

City of South Lake Tahoe

Sierra Tract Erosion Control Project Phase 3 and 4

CEQA Initial Study/Mitigated Negative Declaration

Public Draft

June 2013



**CDM
Smith**

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Draft Mitigated Negative Declaration

Sierra Tract Erosion Control Project Phase 3 and 4

Lead Agency: City of South Lake Tahoe

Mitigated Negative Declaration: Pursuant to Division 13, Public Resources Code, California Environmental Quality Act

Description

Project Location:

The Sierra Tract Subdivision is located at the southern end of Lake Tahoe in California, south of Lake Tahoe Boulevard. The subdivision is located approximately three miles west of the Nevada/California state line. The Sierra Tract Project Area has been divided into five separate projects and this document specifically focuses on the Phase 3 and 4 project area.

This project consists of an approximately 81-acre area in the northwestern portion of the Sierra Tract. It is bounded to the northwest primarily by the U.S. Highway 50 Caltrans right of way line, although the project area does spill over to the northwest of Highway 50 onto portions of Rubicon Trail, Sussex Avenue, Brockway Avenue and Lodi Avenue. The project area borders Sierra Boulevard from its intersection with Highway 50 to the intersection of Osbourne Avenue. The project area then extends southwest of Sierra Boulevard to the Sierra Tract boundary with the Upper Truckee River; and extends northeast to Martin Avenue. The southeast boundary of the project area goes to William Street from Sierra Boulevard to Martin Avenue; Osbourne Avenue from Sierra Boulevard to Stockton Avenue; and Knox Avenue between Stockton Avenue and Lodi Avenue.

Purpose of the Project:

The purpose of the Sierra Tract Erosion Control Project (ECP) Phase 3 and 4 is to reduce the discharge of fine sediment, phosphorus and other nutrients into Lake Tahoe and the Upper Truckee River. The City will perform this project in accordance with the Preferred Design Approach and applicable guidelines of the California Tahoe Conservancy (Conservancy) and U.S. Forest Service (USFS) Lake Tahoe Basin Management Unit (LTBMU) Grants Program. The Project focus is to first control upgradient pollutant sources by maximizing source controls to prevent sediment and nutrients from becoming mobilized in stormwater runoff; second, to reduce surface runoff volumes and separate clean flows from polluted flows by implementing hydrologic controls; and lastly, to remove fine sediment and nutrients from stormwater runoff by implementing treatment controls. Alternative combinations of

controls will be devised in a treatment train type approach to address the stated goals of the project.

It is scientifically proven that surface runoff transports a significant fraction of the total clarity-reducing pollutants entering Lake Tahoe each year. Urbanized areas around the lake, including the Sierra Tract, are particularly large pollutant contributors because of intensive development, lack of drainage control and unstable soils. The *Draft Existing Conditions Assessment* (K.B. Foster 2003) indicates that about 38% of Sierra Tract is covered by impervious surfaces associated with roadways, buildings, driveways and parking lots. Industry-wide watershed assessment practices show that above a threshold of approximately 10% impervious coverage, urban watersheds and their receiving waters will be impacted by increased runoff volumes, shorter, more intense flows and higher pollutant loads. Given the high percentage of impervious surfaces in the Sierra Tract, source controls alone will not provide sufficient water quality control to meet stringent Regional and State water quality objectives.

The Sierra Tract area is largely built-out and dates from 1946. The Project area also includes commercial properties along the portion of Lake Tahoe Boulevard and Palmira Avenue within the Project area boundary. The Project area is characterized by poor drainage, bare soils, and unstable conveyances. Poor drainage results in localized street flooding where residences were built in natural drainage swales, as well as ponding of runoff water along bare soil road shoulders. Some engineered water quality improvement projects have been installed in this portion of Sierra Tract including the Beecher-Lodi ECP (1999) and Western Sierra Tract ECP (1989).

Action is needed at this time because of the issues related to water quality in this portion of the Sierra Tract and the adjacency of its western side to highly sensitive wetland and river habitat (Upper Truckee River). These natural systems transport the sediment and nutrient laden discharges from the project area directly to Lake Tahoe. There is a need to maximize stormwater quality improvement in the urban area and provide multiple layers of protection for these downstream receiving waters.

To achieve this goal, the Regional Storm Water Quality Improvement Committee (SWQIC), comprised of water quality experts from multiple public agencies and the private sector, has created a water quality improvement preferred design approach for water quality improvement/erosion control projects. Projects should be consistent with this approach in order to maximize effectiveness. It emphasizes source control first, then hydrologic controls, and finally, treatment controls. Source controls should be designed to stabilize soils and associated nutrients so they do not enter the stormwater runoff stream. Conveyance systems should be designed to minimize concentrated surface runoff by maximizing infiltration as close to the source of runoff as possible. Treatment best management practices (BMPs) should be designed to treat the runoff of more frequent, smaller storm events (SWQIC 2004).

As of August 2011, the Lake Tahoe Total Maximum Daily Load (TMDL) has been adopted. The Pollutant Load Reduction Model (PLRM) is an approved tool that can

be used to help implement the TMDL. It calculates runoff volumes and associated pollutant loads from user-defined watersheds. The PLRM can be utilized to estimate the effectiveness of ECPs by modeling existing and future pollutant loads based on an assessment of existing conditions and ECP design plans. The PLRM was applied to the existing Phase 3 and 4 project areas in order to determine which sub-watersheds were of the highest priority (highest pollutant loads). Based on the model results, it was determined that both project areas could be reduced in size and combined in order to most effectively achieve goals for pollutant load reduction. Subsequently, both Phase 3 and 4 projects were combined into the Sierra Tract ECP Phase 3 and 4 project, and the project area boundary was revised as the presented plan in the Initial Study.

Finally, the purpose of this public project is to treat the water quality impacts from public land. Consequently, the project should be limited to activities in the City right-of-way, public parcels and private lands planned for full acquisition or acquisition of drainage easements. Other private lands should not be affected.

Determination

The City of South Lake Tahoe has prepared an Initial Study to assess the significance of the effects of the Sierra Tract ECP Phase 3 and 4. The City has determined that the project, as proposed, could cause a significant effect on the environment. This determination is based upon the evidence provided in the attached Initial Study and other relevant documents and agency consultation. Mitigation measures have been incorporated into the project to reduce potential impacts to a less than significant level. These mitigation measures are listed below.

Biological Resources

Mitigation BIO-1 Prior to project implementation, protocol-level surveys for willow flycatchers will be conducted in suitable riparian/meadow habitat (situated in the undeveloped western portions of the Project area). Work within the City right of way will not require surveys. Only work beyond the subdivision within 300 feet of the habitat will require the surveys. If willow flycatchers are detected, a Limited Operating Period (LOP) between June 1 and August 31 will be imposed. The location of the LOP will be determined by the consulting wildlife biologist based on site conditions and the type of Project activity. If no surveys are conducted, an LOP will automatically be implemented in suitable habitat within 300 feet of any Project activities.

Protocol level surveys require 2 visits. One must be conducted between June 15-25, while the second can be conducted between June 1 and June 14 or between June 26 and July 15. If snow is gone and spring conditions prevail, the first survey can be conducted

the first week of June and the second can be completed the week of June 15.

