPA has implemented a strict growth control system under the Bi-State Compact and Regional Plan. The system is designed to complement the region's development standards and improvement programs to achieve and maintain the Thresholds. Since the TRPA implemented a strict growth control system under the Bi-State Compact and Regional Plan, there has been very little private redevelopment in the vicinity of the Project. Overall, the TRPA growth control system limits the area's capacity for development.

4.14.2 CEQA Checklist Summary

Would the project:

CEQA Question	Impact Determination
a) 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)?	No Impact
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	No Impact

4.14.3 Answers to CEQA Checklist Questions

a) 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)?

No Impact

The Project proposes to construct an accessible and continuous shared-use trail that establishes a convenient non-auto transportation alternative in the north Tahoe region. As discussed in the Environmental Setting, the TRPA growth control system limits the Project area's capacity for development. The proposed Project improves the existing transportation infrastructure but does not induce substantial population

growth by adding new housing or commercial uses; thus, no growth-related impacts are anticipated.

b) Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact

The Project does not propose any removal or construction of features which would result in displacement of persons and would therefore not require construction or replacement housing elsewhere. Therefore, there would be no impact.

4.14.4 TRPA Checklist

TRPA Questions – Population	Answers	Discussion
11a) Would the proposed project alter the location, distribution, density, or growth rate of the human population planned for the Region?	No	The Project does not propose facilities such as housing, new infrastructure, or commercial facilities which could affect area population. Therefore, there would be no impact.
11b) Would the proposed project include or result in the temporary or permanent displacement of residents?	No	The Project would have no impact on the temporary or permanent displacement of residents. Temporary displacement would not be required for trail construction.
11c) Would the proposed project affect existing housing, or create a demand for additional housing?	No	Refer to CEQA items a) and b). The Project would not displace existing housing or create a demand for additional housing, and the proposed trail would have no impact on population growth.

TRPA Questions – Housing	Answers	Discussion
12a) Would the proposed project affect existing housing, or create a demand for additional housing?	No	There are no homes located in the Project area, and construction of a shared-use trail would not affect existing or future housing.
12a) Would the proposal result in the loss of housing for lower-income and very-low-income households?	No	Refer to TRPA 12a) above. There is no impact to existing or future housing, including lower and very low-income households.

4.15 PUBLIC SERVICES

4.15.1 Environmental Setting

Parks

The proposed trail alignment would begin at Carnelian Bay Avenue on the west and terminates at a junction with the existing Pine Drop Trail at the eastern boundary of the Regional Park. Construction would temporarily utilize an existing staging area within the park.

Fire Protection

The North Tahoe Fire Protection District (NTFPD) provides fire and life safety, rescue and emergency medical service, and fire prevention to the study area. NTFPD is comprised of 7 stations that are located throughout North Tahoe. Station 55 is located at 240 Carnelian Bay Ave.

Police Protection

The Placer County Sheriff's Office provides 24/7 patrol coverage and search and rescue operations within the study area. The North Tahoe Substation is located at 2501 North Lake Boulevard in Tahoe City, California. The Department is comprised of 48 full-time employees commanded by a Sheriff's Captain.

4.15.2 CEQA Checklist Summary

Would the project result in:

CEQA Question	Impact Determination
a) Would the project result in substantial adverse physical impacts associated with the need and/or provision of new or physically altered governmental services and/or facilities in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services? i) Fire protection? ii) Police protection? iii) Schools? iv) Parks? v) Other public facilities?	No Impact

4.15.3 Answers to CEQA Checklist Questions

a) Would the project result in substantial adverse physical impacts associated with the need and/or provision of new or physically altered governmental services and/or facilities in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services?

i) Fire protection?

ii) Police protection?

iii) Schools?

iv) Parks?

v) Other public facilities?

No Impact

The proposed Project would construct a paved shared-use trail connecting to the eastern edge of the Regional Park in Tahoe Vista in order to enhance accessibility, recreational, and alternative transportation opportunities within the community.

The Project would not increase dwelling units or road capacity and thus involves no increase in demand for public services such as schools, libraries, or parks. During construction, the Project may have a negligible temporary increase in emergency services demand to protect construction equipment or personnel that could be adequately served by existing services. There are adequate fire and police services to protect the construction sites and construction workers without affecting emergency services ratios, response times or other performance objectives. Therefore, the proposed Project would not require new or physically altered governmental services and/or facilities in order to maintain acceptable service ratios, response times, or other performance objectives.

4.15.4 TRPA Checklist – Public Services

Would the proposed project have an unplanned effect upon, or result in a need for new or altered governmental services in any of the following areas?

TRPA Questions	Answers	Discussion
14a) Fire protection?	No	Refer to CEQA item a) above. There are adequate existing fire services to serve the Project.
14b) Police protection?	No	Refer to CEQA item a) above. The Project would not result in an increase in population growth and would not require expanded police services.
14c) Schools?	No	Refer to CEQA item a) above. The Project would not result in an increase in population growth and would not require new or expanded school system.
14d) Parks or other recreational facilities?	No	Refer to CEQA item a) above. The Project would not result in an increase in population growth and would not result in the need for a new park or recreation facilities.
14e) Maintenance of public facilities, including roads?	No	The Project is required to comply with TRPA Code 36.5.5 - Bicycle and Pedestrian Facility Maintenance Plan: Entities responsible for the construction and maintenance of all Projects containing active transportation facilities are required to submit a Maintenance Responsibilities Chart and Plan prior to TRPA permit issuance. These plans must clearly identify responsibilities for capital improvements and annual infrastructure operation and maintenance and

TRPA Questions	Answers	Discussion
		identify funding needs and sources. The Project improves an existing transportation facility consistent with adopted plans, and would not have an unplanned effect upon, or result in a significant need for new or altered roadway maintenance services.
14f) Other governmental service?	No	Implementation of the proposed trail Project would not result in the need for new or expanded governmental services.

4.16 RECREATION

4.16.1 Environmental Setting

The Project area and nearby communities contain a variety of existing public and private recreational resources, including biking trails and routes, beaches, golf courses, and hiking trails. The Project alignment would cross a range of USFS-LTBMU national forest lands and privately owned open space area and would end at the NTPUD's North Tahoe Regional Park in Tahoe Vista. The Project passes through USFS LTBMU national forest lands west and north of the North Tahoe Regional Park, specifically land managed as General Conservation.