- Mitigation BIO-2** Any sighting of listed or sensitive species, or nests or dens of these species will be reported to the City Planning Department. These nests, dens, or plant locations would be protected in accordance with the Environmental Threshold Carrying Capacities for the Lake Tahoe Region guidelines (TRPA 1982).
- Mitigation BIO-3** If special status wildlife species with agency-mandated protected activity centers and LOPs are found breeding in the Project area, a protected activity center will be delineated and a limited operating period will be implemented.
- Mitigation BIO-4** Any construction activities that require remove of trees and shrubs will be conducted outside the avian nesting season (April 1 through August 15) unless a qualified biologist determines that no nesting is occurring. The chronology of each year's nesting could vary due to snow loads. If vegetation removal and/or ground disturbance occurs during the avian nesting season, a qualified biologist will conduct nesting bird surveys of the areas of vegetation and tree removal out to 150 feet to ensure that breeding birds are not adversely affected. To comply with the MBTA, any location containing an active nest will not be disturbed until the young have fledged or it is determined that the nest is inactive. The first survey will be conducted 15 days prior to construction activity. A second survey will be conducted 72 hours prior to construction.

Cultural Resources

- Mitigation CR-1** The Washoe tribe shall be invited to spot check the Project during construction. Selective archaeological monitoring by a qualified archaeologist and/or Native American consultant is recommended during project ground disturbance activities, especially in areas closest to the Upper Truckee River. In the event of fortuitous discoveries of buried or concealed heritage resources, ground disturbance activities shall cease in the area of the find and the project sponsor shall consult a qualified archaeologist for recommended procedures (Lindstrom 2004).
- Mitigation CR-2** If human remains are inadvertently discovered, California law requires that work must stop immediately and the county coroner must be notified. If the remains are Native American the coroner shall notify the members of the Washoe Tribe to insure that proper treatment is given to the burial site (Lindstrom 2004).

A copy of the Initial Study is attached. Questions about this Mitigated Negative Declaration and the Initial Study may be directed to:

Mr. Stan Hill, Associate Engineer
City of South Lake Tahoe
1052 Tata Lane
South Lake Tahoe, CA 96150
(530) 542-6039

All comments will be reviewed and responses prepared by the City of South Lake Tahoe.

Date:

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Section 1

Introduction

This Initial Study/Proposed Mitigated Negative Declaration (IS/MND) has been prepared to address the environmental effects of the Sierra Tract Erosion Control Project (ECP) Phase 3 and 4 (Project), the third and fourth of the five projects being considered. This document will serve the decision making needs of the City of South Lake Tahoe (City) and other state agencies with discretionary approval authority of the Project.

1.1 Background

The City has started implementing a series of water quality improvement projects in the neighborhood known as Sierra Tract in South Lake Tahoe, California. The neighborhood has been divided into five geographically distinct project areas. The City has already constructed Phase 2 and a portion of Phase 1 (Phases 1A and 1B). All of the Sierra Tract project areas are based upon sub watershed boundaries and drainage areas and the distinct types of water quality treatment solutions appropriate to the area.

For funding purposes, the five projects are referred to collectively as the “*Sierra Tract Erosion Control Project*.” Planning funding has been granted to the City, the lead CEQA agency and project proponent, by the California Tahoe Conservancy (Conservancy). The Lake Tahoe Environmental Improvement Program (EIP) assigns Project Numbers 177 and 693 to this water quality improvement/erosion control effort. The EIP is a cooperative program administered by the Tahoe Regional Planning Agency (TRPA) that relies on a partnership of private, local, state, and Federal entities to implement its goals of preserving, restoring, and enhancing the environment of the Lake Tahoe Region (TRPA 2001).

In 2010, the Pollutant Load Reduction Model (PLRM) was used to assess stormwater priority areas within both the Phase 3 and Phase 4 project areas. Both projects were in the planning and early design phases at the time of PLRM implementation. As a result of the PLRM, both project areas for the Phase 3 and 4 projects were reduced and it was decided to combine the two remaining project areas into one project. This combined project is now the Sierra Tract ECP Phase 3 and 4.

A Technical Advisory Committee (TAC) was formed for planning and design of the Phase 3 and 4 project. Members of the TAC include representatives from the following agencies: Lahontan Regional Water Quality Control Board (RWQCB), the Conservancy, Tahoe Resource Conservation District (TRCD), the City, Natural Resource Conservation Service (NRCS), Caltrans, U.S. Army Corps of Engineers (USACOE), U.S. Forest Service Lake Tahoe Basin Management Unit (USFS LTBMU), South Tahoe Public Utility District (STPUD), Tahoe Regional Planning Agency (TRPA), and CDM Smith (Design, Planning and Permitting Consultant). The TAC was formed to provide guidance and concurrence throughout the Project planning

development process and making decisions regarding selection of the preferred alternative. Since the TAC includes representatives from the permitting agencies, it provides useful insights about permitting challenges early in the planning process. The following is a list of Phase 3 and Phase 4 TAC meetings prior to combining the Phase 3 and Phase 4 project areas. Minutes are available in the public record at the City office in South Lake Tahoe.

- October 10, 2007 – Phase 3 - First TAC meeting to initiate Project and review Existing Conditions Analysis Memorandum comments.
- December 19, 2007 – Phase 3 - Tour project area and review sub-basin alternatives, review evaluation and criteria for alternatives evaluation.
- February 27, 2008 – Phase 3 - Review evaluation of alternatives and consider recommended alternative.
- July 22, 2008 – Phase 4 – First TAC meeting to initiate Project.
- August 26, 2009 – Phase 4 – Review Formulation and Evaluation Alternatives Memorandum.

The list below describes TAC meetings after combining the two projects.

- November 18, 2010 – Project Restart, Review Pollutant Load Reduction Model (PLRM) results and Project Schedule.
- March 10, 2011 - Review Revised Phase 3 and 4 Project Area and Recommended Alternative
- September 27, 2012 – Project Re-Initiation and Finalize Recommended Alternative
- March 18, 2013 – Review Final Recommended Alternative Project Report and 60 percent design plans

This environmental analysis will address the Phase 3 and 4 project only. The other Sierra Tract phases and other past and future projects will be considered with regards to the cumulative effects from the Phase 3 and 4 project.

1.2 Project Purpose and Need

The purpose of the Sierra Tract ECP Phase 3 and 4 is to reduce the discharge of fine sediment, phosphorus and other nutrients into Lake Tahoe and the Upper Truckee River. The City will perform this project in accordance with the Preferred Design Approach and applicable guidelines of the Conservancy and USFS LTBMU Grants Program. The Project focuses on three key elements: first, control upgradient pollutant sources by maximizing source controls to prevent sediment and nutrients from becoming mobilized in stormwater runoff; second, reduce surface runoff volumes and separate clean flows from polluted flows by implementing hydrologic

controls; and lastly, remove fine sediment and nutrients from stormwater runoff by implementing treatment controls. Alternative combinations of controls will be devised in a treatment train type approach to address the stated goals of the project.

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The Sierra Tract is largely built-out and dates from 1946. The Project area also includes commercial properties along the portion of Lake Tahoe Boulevard and Palmira Avenue within the Project area boundary. The Project area is characterized by poor drainage, bare soils, and unstable conveyances. Poor drainage results in localized street flooding where residences were built in natural drainage swales, as well as ponding of runoff water along bare soil road shoulders. Some engineered water quality improvement projects have been installed in this portion of Sierra Tract including the Beecher-Lodi ECP (1999) and Western Sierra Tract ECP (1989).

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To achieve this goal, the Regional Storm Water Quality Improvement Committee (SWQIC), comprised of water quality experts from multiple public agencies and the private sector, has created a water quality improvement preferred design approach for water quality improvement/erosion control projects. Projects should be consistent with this approach in order to maximize effectiveness. It emphasizes source control first, then hydrologic controls, and finally, treatment controls. Source controls should be designed to stabilize soils and associated nutrients so they do not enter the stormwater runoff stream. Conveyance systems should be designed to minimize concentrated surface runoff by maximizing infiltration as close to the source of runoff as possible. Treatment best management practices (BMP's) should be designed to treat the runoff of more frequent, smaller storm events (SWQIC 2004).

As of August 2011, the Lake Tahoe Total Maximum Daily Load (TMDL) has been adopted. The PLRM is an approved tool that can be used to help implement the TMDL. It calculates runoff volumes and associated pollutant loads from user-defined watersheds. The PLRM can be utilized to estimate the effectiveness of ECPs by modeling existing and future pollutant loads based on an assessment of existing conditions and ECP design plans. The PLRM was applied to the existing Phase 3 and 4 project areas in order to determine which sub-watersheds were of the highest priority (highest pollutant loads). Based on the model results, it was determined that both project areas could be reduced in size and combined in order to most effectively achieve goals for pollutant load reduction. Subsequently, both Phase 3 and 4 projects were combined into the Sierra Tract ECP Phase 3 and 4, and the project area boundary was revised as presented in the conceptual plan (Figure 2-2).

Finally, the purpose of this public project is to treat the water quality impacts from public land. Consequently, the project should be limited to activities in the City right of way, public parcels and private lands planned for full acquisition or acquisition of drainage easements. Other private lands should not be affected.

1.3 Legal Authority

This environmental analysis was prepared to comply with the requirements of California Environmental Quality Act (CEQA) of 1970, Cal. Pub. Res. Code §21000 et seq. The City, as the CEQA Lead Agency, commissioned the preparation of this document to inform governmental decision makers and the public about the environmental effects of activities being considered for implementation. City Planning Division staff will conduct Design Review for the project and the Planning Commission will make the CEQA decision and approve the Design Review application.

Under the Conservancy rules for management of grant funds, only ECPs over 20 years old may use funds to improve existing ECPs. Therefore, under the Project, existing Beecher-Lodi ECP facilities will not be improved; however, existing Western Sierra Tract ECP facilities may be improved under the Project.

In this case, this IS has been prepared to determine whether the Project may have a significant adverse effect on the environment. It is based upon the CEQA checklist (Appendix A) which illuminates the various environmental impacts which may result from development. The administrative record associated with this analysis includes specific studies which examine the potential significance of environmental effects to specific resources. While these studies are a crucial part of the record supporting the proposed MND for this project, they are merely summarized and are not included in their entirety in the body of this document.

This document considers direct impacts (those caused by an action and occurring at the same time and place) and indirect impacts (those caused by an action but occurring later or farther away but at a reasonably foreseeable time or place). Actions

that could lessen identified impacts (mitigation measures) are identified when needed to reduce any adverse environmental effects to below a level of significance.

1.3.1 Responsible Agencies

CEQA Responsible agencies require CEQA compliance prior to issuance of any permits or other regulatory responsibilities and are listed below.

- California Tahoe Conservancy - The Conservancy is providing grant funding for both planning and construction and will provide an easement or license agreement for use of property under Conservancy ownership. Prior to Conservancy Board approval for an easement or license agreement, CEQA compliance must be approved by the lead agency.
- Lahontan Regional Water Quality Control Board (Lahontan RWQCB) - Lahontan RWQCB has jurisdiction over all water quality improvement projects on the eastern slope of the Sierra Nevada (Lahontan RWQCB 1995). The RWQCD staff will determine whether or not the Project will be eligible for a General Waste Discharge Requirements and National Pollutant Discharge Elimination System (NPDES) Permit for Storm Water Discharges Associated with Construction Activity in the Lake Tahoe Hydrologic Unit (Board Order No. R6T-2011-0019). The agency will require completion of CEQA compliance prior to issuance of any permits.
- Caltrans - Caltrans will receive a copy of the CEQA environmental document for review. Caltrans maintains and is responsible for drainage facilities on Highway 50. Work proposed within the Caltrans right of way will require an Encroachment Permit.

Caltrans Aeronautics Division will receive a copy of the CEQA environmental document from the State Clearinghouse since the Project is located within 2 miles of an airport. They will have discretionary approval authority because the Project is located within an overflight zone and an opportunity to comment on the CEQA environmental document during the 30-day public review period.

- El Dorado County - A final CEQA Notice of Determination (NOD) will be filed with the County Clerk after the final determination has been made by the City Planning Commission.
- City of South Lake Tahoe - The City is the Grantee, land owner and a permitting agency for the project. The City is also the lead agency for CEQA compliance. A Design Review permit will be required prior to construction of the project. This is issued by the Planning Commission at the time of CEQA adoption.
- South Lake Tahoe Public Utilities District (STPUD) - The STPUD owns several sewer and water facilities within the Project area that would be affected by the Project. The STPUD is not required to issue a permit for the Project, however, they will need to approve of and oversee any modifications to their facilities. They will review Project plans as they become available and the CEQA environmental

document to determine if any conflicts with their facilities could cause potentially significant impacts.

1.3.2 Other Permitting Agencies

U. S. Forest Service Lake Tahoe Basin Management Unit

Improvements are proposed on USFS LTBMU owned land. A Special Use Permit will be required from the agency for all work on their land. The USFS LTBMU will also prepare a National Environmental Policy Act (NEPA) Categorical Exclusion based on information submitted to the agency by the City.

Tahoe Regional Planning Agency (TRPA)

This Project will be required to comply with the *TRPA Code of Ordinances* to receive a permit for construction. The TRPA has its own environmental documentation requirements outlined in Chapter 3 of the *TRPA Code of Ordinances* (TRPA 2013a). The TRPA Initial Environmental Checklist is used to determine significant impacts to the environment from a Project under a separate document.

1.3.3 Private Lands Improvements

Some easements may be acquired on private lands throughout the Project area. Easements may be granted to the City to construct and maintain the Project for 20 years. Private land owners have been provided opportunity to review Project plans throughout the planning process and will review future plans as they are developed.

1.4 Public Review Process

Opportunities for public participation in the environmental document review process are provided in order to promote open communication and better decision making. All persons and organizations having a potential interest in the proposed plan are invited to provide comments during the thirty-day comment period for this document.

The CEQA process provides opportunities for agencies and the public to review and comment upon draft environmental documents. Property owners within the Project area and agencies with regulatory or funding authority over the Project were specifically targeted for Project scoping because they are the primarily affected parties. The first public meeting for this Project was held on July 18, 2007. A second public meeting was held on May 16, 2008 to present the proposed project to the local residents and receive comments.

A CEQA document scoping meeting was held on March 28, 2008 with the TAC comprised of federal, state and local agencies and the Project team to discuss the focus of the environmental document. This meeting determined that a MND would be prepared.

Pursuant to the requirements of CEQA, this document was sent, along with a Notice of Completion, to the California State Clearinghouse. In addition, copies of this document are placed in local public repositories and distributed to other reviewing

agencies and interested individuals and entities that request a copy. Property owners of property within the project area and within 300 feet of the project boundary were notified of its availability. One public meeting is scheduled to be conducted at a regular Planning Commission meeting to receive verbal comments about the document on or around July 11, 2013. After closure of the public review period, staff will respond to all comments.