The Regional Park is approximately 124 acres and provides year-round recreational activities in Tahoe Vista. Regional Park activities are open to the public and include hiking, multiple sports fields, a playground, fitness courses, dog park, and various activities to do during the winter. Vehicular access to the Regional Park is provided by National Avenue and Donner Road. The Pine Drop Class I bike trail provides access to the Regional Park from Pine Drop Lane to the east, and the National Avenue Class I bike trail provides access between Donner Road and SR 28 to the south. At present, there are no bike lanes or trails along Donner Road near the Regional Park entrance. There is a $5.00 vehicle fee to park a car at the Regional Park. However, residents in the NTPUD district are free to park at the Regional Park year-round.

4.16.2 CEQA Checklist Summary

Would the project:

CEQA Question	Impact Determination
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	Less Than Significant Impact
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	Less Than Significant Impact

4.16.3 Answers to CEQA Checklist Questions

a) 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?

Less Than Significant Impact

Although the trail would improve connections to neighborhoods located to the west of the Regional Park by non-motorized traffic, some access to the Regional Park and

nearby LTBMU lands currently exists using County and Forest roads. By increasing trail access, Regional Park and national forest patrons may be encouraged to access these recreation areas by foot or bicycle rather than by motorized methods. Therefore, while access methods would be improved, use of the park facilities is expected to remain nearly the same with a change only in the way patrons access the park and national forest lands. No physical deterioration of the parks would occur as a result of the Project.

b) 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?

Less Than Significant Impact

As discussed in Section 4.17, Transportation, the trail serves primarily as a recreational route, although it may be use for transportation purposes by some users. Impacts to the environment are analyzed in each subsection of Chapter 4 and appropriate conditions of approval or mitigation measures are proposed as needed. No new parks facilities are proposed, and completion of the Project would not require the construction or expansion of other existing recreational facilities.

4.16.4 TRPA Checklist – Recreation

TRPA Questions	Answers	Discussion
19a) Does the proposed project create additional demand for recreation facilities?	No	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.
19b) Create additional recreation capacity?	No	Summer day use persons at one time (PAOTs) are not assigned to new transportation facilities, such as the Project (TRPA Code Subsection 50.8.3.A.1).
19c) Have the potential to create conflicts between recreation uses, either existing or proposed?	No	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

TRPA Questions	Answers	Discussion
		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. Trail pull outs are provided along the trail corridor so users can stop and enjoy views. No conflict would occur between the use of the trail and the use of the park facilities or national forest system lands (LCS 2021).
19d) Result in a decrease or loss of public access to any lake, waterway, or public lands?	No	Project construction results in temporary (approximately 3 month) restricted access along the trail corridor for purposes of public health and safety. Construction will not decrease public access to existing parks and forest roads outside of the active construction corridor. Project operation would lead to an increase of public access to public lands through alternative transportation 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.

4.17 TRANSPORTATION

4.17.1 Environmental Setting

Project Vicinity – Existing Trail and Pedestrian Facilities

Figure 5 in the Project Description depicts existing trails in vicinity of the proposed Project. State Route 28 provides a Class II bike lane (striped paved shoulder) between Tahoe City and Crystal Bay. Paved bicycle facilities consist of the Pine Drop Trail (connecting the Regional Park with Pine Drop Lane 1.2 miles to the east), Snow Creek Crossing, the National Avenue trails along National Avenue, and the Dollar Creek Trail/North Tahoe Trail providing a separated multipurpose path from Tahoe City to Fulton Crescent Drive.

There is currently a gap of 3.8 miles (as the crow flies) between the existing paved trail facilities across the Placer County portion of the North Shore. Pedestrian facilities in the area are limited to sidewalks in the Carnelian Bay, Kings Beach, and Tahoe City core areas, and some limited sidewalks in the Kings Beach residential areas. Outside of these areas, pedestrians are forced to walk along the roadway shoulders. The County's Basin Area Transportation Plan states that development is spread over a broad area; transit service is limited, and the bicycle and pedestrian network is not fully connected" in the Project area vicinity.

Project Vicinity – Existing Traffic Conditions

As reported in the *Environmental Impact Report/Environmental Impact Statement: Placer County Tahoe Basin Area Plan and Tahoe City Lodge Project* (TRPA 2016), the Level Of Service (LOS) along SR 28 between Dollar Hill and Tahoe Vista is a relatively good LOS C.2 (LSC 2021). The Tahoe Basin Area Plan also indicates an existing LOS of A at the SR 28/National Avenue intersection. In general, while there are poor traffic conditions both to the east (in Kings Beach) and to the west (in Tahoe City), the segment of SR 28 between Carnelian Bay and Tahoe Vista provides generally good traffic conditions.

Project Area – Existing Facilities

The Project area contains some unimproved dirt trail area and undeveloped open space. There are no existing TRPA designated trails or roads within the Project area.

4.17.2 Regulatory Setting

Local and Regional Transportation

The following local and regional transportation guidance documents apply to the Project:

- The **2020 Final Regional Transportation Plan** (RTP) is the Lake Tahoe Regional Transportation Plan and Sustainable Communities Strategy, and element of the TRPA Regional Plan. The RTP's vision is a transportation system that prioritizes bicycling, walking, and transit and serves residents and visitors while contributing to the environmental and socioeconomic health of the Region. Important strategies of the Regional Plan and RTP are to reduce the overall environmental impact of transportation in the Region, create walkable, vibrant communities, and provide alternatives to driving (TRPA 2021a).
- The **VMT Threshold Update** (March 2021) is an update to the initial 1981 threshold study report, which recommends establishing a new threshold standard category for "Transportation and Sustainable Communities" and incorporate threshold standard "TSC1 – Reduce Annual Daily Average VMT Per Capita by 6.8% from 12.48, the 2018 baseline, to 11.63 in 2045." The goal of the standard is to reduce dependence on the automobile, support GHG emission reduction, and increase mobility (TRPA 2021b).
- The **2018 Active Transportation Plan** (formerly Bike and Pedestrian Plan) is a technical update prepared to help inform development of the 2020 RTP. The Active Transportation Plan (ATP) aims at improving transportation options for bicyclists and pedestrians as one of the most effective ways to conserve and restore Lake Tahoe's environment, revitalize the economy, enhance recreation opportunities, and improve public health. The plan outlines challenges and solutions to existing mobility issues and identifies priority projects to be implemented (TRPA 2018).
- **Chapter 5 of the Basin Area Plan** contains a Transportation Plan, intended to develop improved pedestrian, bicycle, and transit options in accordance with the 2012 Lake Tahoe Sustainable Communities Strategy (SCS) that was adopted pursuant to the California Senate Bill 375 (Sustainable Communities and Climate Protection Act). As automobile use strongly influences air quality, greenhouse gas, and noise thresholds, the Plan focuses on enhancing alternative transportation opportunities in an area that heavily relies on automobile transportation (Placer County and TRPA 2017).
- The **TRPA Code of Ordinances**, Section 36.5.5. Bicycle and Pedestrian Facility Maintenance Plan, requires "Entities responsible for the construction and maintenance of all projects containing active transportation facilities are required to submit a Maintenance Responsibilities Chart and Plan prior to permit issuance. These plans must clearly identify responsibilities for capital improvements and annual infrastructure operation and maintenance and identify funding needs and sources."