Written comments should be sent to:

Stan Hill, P.E.
Engineering Department
City of South Lake Tahoe
1052 Tata Lane
South Lake Tahoe, CA 96150

City staff will then prepare an agenda item for a future City Planning Commission Public Hearing where a decision on the adequacy of the CEQA documentation will be made. If the Planning Commission determines that the proposed project would have significant adverse impacts, a Notice of Preparation to prepare an Environmental Impact Report (EIR) would be published. If it is determined that significant adverse impacts would not result from the proposed project, the Planning Commission would certify the MND. A Notice of Determination will be filed with the county recorder-clerk and the California State Clearinghouse. The Planning Commission will make the necessary Design Review decision for this project.

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Section 2

Project Description

2.1 Project Area

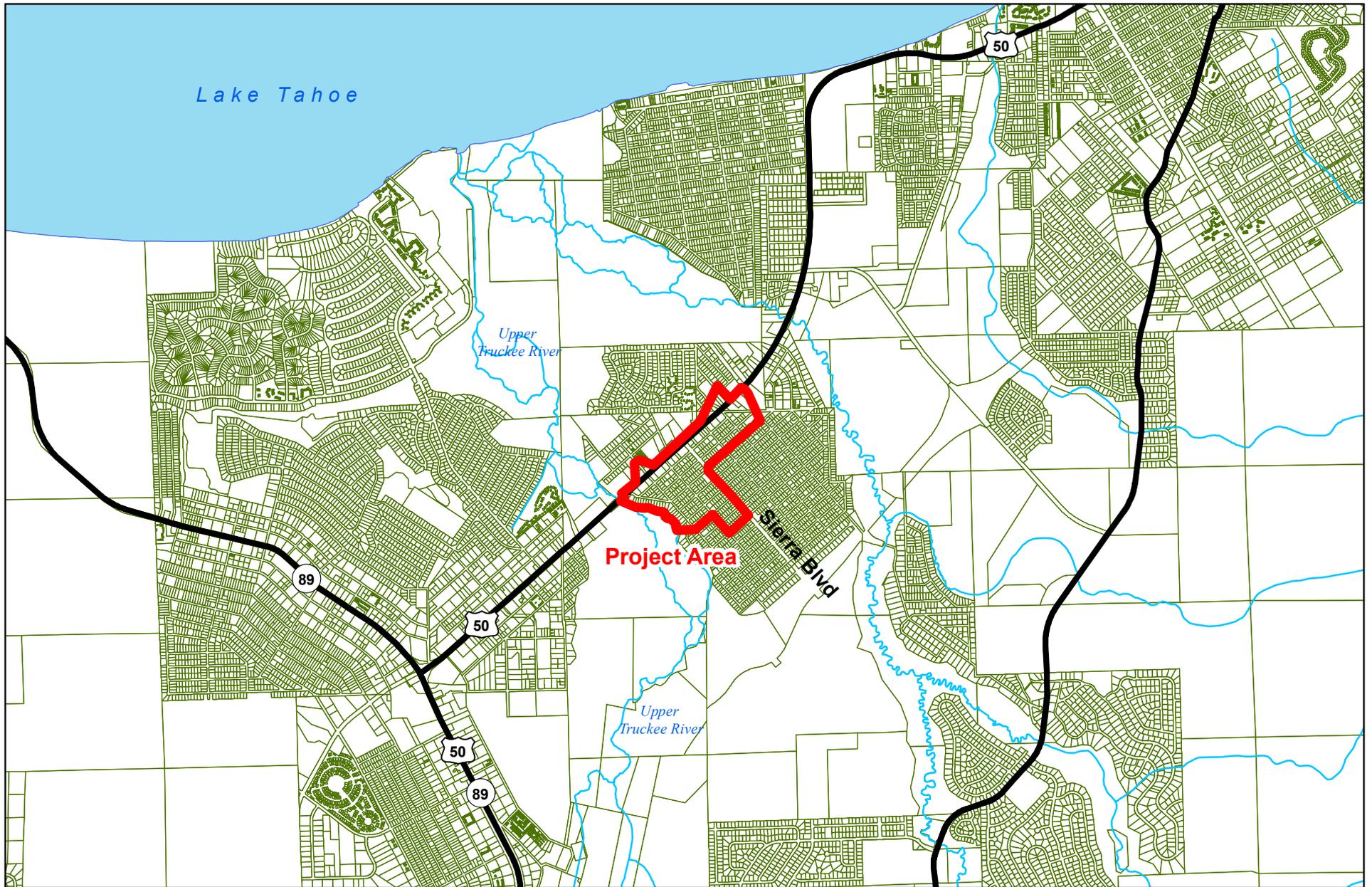
The Sierra Tract neighborhood is located at the southern end of South Lake Tahoe in California, south of Lake Tahoe Boulevard (Highway 50) and approximately three miles west of the Nevada/California state line. Figure 2-1 presents a General Vicinity Map.

This Project area consists of an approximately 81-acre area in the northwestern portion of the Sierra Tract. It is bounded to the northwest primarily by the Highway 50 Caltrans right of way line, although the Project area does extend to the northwest of Highway 50 onto portions of Rubicon Trail, Sussex Avenue, Brockway Avenue and Lodi Avenue. The Project area borders Sierra Boulevard from its intersection with Highway 50 to the intersection of Osbourne Avenue. The Project area then extends southwest of Sierra Boulevard to the Sierra Tract boundary with the Upper Truckee River; and extends northeast to Martin Avenue. The southeast boundary of the Project area goes to William Street from Sierra Boulevard to Martin Avenue; Osbourne Avenue from Sierra Boulevard to Stockton Avenue; and Knox Avenue between Stockton Avenue and Lodi Avenue.

2.2 Project Description

An alternatives evaluation was conducted per the guidelines presented in the *Formulation and Evaluation of Alternatives for Water Quality Improvement Projects (FEA)* (SWQIC, 2004) which resulted in a stakeholder consensus on a Preferred Alternative, hereafter known as the Project. The Project's water quality improvements have been designed in accordance with the SWQIC preferred design approach, emphasizing source control first, then hydrologic controls, and finally, treatment controls. The source controls included in the proposed Project are designed to stabilize soils and associated nutrients so they do not enter the stormwater runoff stream. Conveyance systems for the Project have been designed to minimize concentrated surface runoff by maximizing infiltration as close to the source of runoff as possible. The treatment BMPs have been designed to treat the runoff of more frequent, smaller storm events, unlike flood control measures that are typically designed to store or convey the peak flow rates or detain sufficient volume to reduce the peak flow rate of infrequent storm events. The improvements have been configured in a "treatment train" system to maximize stormwater quality improvement and provide multiple layers of protection for receiving waters downstream of the Project area.

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Sierra Tract Erosion Control Project Phase 3 and 4



Figure 2-1
Vicinity Map

The planned improvements would be constructed in City right of way and on public land, with the exception of improvements on parcels within the proposed CFD. Existing trees would be protected where possible. Some trees will need to be removed, including several under 14 inches in diameter and 5 trees 14 inches in diameter or greater. The TRPA requires approval for tree removal for all trees 14 inches in diameter or greater and special findings are required for removal of trees greater than 30 inches in diameter. All trees proposed for removal range between 18 inches and 28 inches in diameter. Construction staging would be specified in the City right of way or publicly owned parcels at various locations. Figure 2-2 present a graphic depiction of the proposed Project. The proposed Project is described below.

2.2.1 Types of Erosion Control Improvements

Various types of improvements are proposed including revegetation of bare soil road shoulders and other compacted dirt areas, drainage inlets, sediment traps, storm drain pipes for underground stormwater conveyance, vegetated swales, treatment basins, underground infiltration galleries, and concrete curb and gutter, and a few parking deterrents on road shoulders where needed. Below is a general description of each type of erosion control improvement proposed.