4.17.3 CEQA Checklist Summary

Would the project:

CEQA Question	Impact Determination
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	No Impact
b) Conflict or be inconsistent with CEQA Guidelines §15064.3, subdivision (b)?	Less Than Significant Impact
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	Less Than Significant Impact
d) Result in inadequate emergency access?	No Impact

4.17.4 Answers to CEQA Checklist Questions

a) Would the project conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

No Impact

As discussed in the Environmental Setting, a common goal of the Basin Area Plan, RTP, and ACT is to limit greenhouse gas emissions from vehicle use, improve air quality and reduce noise by transitioning to a more walkable development pattern in Town Centers and improving pedestrian, bicycle, and transit facilities (Placer County and TRPA 2016).

Construction of the Project would install a paved, shared-use trail in the vicinity of Carnelian Bay and Tahoe Vista to provide Lake Tahoe residents and visitors with a transportation alternative and provide public access to existing recreational trails in the north Lake Tahoe area.

Because the Project is consistent with the goals of TRPA's Basin Area Plan, RTP, and ATP, the Project would not conflict with any ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities; impacts are anticipated to be beneficial.

b) Would the project conflict or be inconsistent with CEQA Guidelines §15064.3, subdivision (b)?

Less Than Significant Impact

CEQA Guidelines §15064.3, subdivision (b) pertains to the use of VMT to analyze transportation impacts. The Governor's Office of Planning and Research Technical Advisory on Evaluating Transportation Impacts in CEQA (2018) provides technical recommendations regarding the assessment of VMT, non-binding thresholds of significance, potential exemptions, or presumptions of less-than-significant CEQA impacts, and mitigation measures.

LSC traffic consultants performed an analysis to calculate the change in VMT that can be expected with the use of the proposed trail (LSC 2021). The full *Transportation Impact Analysis Report* is included as **Appendix J**.

The following factors in determining VMT impact were considered:

- As a result of additional traffic analysis conducted by LSC, the use of the new trail for purpose of non-recreational trips would be negligible; therefore, there is no reduction in existing auto trips for commuting, shipping, etc. that can be attributed to the project.
- While the new trail would be a recreational amenity for area residents and visitors already in the area, it's relatively short length and location are such that it would not generate a significant amount of new auto trips into the region (such as from Truckee or Reno) simply to use the project.
- As evidenced by the high utilization levels of existing multi-use trails in the region (such as the Dollar Creek Trail), there is a need for additional trails and connectivity. The 'drive-to trail users' in the absence of the new trail, would instead drive to another existing multi-use paved trail further away. The area in which these trail users would be drawn from, given the distances to existing trails, is the Tahoe North Shore between Carnelian Bay on the west and Brockway on the east. As shown in Table 8 of **Appendix J** (Transportation Impact Analysis), TRPA estimates of total overnight (resident and visitor) population by Traffic Analysis Zone (TAZ) were used to identify the proportion of the drive-to trips from each TAZ. These were then multiplied by the total drive-to vehicle-trips (in 1-way vehicle-trips) to estimate the daily vehicle-trips to/from each TAZ. The distances from each TAZ to the existing trail (at Dollar Hill) compared to the minimum drive distance to the closest access point to the proposed new trail were then calculated. Multiplying the reduction in vehicle-trip length by the number of vehicle-trips and summing over all TAZs yields a total reduction of 1,226 VMT per day.

In sum, the proposed trail is anticipated to reduce regionwide VMT by an estimated 1,226 miles per day.

As noted in CEQA Guidelines Section 15064.3(b)(2), transportation projects "that reduce, or have no impact on, vehicle miles traveled should be presumed to cause

a less that significant transportation impact." Because no VMT increase are anticipated, potential impacts related to the VMT standard are therefore considered less than significant.

c) Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less Than Significant Impact

The Project is located in an area of generally steep terrain as is common within the Tahoe Basin. Shared-use paths are the most common type of paved facility provided for shared users in areas with rugged terrain, steep slopes, and rural areas. The trail would follow (at a minimum) federal AASHTO standards for trail grades of up to 5% maximum slopes, up to 8.33% slopes for no more than 200 linear feet, up to 10% slopes for a maximum of 30 linear feet, and up to 12.5% slopes for a maximum of 10 linear feet (AASHTO 2012). Use of trail 'switchbacks' as a design control would also prevent excessive speeds and minimize the slope differentials. Trail design includes ADA-accessible pullouts where the slope exceeds 5%.

The trail would meet AASHTO width and clearance design requirements as well. The minimum paved width for a two-directional shared use path is 10 ft, and wider pathways are recommended in locations that serve more pedestrians. All other AASHTO trail design standards would be met, including design guidelines cross-slopes, overhead obstructions, sight-distance, safety rails, lateral clearance, design speeds for safety and minimum radii.

Because the Project incorporates design features intended to protect the safety of users, and limit excessive slopes, speeds, and hazardous design features, impacts would be less than significant.

d) Would the project result in inadequate emergency access?

No Impact

See discussion and analysis in Section 4.20, Wildfire, and 4.9, Hazards and Hazardous Materials, which conclude that implementation of the Project would not impact emergency evacuation plans and may serve as a beneficial egress route.

4.17.5 TRPA Checklist – Transportation/Circulation

TRPA Questions	Answers	Discussion
13a) Would the proposed project result in generation of 100 or more new Daily Vehicle Trip Ends (DVTE)?	No	According to LSC's *Transportation Impact Analysis* (**Appendix J**), the Project is anticipated to generate (on a peak day) 18 round-trips to the Regional Park, 3 round-trips on Carnelian Bay Ave., and 3 round-trips on Regency Way; therefore, impacts of new trip generation would be well below the threshold of significance. As discussed above in CEQA b), the impact on VMT would be beneficial.
13b) Would the proposed project result in changes to existing parking facilities, or demand for new parking?	No	LSC's Transportation Study estimates the following peak parking demand: Regional Park – 22 vehicles; Carnelian Bay Ave. – 4 vehicles; Regency Way – 3 vehicles. At the Regional Park, there are 270 existing parking spaces. LCS concludes there is adequate existing parking at the Park to accommodate the peak demand. At Regency Way, the paved width of the roadway is approximately 20 to 22 feet, which is not sufficient to provide paved shoulder parking. Instead, drivers can be expected to choose to park along the unpaved shoulder within the 58-foot-wide right-of way. There is some evidence of this pattern occurring at present, just to the east of the dirt road. This use pattern is not expected to result in any significant safety or circulation impacts, given the geometrics of the area and low traffic volumes, though any off-pavement

TRPA Questions	Answers	Discussion
		parking activity does result in soil compaction and disturbance. The peak 4 vehicles a day forecast would not result in demand for additional parking in this location. At Carnelian Bay Avenue, most persons accessing the trail from this direction would park along Tripoli Road. There are good opportunities for this parking to occur without impeding access to driveways, particularly on the north side of Tripoli Road west of Carnelian Bay Avenue. Given the very low level of traffic activity at this location (as shown in Table 5 of the Transportation Report) and the fact that the roadway geometrics limit traffic speeds, this low level of parking demand would not result in any potential for significant impact along Tripoli Road. In summary, the parking impact analysis conducted by LSC concludes the Project would not result in demand for new parking (LCS 2021).
13c) Would the proposed project result in substantial impact upon existing transportation systems, including highway, transit, bicycle, or pedestrian facilities?	No	LSC's Transportation Study analyzed potential circulation impacts to Regency Way, Carnelian Bay Road, and the Regional Park where users are anticipated to access the trail. The study concludes no substantial transportation impacts would occur from users accessing the trail. Additionally, it was concluded construction traffic would not degrade roadways or intersection LOS, and therefore, causes no significant short-term impact either (LSC 2021).

TRPA Questions	Answers	Discussion
13d) Would the proposed project result in alterations to present patterns of circulation or movement of people and/or goods?	No	Refer to responses for TRPA 13a-c. The Project would construct a new shared-use trail between existing transportation systems but would not alter present patterns of circulation or movement of people and/or goods.
13e) Would the proposed project result in alterations to waterborne, rail or air traffic?	No	There is no waterborne, rail, or air traffic associated with the Project.
13f) Would the proposed project result in an increase in traffic hazards to motor vehicles, bicyclists, or pedestrians?	No	Refer to CEQA c) above. Compliance with applicable trail design standards would ensure traffic hazards from use of the trail does not occur.

4.18 TRIBAL CULTURAL RESOURCES

4.18.1 Environmental Setting

Ethnographic literature indicates the region surrounding the proposed APE was part of the Washoe people's homeland. Their territory surrounded Lake Tahoe in a lozenge-shaped area that straddled the Sierra Nevada from the southern shore of Honey Lake, south through Antelope Valley and the West Fork of the Walker River (d'Azevedo 1986). Washoe-speakers north of Carson Valley were Wélmelti', a term meaning "northerner," identified as much by a distinctive manner of speech as geographic affiliation. To their east were two bands of Northern Paiute-speakers, the Tasiget from the lands "right here, in the middle," and the Kuyuidökadö, or "cuiui fish-eaters" of Pyramid Lake (Fowler and Liljeblad 1986).

The economy was based on seasonal resources harvested from catchments tethered to areas associated to specific lineages. Social networks extended visiting rights and resource procurement well beyond these borders. By Contact (the onset of Euro-American encroachment CA 1850s), the pine nut harvest dictated fall movement and winter residence for most Washoe and Northern Paiute people. Wélmelti' Washoe are said to have moved south into the Pine Nut Mountains, as Tasiget and Kuyuidökadö Northern Paiute moved into the Flowery Range, including the environs of Mount Davidson and Virginia City.

Family camps and favored fishing spots at Lake Tahoe were allocated according to one's origin or association as Wélmelti', Páwa'lu' ([Carson] valley Washoe), or Hángalelti' (the "southerners)." Wélmelti' are said to have concentrated on the northern end of Lake Tahoe, from McKinney's, east to "Sand Point" (Sand Harbor). Sierra Valley people are said to have come into the basin along the Truckee River; those from Truckee and Martis Valley, over Brockway Summit; and those from Eagle Valley (Carson City), up Clear Creek via Spooner Summit to Glenbrook. From Washoe Valley, trekkers moved into Little Valley via Franktown Creek. Another route up Ophir Creek to Lower Price Lake was abandoned after the landslide in 1864, that gave "Slide Mountain" its name, buried the old trail and a camp near Lower Price Lake. From this lake, the route continued south into Little Valley, or up through Tahoe Meadows, then to Incline Beach.

4.18.2 Regulatory Setting

Native American Consultation

In accordance with Assembly Bill 52, as identified in the PRC Section 21080.3.1(b)(2) of CEQA. Native American tribes (tribes) identified by the NAHC must be invited to consult on projects. Additionally, TRPA Code contains requirements for consultation with area tribes (Subsection 67.3.2). Native American correspondence was initiated by NCE with a letter and attached maps to the NAHC

on September 17, 2019. 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 September 24, 2019, identifying Tribe representatives from the Washoe Tribe of Nevada and California. SLF results within the present APE were negative.

In addition to the single Tribe identified by the NAHC, it is the County's policy to send an inquiry letter to all Tribes within the County's jurisdiction. One Tribe, the Shingle Springs Band of Miwok Indians (SSBMI) responded to the County stating that the Tribe is not aware of any known cultural resources in the Project area. The SSBMI indicated they would like to continue consultation as the Project progresses and requested a copy of the records search and completed environmental reports and would like to be notified of any inadvertent discoveries during Project implementation.

The NAHC letter and response, and copies of tribal correspondence are provided in the attached *Heritage Resource Inventory Report* (**Appendix G**; NCE 2021d).

4.18.3 CEQA Checklist Summary

Would the project:

CEQA Question	Impact Determination
a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC § 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: i. Listed or eligible for listing in CRHR, or in a local register of historical resources as defined in PRC § 5020.1(k), or	No Impact
ii. 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 PRC § 5024.1. In applying the criteria set forth in subdivision (c) of PRC § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	Less Than Significant Impact with Mitigation Incorporated

4.18.4 Answers to CEQA Checklist Questions

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC § 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:

i. Listed or eligible for listing in CRHR, or in a local register of historical resources as defined in PRC § 5020.1(k)?