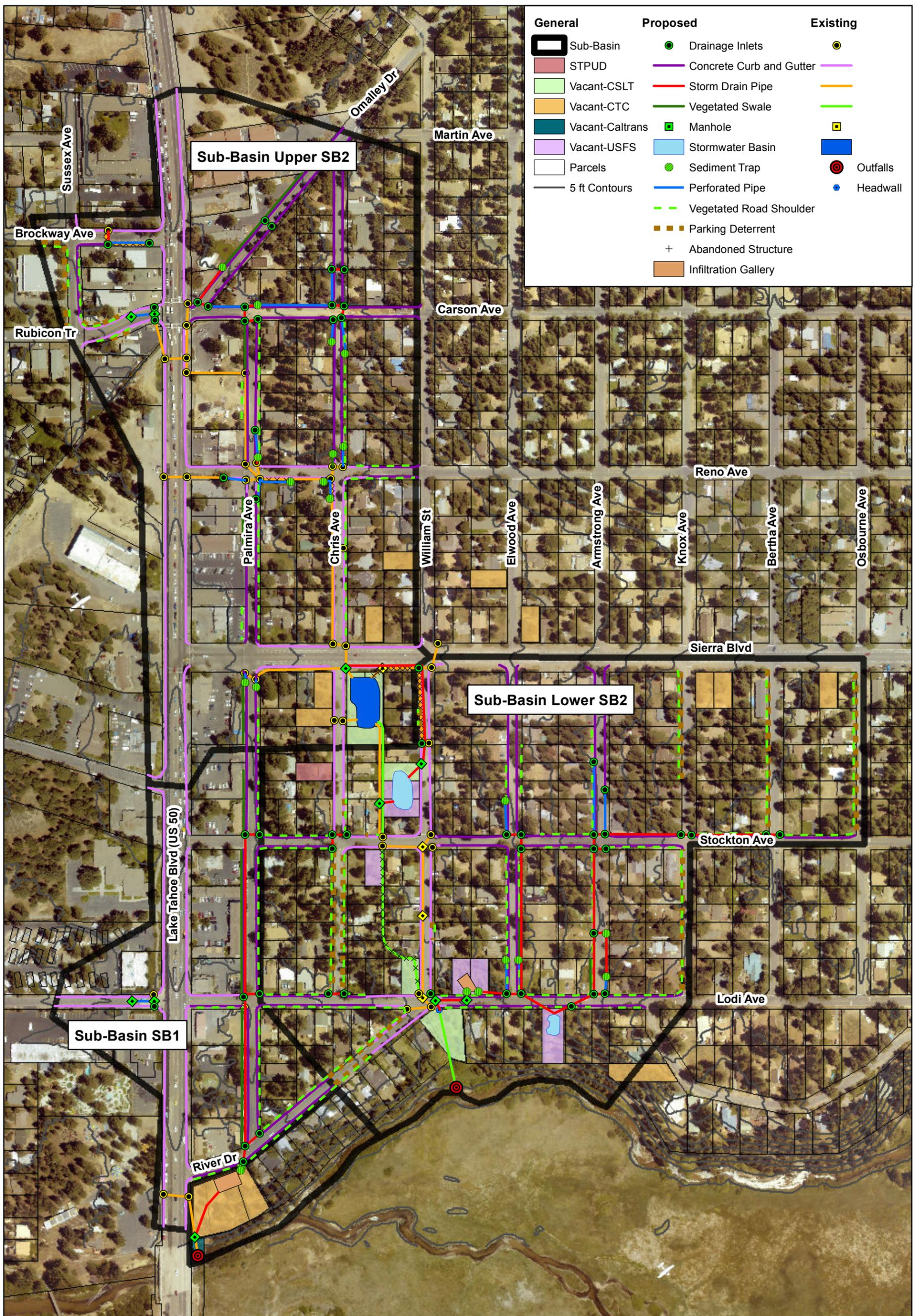
2.2.1.1 Revegetation

Disturbed and bare soil road shoulders throughout the Project area would be revegetated. Highly compacted soils in these areas would be mechanically loosened and revegetated to promote infiltration of roadway runoff. Battered concrete curb and gutter and possibly a few parking deterrents would be installed along some of the treated road shoulders which would provide some protection of the restored areas. Signs would be placed at larger revegetated areas to inform the public that the areas are newly revegetated and would state that these areas are not to be disturbed. Revegetation seed mixes would not contain any invasive or noxious weeds.

2.2.1.2 Curb and Gutter

Battered curb and gutter (near vertical) is planned at strategic locations throughout the Project area. These structures would provide stabilization of road shoulders by keeping concentrated roadside flows off of sensitive soils, protect the roadside soils from plowing impacts during snow removal activities, and prevent soil disturbance and transport by preventing parking and vehicular traffic on dirt road shoulders. The curb and gutter also provides a means to convey runoff to areas where it can be effectively treated. Where feasible, curb breaks would be incorporated to allow a portion of stormwater runoff flow to infiltrate behind the curb. The curb and gutter would extend past all driveways using appropriate driveway transitions. Driveways that are currently paved would be tied-in with asphalt/concrete pavement extending from the back of the curb to the existing driveway (within the City right of way). Unpaved driveways and unpaved areas in general would be backfilled with soil to meet the back of curb (within the City right of way). Disturbed soil areas behind the curb would be revegetated.

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Data Sources: City of South Lake Tahoe LIDAR (Merrick and Company, 2002)
 El Dorado County Parcel Database, 2007
 West Sierra Tract ECP As-Built Drawings, 1990
 City of South Lake Tahoe Aerial Photography, 2002

**Sierra Tract Erosion Control Project
 Phase 3 and 4**



**CDM
 Smith**

**Figure 2-2
 Project Plan**

2.2.1.3 Infiltration Facilities

A treatment basin would be installed on three contiguous parcels where one is City-owned and the other two are owned by the USFS on the north side of William Street near the corner of Stockton Avenue. Another basin is proposed, on the southwest side of Lodi Avenue between Elwood Avenue and Armstrong Avenue. These basins would provide temporary storage of runoff flows to allow for settling of particulates and infiltration of stormwater. Some biological nutrient removal may also occur by vegetation growing in the basins.

Infiltration galleries are proposed on a USFS owned parcel on the northeast side of Lodi Avenue between Elwood Avenue and William Street, and on the Conservancy owned property at the corner of Highway 50 and River Drive. These facilities will be installed completely below the ground surface.

Vegetated swales would be installed along some streets for infiltration and conveyance of stormwater. The vegetated swales would be constructed with a 3 to 1 side slope. The Project construction documents would allow the Conservancy, City or engineer, as ultimately detailed in the Project specifications, to “field-fit” these swales during construction.

Stormwater retention features and a perforated pipe underground infiltration system would be installed on Rubicon Trail, Brockway Avenue, Palmira Avenue, Reno Avenue, Chris Avenue, and Lodi Avenue. The proposed perforated pipe infiltration systems would consist of perforated storm drain pipes encased in a layer of gravel below the road and road shoulder surfaces. These facilities would provide stormwater retention and infiltration, and would be required to fill completely before flows are discharged downstream.

2.2.1.4 Conveyance Structures

Storm drain piping is proposed at street crossings and other locations that would receive significant drainage. Storm drain piping would convey stormwater to basins, infiltration galleries, and swale locations throughout the Project area. Relocation of some underground utilities, particularly gas mains, may be required. If required, relocation would be performed by the gas company and STPUD for sewer and water facilities as necessary.