No Impact

As discussed in the Environmental Setting, there are no known cultural, tribal, or sacred lands resources, including those eligible for listing in CRHR located within the Project APE; there would be no impact.

ii. 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 PRC § 5024.1. In applying the criteria set forth in subdivision (c) of PRC § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

Less Than Significant Impact with Mitigation Incorporated

As discussed in the Environmental Setting, the SSBMI Tribe requested continued consultation regarding the Project during construction.

In the event inadvertent cultural resources are discovered because of Project activities, Mitigation Measure TCR-1 will ensure the SSBMI Tribe is informed of findings and potential significant impacts to tribal cultural resources are avoided.

Mitigation Measure TCR-1: **Continue Consultation with SSBMI Tribe**. Construction shall cease if a potential cultural resource is inadvertently discovered during construction, and the SSBMI Tribe shall be contacted to continue consultation. Construction shall not resume until consultation is considered concluded when either of the following occurs, pursuant to Public Resource Code (PRC) 21080.3.2(b)(1): "The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource," or PRC 21080.3.2(b)(2): "A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached."

4.18.5 TRPA Checklist – Archaeology

TRPA Questions	Answers	Discussion
20a) Would the proposed project result in an alteration of or adverse physical or aesthetic effect to a significant archaeological or historical site, structure, object or building?	No	As discussed above in CEQA a), there are no known archaeological or historical site, structure, object, or buildings within the Project area.
20b) 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?	No	Refer to discussion for CEQA a) which concludes based on archival research, pedestrian survey, and tribal outreach there are no cultural, historical, and/or archaeological resources, including resources on TRPA or other regulatory official maps or records associated with the Project area.
20d) Does the proposed project have the potential to cause a physical change which would affect unique ethnic cultural values?	No	Refer to discussion for CEQA a). There are no unique ethnic cultural values associated with the Project area.
20e) Would the proposed project restrict historic or pre-historic religious or sacred uses within the potential impact area?	No	None are associated with the Project area, therefore not impact would occur.

4.19 UTILITIES AND SERVICE SYSTEMS

4.19.1 Environmental Setting

Currently, the Project area consists of undeveloped forested land. There are no existing utilities or service systems within the Project area; the nearest utilities are located within the Regional Park. The Project is not located in a source water protection zone of Lake Tahoe.

4.19.2 CEQA Checklist Summary

Would the project:

CEQA Question	Impact Determination
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	No Impact
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	No Impact
c) 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?	No Impact
d) Generate solid waste in excess of State or local standards or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	Less Than Significant Impact
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	Less Than Significant Impact

4.19.3 Answers to CEQA Checklist Questions

a) 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 telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

No Impact

The proposed Project includes the construction of a shared-use trail. The Project does not involve features that would require the construction or relocation of expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities; therefore, there is no impact.

b) Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

No Impact

The construction of the shared-use trail would have no impact on water usage. The Project does not propose features that would require water services; therefore, there would be no impact.

c) 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?

No Impact

The Project does not involve the construction of restroom facilities or direct or indirect discharge of wastewater to sanitary sewer or on-site septic systems. Restrooms are available at the North Tahoe Regional Park. No demand for wastewater treatment or facilities would occur as a result of the Project. The Project would not create or discharge wastewater and therefore would have no impact on a wastewater treatment operator.

d) 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?

Less than Significant Impact

Once constructed, the Project would provide an alternative transportation route through the area and would not create solid waste. Existing waste disposal bins at the Regional Park would serve trail users and no significant increase in trash would be generated.

e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Less than Significant Impact

Construction would result in a temporary increase in solid waste generation requiring disposal at area landfills. Waste generation would be temporary during construction and would not reduce available capacities at existing landfills. Disposal

of construction waste would comply with federal, state, and local statutes and regulations related to solid waste.

4.19.4 TRPA Checklist – Utilities

Except for planned improvements, Would the proposed project result in a need for new systems, or substantial alterations to the following utilities:

TRPA Questions	Answers	Discussion
16a) Power or natural gas?	No	The Project does not propose features that would require power or natural gas; therefore, there would be no impact.
16b) Communication systems?	No	The Project would not result in the construction of communication systems within the vicinity.
16c) Utilize additional water which amount would exceed the maximum permitted capacity of the service provider?	No	The Project does not propose features that would require water services; therefore, there would be no impact.
16d) Utilize additional sewage treatment capacity which amount would exceed the maximum permitted capacity of the sewage treatment provider?	No	Refer to CEQA item c) above. No demand for wastewater treatment or facilities would occur as a result of the Project.
16e) Storm water drainage?	No	The Project does not require construction or alteration of storm water drainage within the vicinity.
16f) Solid waste and disposal?	No	Refer to CEQA item d) and e) above. Disposal of construction waste would comply with federal, state, and local statutes and regulations related to solid waste.

4.20 WILDFIRE

4.20.1 Environmental Setting

The Project area contains U.S. Forest Service lands. The California Department of Forestry and Fire Protection (CAL FIRE) designates fire hazard severity zones for areas under state jurisdiction. For areas under local jurisdiction, CAL FIRE identifies areas that they consider to be Very High Fire Hazard Severity Zones (VHFHSZs); the local jurisdiction must choose whether to adopt the CAL FIRE recommendations. Portions of the Project area are within a state designated VHFHSZ; designated as high risk (**Figure 9**).

4.20.2 CEQA Checklist Summary

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones:

CEQA Question	Impact Determination
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	No Impact
b) 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?	Less Than Significant Impact
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	No Impact
d) 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?	No Impact

4.20.3 Answers to CEQA Checklist Questions

a) Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

No Impact

A Portion of the proposed Project is located within a state responsibility area and is classified as a very high fire hazard severity zone. The North Tahoe Fire Department's "Emergency Preparedness and Evacuation Guide" outlines evacuation routes and procedures in the event of a disaster (North Tahoe Fire Protection District and Meeks Bay Fire Protection District n.d.). The proposed Project would