2.2.1.5 Resource Protection

Parking deterrents may be used in some locations where needed to discourage parking along newly revegetated areas. The design of the parking deterrents would consist of wooden bollards or some other type of design. The battered concrete curb and gutter would serve as a parking deterrent where constructed due to its near vertical design.

2.2.2 Proposed Improvements by Sub-Basin

The Project area is divided into three sub-basins as shown on Figure -2-2. The improvements proposed for each sub-basin area are also shown on Figure 2-2 and are described below.

2.2.2.1 Sub-Basin 1

Sub-basin 1 (SB1) includes the portion of Highway 50, Palmira Avenue, Stockton Avenue, Lodi Avenue, and River Drive within the Project area, which drain to Outfall 1 near the intersection of Highway 50 and River Drive. However, stormwater drainage from Highway 50 will be collected and treated by Caltrans at a sand filter upstream of Outfall 1. Privately owned lots include single family residential and commercial properties. The proposed improvements in this highly developed and high traffic area consist of a system of concrete curb and gutter, drain inlets with sand trap sumps and storm drain pipes that convey runoff to an infiltration gallery on the three Conservancy parcels at the intersection of River Drive and Highway 50. The sub-basin boundary and the proposed improvements are illustrated in Figure 2-2.

To increase treatment and reduce flows to the River Drive infiltration gallery, shallow infiltration swales are proposed behind the curb and gutter on Palmira Avenue where conditions such as topography and available space allow. Breaks in the curb would allow runoff to enter these areas and infiltrate until they were full, at which point flows would bypass and continue down the gutter.

A large percentage of the drainage area in SB1 consists of either Caltrans or private commercial property. Caltrans is currently designing drainage, water quality, and other improvements along this portion of Highway 50, and is planning to route flows generated from their property to a large Delaware Sand Filter near the Upper Truckee River bridge upstream of Outfall 1. According to Caltrans, the design calculations for the sand filter indicate that there is no excess capacity to treat additional flows from the City. The City's flows will be treated at the River Drive infiltration gallery where it will be comingled with the treated Caltrans flows downstream of the sand filter. Both Caltrans' and the City's treated flows will then be discharged at Outfall 1.

Private commercial runoff in SB1 currently commingles with both Caltrans and City runoff and will continue to do so until the private property owners implement BMPs on their properties to retain their required volume of runoff.

The Conservancy property on River Drive contains existing public access to a trail network along the Upper Truckee River. This public access point will be closed during construction of the Project for public safety. The trails will be fully re-established consistent with current conditions over the new underground facility after construction is completed.

2.2.2.2 Upper Sub-Basin 2

Upper sub-basin 2 (SB2) includes the entire area that drains to the existing Chris Avenue basin. The sub-basin generally lies between Highway 50 and William Street, but also includes some drainage from the northwest side of Highway 50. Upper SB2 generates runoff from City, Caltrans, commercial, single family residential, and multi-family residential sources. The flows from these different sources commingle, and are conveyed through an existing stormwater drainage system to the Chris Avenue basin. Runoff from Upper SB2 is ultimately conveyed to Outfall 2 near the Upper Truckee River. The Upper SB2 boundary and the proposed improvements are illustrated in Figure 2-2.

The modifications proposed for the existing conveyance system focus on disconnection and dispersed infiltration. The improvements include various types of retention features and perforated pipe underground infiltration systems on Rubicon Trail, Brockway Avenue, Palmira Avenue, Reno Avenue, and Chris Avenue. In addition, a portion of the flow to the Chris Avenue basin will be intercepted and rerouted to a new wet basin proposed on William Street in Lower SB2. With this configuration, the two wet basins will operate in parallel rather than in series. The condition of the existing storm drain piping leading to the Chris Avenue basin will be evaluated, and the piping will be replaced and/or slip lined if deemed necessary.

In the residential portion of Upper SB2, where no previous drainage or water quality improvements have been installed, a combination of concrete curb and gutter, drainage inlets with sediment traps and vegetated swales and shoulders is proposed to protect shoulders and eliminate ponding, while also reducing surface runoff and pollutant loads.

Caltrans is currently planning improvements that may incorporate an additional infiltration gallery on two vacant Conservancy owned parcels on Sierra Boulevard near the existing Chris basin. This would further reduce flows to the existing Chris Avenue basin and would improve the overall effectiveness of the Project. Drainage piping upstream of the Chris basin will be shared with Caltrans and a flow splitter will be constructed on Sierra Boulevard to separate between the two City basins and Caltrans infiltration gallery.

2.2.2.3 Lower Sub-Basin 2

Runoff sources within Lower SB2 include City streets and single family residential property. Flows exiting Upper SB2 enter Lower SB2 and are ultimately routed to Outfall 2, which is located between a Conservancy-owned parcel at the corner of Lodi Avenue and River Drive and the Upper Truckee River. The Lower SB2 boundary and the proposed improvements are illustrated in Figure 2-2.

A flow splitter upstream of the Chris Avenue basin will convey a portion of the runoff to a new treatment basin in USFS and City property on William Street near the intersection of Stockton Avenue. The new basin would then discharge to existing storm drain piping leading to Outfall 2. The condition of the existing piping will be

evaluated, and will be replaced and/or slip lined if deemed necessary. The existing vegetated swale that travels through private properties from Stockton Avenue to Lodi Avenue would be abandoned.

To the southeast of William Street, runoff would be conveyed by either curb and gutter with storm drain piping/drainage inlets or vegetated swales. The northeast shoulders of Armstrong Avenue, Knox Avenue, and Bertha Avenue have wide right of way. On these streets, a vegetated channel would be constructed to convey runoff. Runoff from streets would be conveyed via new drain inlets and associated storm drain pipes on Elwood Avenue, Armstrong Avenue, Stockton Avenue and Lodi Avenue to a new infiltration gallery on two adjacent USFS parcels on Lodi Avenue and a new basin on another USFS parcel on the southwest side of Lodi Avenue. These new infiltration features would provide opportunity to infiltrate stormwater runoff and reduce discharge volumes at Outfall 2.

The Project would not alter the existing vegetated channel upstream of Outfall 2 from Lodi Avenue to the southwest edge of the Conservancy-owned parcel. Due to indications of shallow groundwater, structures in some areas of Lower SB2 (Chris Avenue to William Avenue) collecting groundwater (i.e. perforated drainage inlets) should be sealed to prevent groundwater intrusion. A Special Use Permit with the USFS would be required for improvements proposed on USFS property.

2.2.3 Construction Controls

The construction control measures described below are being incorporated into the Project specifications and plans. The contractor would be required to incorporate all the policies discussed below into their construction activities.

2.2.3.1 Air Quality During Construction

The El Dorado County Air Pollution Control District (APCD) has developed a *Guide to Air Quality Assessment: Determining Significance of Air Quality Impacts Under the California Environmental Quality Act* (February 2002). This guide provides construction control measures for incorporation into the Project to reduce construction emissions to a less-than-significant level. Some of the following construction control measures are taken directly from this guide. Other measures are taken from City specifications for Dust Control.

- Construction equipment and vehicles will not be left idling and will be shut down when not in use. Construction equipment shall be maintained in accordance with manufacturers' specifications to avoid excessive emissions.
- Construction vehicles shall not park on dirt areas.

- The Contractor shall prevent the generation of dust due to his operations in the construction zones, along the haul routes, or equipment parking zones. This may consist of water sprinkling, or an equivalent service, provided it is not in conflict with requirements of any agency's water quality regulations having jurisdiction in that area. The Contractor shall endeavor, whenever possible, to restrict the use of water to control dust nuisance due to the current need to conserve water.
- Dust control shall be in strict accordance with the Storm water Pollution Prevention Plan (SWPPP) for the Project, as approved by the RWQCB. Under no circumstances shall the contractor violate any of the terms of the plan. In the event the RWQCB or TRPA issues fines or stop work orders, it shall be the contractor's sole responsibility to pay the fines, whether issued to the City or Contractor and no additional working days will be granted.

2.2.3.2 Biological Resources

The management recommendations incorporated into the Project to reduce the potential effects of Project activities to a level that is less than significant are described below.

- All trash created during construction will be properly contained (wildlife-proof containers) and removed at the end of each day.
- Construction equipment used in construction must be free of invasive weed seed.
- All off-road equipment and vehicles used for Project implementation are required to be weed-free. All equipment and vehicles will be cleaned of all attached mud, dirt, and plant parts. This will be done at a vehicle washing station or steam cleaning facility (power or high-pressure cleaning) before the equipment and vehicles enter the Project area and before vehicles enter the Lake Tahoe basin (if they originate from outside the basin).
- All earth-moving equipment, gravel, fill, or other materials are required to be weed-free. Use onsite sand, gravel, rock, or other organic matter when possible. Otherwise, obtain weed-free materials from gravel pits and fill sources that have been surveyed and approved by Nevada Department of Agriculture or by a botanist or ecologist at the Lake Tahoe Basin Management Unit.
- Place construction fencing around wetland areas identified on the Wetlands Delineation (Figure 3.3-1) that are located outside of proposed disturbance area to avoid direct impacts during construction.
- Salvage topsoil from the Project area for use for onsite revegetation, unless contaminated with invasive or noxious weeds. All activities that require seeding or planting must utilize native (not hybrid) seed sources preferably originating from sources above 4000 feet. The USFS recommended seed mix includes: *Bromus carinatus* (California brome var. carinatus), *Elymus glaucus* (Blue wild rye), *Poa Secunda* ssp. *Juncifolia* (Big Bluegrass), *Achillea millefolium* (Western yarrow),

Eriogonum umbellatum (Sulfur flower), and *Lupinus argenteus* (Silver Lupine). This requirement is consistent with the USFS Region 5 policy that directs the use of native plant material for revegetation and restoration for maintaining “the overall national goal of conserving the biodiversity, health, productivity, and sustainable use of forest, rangeland, and aquatic ecosystems.” Any alteration of seed mixes must be approved by a USFS botanist.

- Staging areas for equipment, materials, or crews will not be sited in weed infested areas.
- Weed infestations identified before Project implementation that are within the Project area or along travel routes near the Project area will be hand treated or “flagged and avoided” according to the species present and Project constraints.
- The Project area will be monitored by the City for 3 years subsequent to Project implementation to ensure weeds do not become established in the areas affected by the Project. Annual reporting will be submitted to the invasive and noxious weed coordinator to ensure compliance. If invasive or noxious weeds are found, the weed coordinator for the LTBMU will be notified immediately.

2.2.3.3 Geology and Soils

The following construction controls are recommended during construction to avoid potential impacts to geology and soils. The specific procedures and protocols outlined in the SWPPP shall also be implemented.

- Temporary erosion control devices shall be placed on the downhill side of all excavation and dirt piles. These shall include: sediment fencing and/or sediment rolls.
- Dirt piles shall be covered during non working hours and during times of precipitation.
- All open trenches shall be covered during periods of precipitation.
- Vegetation protection fencing shall be placed around all vegetated areas near construction.
- All construction equipment shall be parked on paved areas.
- Stabilize all disturbed areas with vegetation and heavy mulch until vegetation is established.
- Clean up and remove all construction site waste including trash, debris and spoil piles.

2.2.3.4 Hazards and Hazardous Materials

- Construction vehicles will be serviced in specific paved areas to prevent accidental spills of fluids, oils and lubricants into groundwater. All spills shall be reported to Lahontan RWQCB and procedures and response protocols for immediate cleanup outlined in the SWPPP shall be implemented. These procedures shall include placement of sandbags, gravel, boards or other TRPA approved methods to prevent spilled material from entering groundwater or leaving the site. Contact Underground Service Alert (USA) 48 hours prior to grading activities to mark underground utility locations.

2.2.3.5 Hydrology and Water Quality

In addition to the construction controls identified above under Geology and Soils, the measures stated below would also help to protect hydrology and water quality. Additional requirements and protocols will be outlined in the SWPPP.

- Temporary erosion control devices shall be constructed as shown on the plans and as required by the TRPA. These devices shall be maintained and left in a stable condition on site or later removed, as directed by the Engineer, and as specified in the Special Provisions.
- When no longer required, temporary erosion control devices and the retained silt and any trapped solids from runoff shall be removed and disposed of in accordance with the Standard Specifications.
- Dirt shall not be tracked off site. Construction equipment shall be cleaned to remove any loose dirt or sediment prior to exiting the site.
- Place construction fencing around SEZ and wetland areas as identified on the TRPA Land Capability Verification (Figures 3.8-2) and Wetlands Delineation map (Figure 3.3-1) that are located outside of the proposed disturbance area to avoid direct impacts during construction.

2.2.3.6 Noise During Construction

- Any normal construction activities shall be conducted between the hours of 8:00 a.m. and 6:30 p.m., Monday through Friday, holidays excluded. Any construction activities conducted between the hours of 6:30 p.m. and 8:00 a.m. Monday through Friday, or at any time on Saturday, Sunday and holidays, shall comply with the noise standards applicable to the corresponding TRPA Plan Area Statements 103 and 105.
- Said noise level requirement shall apply to all equipment on the job or related to the job, including but not limited to trucks, transit mixers or transient equipment that may or may not be owned by the Contractor. The use of loud sound signals shall be avoided in favor of light warnings except those required by safety laws for the protection of project personnel or the public.

- Construction equipment shall be maintained in proper working conditions with appropriate muffler devices installed.

2.2.3.7 Traffic and Circulation During Construction

- A traffic control plan shall be prepared by a California Licensed Civil Engineer or Traffic Engineer, or by an American Traffic Safety Services Association certified person for City approval. No lane closures shall take place until this plan has been approved by the City.
- All guide signs shall be installed to maintain continuity of destination. In addition to the existing warning and directional signs, the Contractor shall erect, within or adjacent to the limits of the work, such supplemental warning and directional signs as ordered by the Engineer.
- Personal vehicles of the Contractor's employees shall not be parked on the traveled way or shoulders, including any section closed to public traffic.
- The Contractor shall notify local authorities of his intent to begin work at least 5 days before work is begun. The Contractor shall cooperate with local authorities relative to handling traffic through the area and shall make his own arrangements relative to keeping the working area clear of parked vehicles.
- Whenever vehicles or equipment are parked on the shoulder within 6 feet of a traffic lane, the shoulder area shall be closed with fluorescent traffic cones or portable delineators placed on a taper in advance of the parked vehicles or equipment and along the edge of the pavement at 25-foot intervals to a point not less than 25 feet past the last vehicle or piece of equipment. A minimum of 9 cones or portable delineators shall be used for the taper. A C23 (Road Work Ahead) or C24 (Shoulder Work Ahead) sign shall be mounted on a telescoping flag tree with flags.
- For work within the City right of way, the contractor shall provide for a minimum of one 11-foot paved travel lane during construction hours. In the event the contractor chooses to reduce traffic to one lane the contractor must provide for traffic control to allow for travel in both directions along the street. The contractor shall employ a minimum of two "flaggers" that will be provided with radios so that they can coordinate the flow of traffic. The Engineer shall review all proposed detours. No detour can begin until approved by the Engineer, and must be appropriately signed. All detours and lane closures are to be suspended during non-working hours and the roadways shall be reopened to vehicular traffic at the end of each working day. When lane closures are made for work periods only, at the end of each work period, all components of the traffic control system, except portable delineators placed along open trenches of excavation adjacent to the traveled way, shall be removed from the traveled way. If the Contractor so elects, said components may be stored at selected central locations, approved by the Engineer, within the limits of the highway right of way.