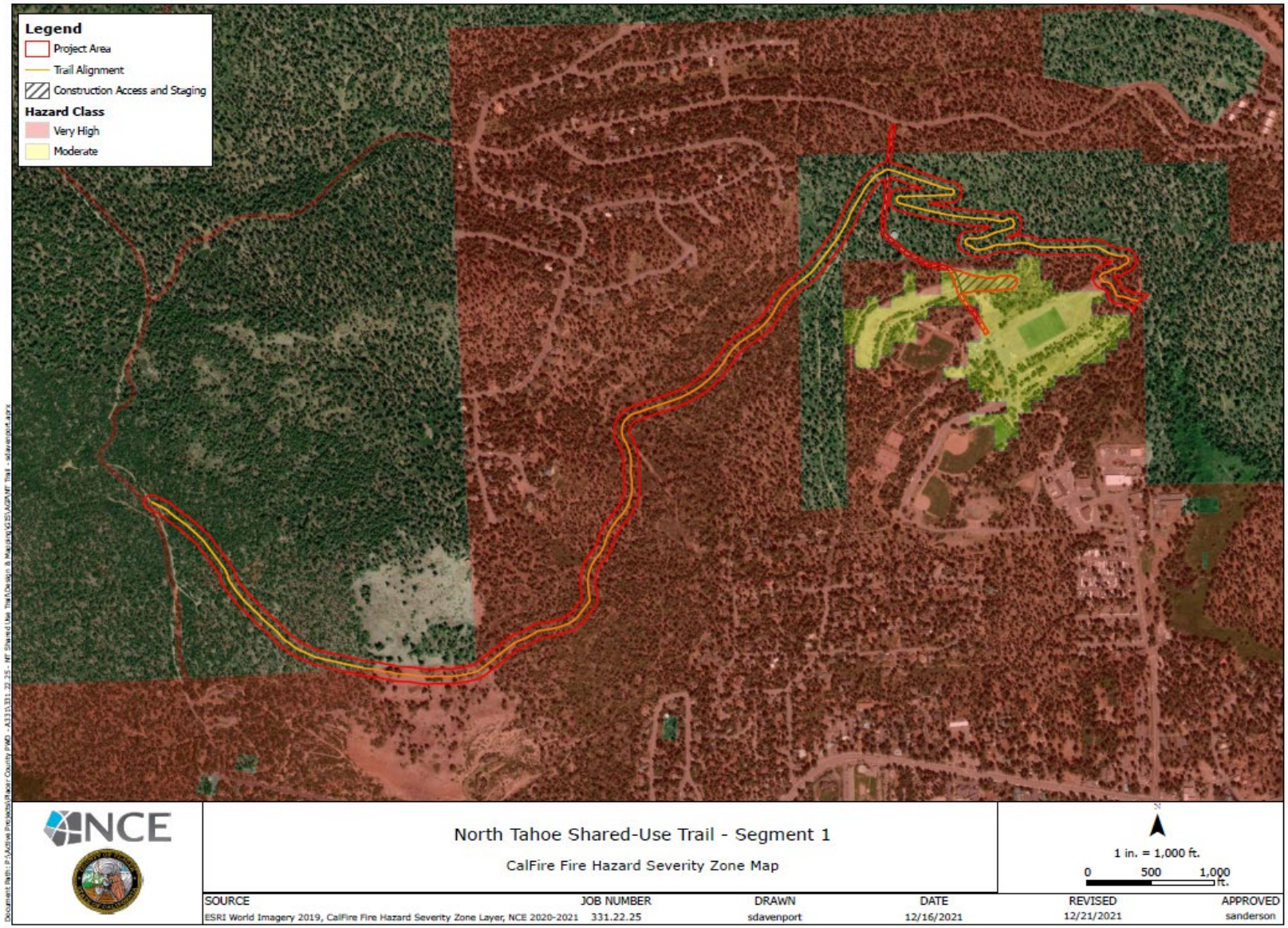

Figure 9. CAL FIRE Hazard Severity Zones

construct a trail in the vicinity of Carnelian Bay and Tahoe Vista and would provide connectivity between other area trails. Construction of the Project would not require changes to existing evacuation routes. Construction of the Project may provide the area with an additional egress option should a wildfire occur. Therefore, impacts are anticipated to be beneficial.

b) Would the project, 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?

Less Than Significant Impact

The trail would be constructed to be 12 feet in width, thus creating a break in the slope and forested environment; construction of the trail has the potential to serve as a small fire break should a fire occur in the area. Construction of the trail would not increase the risk associated with wildfire in this area. The Project does not propose to construct or modify habitable structures within the Project area that could expose occupants to pollutant concentrations from wildfire or the uncontrolled spread of a wildfire.

c) Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

No Impact

The Project does require associated infrastructure or utilities that would exacerbate fire risk. The proposed Project would not require the installation or maintenance of new drainage systems or utility relocations. Construction of the trail would not exacerbate fire risk or result in ongoing impact to the surrounding environment.

d) Would the project 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?

No Impact

The shared-use trail would be graded such that the trail surface is flat. Implementation of the trail Project does not require large areas to be graded or disturbed such that they would be susceptible to runoff, post-fire slope instability, or drainage changes. Temporary construction BMPs as discussed in Section 3.7, Construction Controls, would be implemented to stabilize the Project area during construction as to not cause significant risks associated with runoff, slope instability or drainage changes.

4.21 MANDATORY FINDINGS OF SIGNIFICANCE

4.21.1 CEQA Checklist Summary

CEQA Question	Impact Determination
a) Does the project have the potential to substantially 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 a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	Less Than Significant Impact with Mitigation Incorporated
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, or the effects of probable future projects.)	Less Than Significant Impact with Mitigation Incorporated
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	Less Than Significant Impact with Mitigation Incorporated

4.21.2 Answers to CEQA Mandatory Findings of Significance Questions

a) Does the project have the potential to substantially 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 a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less Than Significant Impact with Mitigation Incorporated

As discussed in this IS/MND/IEC, the Project may result in potentially significant impacts to special status species due to construction activities and tree removal, forestry resources through tree removal, and tribal cultural resources in the event the County does not comply with the request to continue consultation with an interested Tribe.

However, with implementation of the following mitigation measures, the County intends to avoid potentially significant impacts to the above listed resources and ensure impacts remain less than significant: Mitigation Measure BIO-1, which requires the County to conduct a preconstruction protocol-level survey for CSO in the HRCA zone and implement measures to protect the species if present;

Mitigation Measure BIO-2 requires the County to obtain and comply with conditions of USFS-LTBMU Special Use Permit to avoid significant impacts from timber harvesting and conversion activities; Mitigation Measure BIO-3 which requires the County to conduct a-preconstruction migratory bird nesting survey; and Mitigation Measure BIO-4 that requires the County to avoid (if possible) vegetation removal during the avian breeding season and if unavoidable, conduct a clearance survey prior to removal to ensure species are not present.

Finally, Mitigation Measure TCR-1 requires the County to continue coordination with SSBMI Tribe throughout implementation of the project to avoid significant, unintended impacts to cultural and tribal resources.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, or the effects of probable future projects.?

Less Than Significant Impact with Mitigation Incorporated

As discussed in Section 4.3, Air Quality, and Section 4.17, Transportation, the Project may contribute to cumulatively beneficial impacts to air quality and greenhouse gas emissions by providing an alternative transportation means, VMT reductions, providing cumulative benefit to the region's air quality overtime.

Cumulatively considerable impacts from tree removal would be avoided through Mitigation Measure FR-1, which requires the County's coordination and compliance with CAL FIRE and USFS-LTBMU permit requirements, including development of a Timber Harvest Plan by a Registered Forestry Professional, and securing a Timber Conversion Permit that includes requirement to complete tree removal activities within one year of filing with CAL FIRE.

Cumulatively considerable impacts to migratory birds and California spotted owl would not occur as the Project includes preventative mitigation to identify presence of species, protect if present, and comply with conservation requirements of the USFS and other applicable wildlife agencies as required by Mitigation Measures BIO-1 through BIO-4.

There are no known archaeological or historic resources associated with the Project area, or sacred sites. The County has agreed to continue consultation with the SSBMI tribe during construction in the event an inadvertent discovery is made (Mitigation Measure TCR-1) and therefore significant and cumulatively considerable impacts would not occur.

The Project would not considerably contribute to degradation of the regions scenic and aesthetic resources as the Project proposes to implement mitigation measure

AES-1, which requires incorporation of design considerations to minimize the trail's visual impact to existing conditions at the Project site.

Finally, the Project proposes to incorporate BMPs that minimize temporary construction related impacts to water quality, air quality, greenhouse gas, and soils during construction that would prevent cumulatively considerable impacts from occurring even in the event the Project timeline coincides with construction of nearby Projects. Therefore, the Project does not have impacts that are individually limited but would result in cumulatively considerable impacts.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less Than Significant Impact with Mitigation Incorporated

As discussed in this IS//MND/IEC, the Project would result in no significant effects related to air quality, noise, or use of hazardous materials that would adversely affect humans. **Mitigation Measure GEO-1** is required to ensure the trail is designed and engineered to protect human safety from dangerous slopes, slope instability, and design geometrics.

Once the Project is constructed, the trail would positively affect humans through improvement of the non–automobile transportation network.

4.21.3 TRPA Checklist – Findings of Significance

TRPA Questions	Answers	Discussion
21a) 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, threated to eliminate a plant of 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?	No, with Mitigation	As discussed in CEQA 4.21.2 a) above, mitigation is required to prevent potential reduction of California spotted owl (Mitigation Measures BIO-1 and BIO-2). There is no fish habitat or special status plant habitat (including wetlands and riparian areas) associated with the Project area. No important examples of the major periods of California history or prehistory are associated with the Project area.
21b) 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 would endure well into the future.)	No	As discussed throughout this IS/MND/IEC, the Project is identified in TRPA's EIP program and would ultimately improve air quality and recreation thresholds. There were no potentially significant environmental impacts that could not be reduced to less than significant with mitigation incorporated. Therefore, the Project would not prevent (and is anticipated to help) achieve long term environmental goals.
21c) 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?)	No, with Mitigation	Refer to discussion for CEQA 4.21.2 b) above. With required mitigation and best management practices incorporated during construction, the Project would not result in cumulatively considerable impacts.

TRPA Questions	Answers	Discussion
21d) Does the project have environmental impacts which would cause substantial adverse effects on human being, either directly or indirectly?	No, with Mitigation	Refer to discussion for CEQA 4.21.2 c) above, which concludes after integrating mitigation measure GEO-1, human safety would be protected from dangerous slopes, slope instability, and dangerous design geometrics.

Section 5 Mitigation Monitoring and Reporting Plan

CEQA requires review of any project that could have significant adverse effects on the environment. In 1988, CEQA was amended to require reporting on and monitoring of mitigation measures adopted as part of the environmental review process. This Mitigation Monitoring and Reporting Plan is designed to aid the County in their implementation and monitoring of measures proposed in the IS for the proposed project.

Table 3 provides details of the MMRP. The mitigation measures are taken from the IS and are assigned the same number as in the IS. The MMRP describes the actions that must take place to implement each mitigation measure, the timing of those actions, and the entities responsible for implementing and monitoring the actions.

Table 3. Mitigation and Monitoring Plan

Mitigation Measure	Mitigation Activities	Implemented By	Monitored By	Timing and Frequency	Compliance Verification
AES-1	**Incorporate Visual Impact Minimization Design Measures.** Final design of the rock retaining walls shall include natural or natural-appearing retaining wall materials, and colors consistent with the natural palette. Low-profile fence railing shall be constructed from natural materials, natural-appearing materials, and colors to match existing soil/vegetation. Existing boulders, groundcover, and shrubs in the trail vicinity shall be retained to ensure that the man-made linear trail will not be visually out-of-place with the adjacent landscape character. Construction plan sheets shall be supplemented with additional details of building materials consistent with existing landscape.	County and County's Contractor	County	Prior to Construction	Verified by: Date:
FR-1	**Develop Timber Harvesting Plan and Secure Timberland Conversion Permit from the California Department of Forestry and Fire Protection (CAL FIRE).** The County shall comply with the Operations Requiring Conversion Permit (California Code of	County or County's Consultant	CalFire	Prior to Construction; tree removal completed within 1 year	Verified by: Date:

	Regulations [CCR] § 1104) requirements for conversion of Forestland for installation of public service projects. The County shall retain a Registered Professional Forester to develop a Timber Harvesting Plan. The County shall also obtain a Timberland Conversion Permit from CAL FIRE per CCR § 1103. Tree removal shall occur along the trail corridor and be completed within 1 year of filing with CAL FIRE by a Registered Professional Forester and a Licensed Timber Operator.			of filing for permit.	
BIO-1	**Conduct Preconstruction Protocol-Level Survey for California Spotted Owl (CSO) in Home Range Core Area (HRCA).** Under the direction of the resource agency biologists, a protocol-level survey for CSO shall be conducted in the spring (i.e., March to May) prior to commencement of construction within the area of the Project boundary that overlaps with the HRCA. A qualified biologist shall follow resource-agency-approved protocols and conduct protocol-level preconstruction surveys within suitable nesting habitat for California spotted owl within 0.5 miles of the Project area. Should CSO be discovered nesting within the Project area, the resource agencies shall be notified, and additional protection measures will be identified. These protection measures are intended to avoid and minimize significant	County's Consultant – Qualified Biologist	USFS-LTBMU, CDFW, TRPA	Prior to and During Construction	Verified by: Date:

	effects to a nest and roosting individuals, which may include creation of a buffer zone, construction monitoring by a biologist, or similar protection measures to avoid impacts during construction activities. If an active nest is located, the biologist shall determine, depending on conditions specific to each nest and the relative location and rate of construction activities, if it may be feasible for construction to occur as planned without impacting the breeding effort. The resource agencies shall be consulted to determine if and when construction activities can be initiated. The nest(s) may be monitored by a qualified biologist during active construction, if deemed appropriate by resource agencies. If, in the professional opinion of the biologist, construction activities significantly affect the nest and roosting individuals, the biologist shall recommend additional remediation measures which may include stop work action. The biologist and resource agencies will determine any additional protection measures working with the Project Engineer. Construction activities may be halted within the buffer until either the nest is no longer active, or the Project receives approval from the resource agencies to resume work.				

BIO-2	**Obtain and Comply with Conditions of U.S. Forest Service – Lake Tahoe Basin Management Unit (USFS-LTBMU) Special Use Permit (SUP).** Because the project will be constructed through USFS-LTBMU land, the County shall obtain a Special Use Permit from the USFS. Should the USFS-LTBMU determine additional protection measures are necessary, the SUP will outline mitigation and conservation requirements as a condition of approval. The County will be required to comply with any conditions identified within the SUP. Compliance with the SUP will ensure potential impacts to CSO will be mitigated to less than significant. Additional protection measures may include: • Biological monitoring during tree removal and trail construction within the HRCA • Identified tree protection and habitat avoidance measures	County or County's Consultant	USFS-LTBMU	Prior to Construction	Verified by: Date:
BIO-3	**Pre-Construction Avian Survey.** If any construction activities (e.g., grubbing or grading) are scheduled during the bird nesting season (typically defined by CDFW as February 1 to September 1), the City or approved construction contractor shall retain a qualified biologist to conduct a preconstruction survey of the Project area and 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.	County's Consultant – Qualified Biologist	USFS-LTBMU, CDFW, TRPA	Prior to Construction	Verified by: Date:

	The preconstruction survey shall be conducted no more than 14 days prior to land disturbance or tree removal (including staging and equipment storage). Any active nest should not be disturbed until young have fledged or under the direction provided by a qualified biologist. Any special status species shall not be disturbed without the direction of a qualified biologist. If an active nest is found during construction, disturbance shall not occur without direction from a qualified biologist.				
BIO-4	**Avoid Vegetation Removal During Avian Breeding Season.** Tree or shrub removal shall occur during the non-breeding season (September 1 through January 31). If it is not possible to avoid tree removal or other disturbances during the breeding season (February 1 through August 31), a qualified biologist shall conduct a pre-disturbance survey for nesting birds in all trees within the operation footprint and within 250 feet of the Project area no more than 30 days prior to the onset of ground disturbance. If nesting birds are detected on the site during the survey, a suitable activity-free buffer should be established around all active nests. The precise dimension of the buffer (up to 250 ft.) would be determined in consultation with CDFW at that time and may vary depending on location and species. Buffers should remain in place for the duration of the breeding season or until it has	County's Contractor and Consultant - Qualified Biologist	USFS-LTBMU, CDFW, TRPA	Prior to and During Construction	Verified by: Date:

	been confirmed by a qualified biologist that all chicks have fledged and are independent of their parents.				
GEO-1	**Incorporate Geotechnical Study Design Criteria for Slope Stability.** Site Preparation Prior to placement of fill, the Contractor shall conduct localized deep removal of topsoil and organics (including root balls). Vegetation and organic debris shall be disposed of offsite or placed in designated non-structural areas as indicated by the Preliminary Geotechnical Report. Removal of oversized rock (greater than 6-inches) shall be backfilled with structural fill placed and compacted to at least 90-percent relative compaction (per ASTM D1557). Prior to receiving structural fills or loading, subgrade soils shall be moisture-conditioned to near optimum moisture content and compacted to not less than 90 percent of the soil's maximum density (ASTM D1557) for a maximum of 12 inches. The Contractor shall follow the additional compaction requirements of ASTM D1557 as indicated in the Preliminary Geotechnical Report. Any fill placed on a slope steeper than 5:1 shall be keyed and benched per the 'Slope Keying	County and County's Contractor	County and TRPA	Prior to and During Construction	Verified by: Date:

	Detail' provided in the Preliminary Geotechnical Report. <u>Grading and Filling</u> Incorporate all grading and filling recommendations from the Preliminary Geotechnical Report, including requirements for rock fill, structural fill, non-structural fill, and soil compaction requirements pursuant to ASTM D1557. The exterior face of any embankment shall be constructed with an inclination of no steeper than 2:1. The surface of the slope shall be compacted to the same percent compaction as the body of the fill. The Contractor shall conduct density testing of all fills, subgrade, and structural fill in accordance with ASTM D6938 (Standard Test Methods for In-Place Density and Water Content of Soil and Soil Aggregate by Nuclear Methods) as instructed by the Preliminary Geotechnical Report. <u>Retaining Walls</u> Clay soils or soils blended with organics shall not be placed in areas to be retained by or supporting retaining structures.				

	Retaining wall structures shall be designed in accordance with recommendations in Table 2 of the Preliminary Geotechnical Report (Lateral Earth Pressures) and recommended bearing capacities. <u>Slope Stability and Erosion Control</u> Hillside fill grading shall incorporate bench keying as previously described in Site Preparation. Due care shall be exercised by the Contractor to assure inclement weather and/or construction water during moisture conditions or dust control does not result in an excessively wet subgrade. Where encountered, pumping soils may be scarified and allowed to dry or be removed and replaced with a layer or compacted structural fill or rock fill. If required, the Contractor shall stabilize the subgrade by use of a geomembrane or other stabilization protocol consistent with available means and methods and approved by the County Engineering Department.				
TCR-1	**Continue Consultation with Shingle Springs Band of Miwok Indians (SSBMI) Tribe.** Construction shall cease if a potential cultural resource is inadvertently discovered during construction, and the SSBMI Tribe shall be contacted to continue consultation. Construction	County	County	Ongoing during Construction	Verified by: Date:

	shall not resume until consultation is considered concluded when either of the following occurs, pursuant to Public Resource Code (PRC) 21080.3.2(b)(1): "The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource," or PRC 21080.3.2(b)(2): "A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached."				

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