- For work within Caltrans right of way, the contractor shall provide for a minimum of four 11-foot paved travel lanes during non-construction hours.

- The full width of the traveled way and all business/residence driveway accesses shall be open for use by public traffic on Saturdays, Sundays, designated legal holidays, after 12:00 noon on Fridays and the day preceding designated legal holidays. Designated legal holidays are: January 1, the third Monday in February, the last Monday in May, July 4, the first Monday in September, November 11, Thanksgiving Day, and December 25. When a designated legal holiday falls on a Sunday, the following Monday shall be a designated a legal holiday. When November 11 falls on a Saturday, the preceding Friday shall be a designated legal holiday.

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Section 3

Environmental Analysis

This section discusses the environmental analysis of each of the following CEQA resource topics: Aesthetics, Air Quality, Biological Resources, Cultural Resources, Geology and Soils, Green House Gas, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Noise, Recreation, Transportation and Traffic, and Mandatory Findings of Significance. This section does not include discussions for Agricultural and Forestry Resources, Mineral Resources, Population and Housing, Public Services, and Utilities and Service Systems. The reasoning for excluding these resource topics is that they are not impacted in any negative way by the Project or do not apply to this Project or Project area. This is evident after completion of the CEQA checklist located in Appendix A.

Significance criteria for determining potential direct, indirect and cumulative impacts are based on the CEQA checklist. Other significance criteria have been added, where reasonable, for Recreation. Where warranted, some environmental resources are analyzed according to short-term and long-term impacts. This CEQA Document includes a Project Impacts subsection for each resource where impact statements are presented. Potentially significant impact statements requiring mitigation are numbered. Corresponding mitigation measures are described for each numbered potentially significant impact statement and these mitigation measures are also numbered.

Cumulative impacts take into account past, present, and reasonably foreseeable future projects that might have an impact on the various resources being considered. Past projects that may have an effect the Phase 3 and 4 Project would include the following.

- Sierra Tract ECP. The City of South Lake Tahoe under a grant from the Conservancy is in various stages of project development and construction for five erosion control projects located in the Sierra Tract subdivision. Phases 1A, 1B and 2 have been completed. Phase 1C has been shelved pending funding acquisition and would likely be constructed after the Phase 3 and 4 project is completed. Phase 5 has not entered the design or planning phase and would not be constructed until the Phase 3 and 4 project is completed (Hussong Johnson 2012). Some of the project area boundaries have been revised over the years.
- Beecher-Lodi Erosion Control Project was constructed in 1999 by the City and includes several improvements within a portion of the Project area. All of these improvements will remain as is.
- Western Sierra Tract Erosion Control Project was constructed in 1989 and includes many improvements within a portion of the Project area. Many of these improvements will remain as is and some will be improved.

- The Upper Truckee River Restoration Project Middle Reaches 3 and 4, adjacent to the Lake Tahoe Airport was funded by the California Tahoe Conservancy and the Bureau of Reclamation. This project is located upstream of the project area. Construction began in 2008 and was completed in the fall of 2011.

Future projects proposed in or near the project area include the following.

- U.S. 50/Stateline Corridor Project would provide water quality, intersection, roadway, pedestrian, bicycle, air, and scenic improvements. Several federal, state and local agencies are working together to identify alternatives for the project. Caltrans would ultimately take the lead to construct the project. The Draft EIR/EIS is currently being prepared. The construction schedule for the project is unknown but would occur after the Sierra Tract ECP Phase 3 and 4 is completed (Carrol, Personal Communication 2012).
- The Upper Truckee River and Marsh Restoration Project is located downstream of the Project area south of the Highway 50 bridge to the mouth at Lake Tahoe. A joint CEQA/NEPA/TRPA Public Draft EIR/EIS has been completed and circulated for public review. The CEQA/TRPA public review period closed on April 8, 2013 and the NEPA public review period closes on April 26, 2013. Four alternatives are being considered within the EIR. The project is jointly funded by the Conservancy and Bureau of Reclamation. If funding allows construction could begin in 2015 and would be completed in 2018. (Carrol, Personal Communication 2012)
- The Upper Truckee River Middle Reaches 1 and 2 SEZ and Wildlife Enhancement Project is adjacent to the Sierra Tract. The project proposes to eliminate an eroding gully channel and enhance both aquatic and terrestrial habitat along the mainstem of the river. The USFS is in the process of acquiring the property and the project has been placed on hold until this process is completed. (Carrol, Personal Communication 2012). Once the acquisition of the property is completed, the project will enter the planning and design phases. It is unknown when the project would go to construction.
- The Upper Truckee River Restoration Project Sunset Stables Reach (Reaches 5 and 6) is located directly upstream from the Reaches 3 and 4 project. A portion of the project is funded by the USFS and the other portion by the Conservancy. The project proposes to restore approximately 2.6 miles of river by constructing a new channel and filling and revegetating the old channel. The Conservancy filed a Notice of Determination with the California State Clearinghouse for the CEQA Negative Declaration in March of 2012 (CEQAnet 2012). The USFS completed the NEPA process with a Finding of No Significant Impact (FONSI) Decision Notice in March of 2012 (USFS LTBMU 2012). In 2012 construction started for the Reach 5 portion of the project and it is expected to be completed in 2016. Construction of the Reach 6 portion of the project is not expected to start until 2015 at the earliest and will take approximately 4 years to complete (Carrol, Personal Communication 2012).

- The Upper Truckee River Restoration and Golf Course Reconfiguration Project (California State Parks) is located at the existing public golf course upstream of the Sunset Stables project. A joint CEQA/NEPA/TRPA environmental document was prepared and a CEQA Notice of Determination was filed with the California State Clearinghouse in January of 2012 (CEQAnet 2012). This project proposes to relocate portions of the golf course further away from the river and restore the former golf course to a natural state. Alternatives were developed through the environmental document process. Construction could begin in 2014. This work would take approximately 3 to 4 years with most of the in-channel work taking place during 1 season (Carrol, Personal Communication 2012).
- The South Tahoe Greenway Project is to construct a 3.86 mile Class 1 multi-use continuous trail from the Sierra Tract in South Lake Tahoe to Van Sickle Bi-State Park which straddles the California/Nevada stateline. The purpose of the trail is to provide a convenient transportation alternative and high quality recreation experience. The Conservancy issued a CEQA Notice of Determination with the California State Clearinghouse in September of 2011 for the project (CEQAnet 2012). The earliest expected construction start date is 2014 (Carrol, Personal Communication 2012).

3.1 Aesthetics

The following CEQA Environmental Checklist questions (Appendix G of the CEQA Guidelines) are used as the significance criteria for analysis of potential adverse impacts to aesthetics from the Project (Subsection 3.1.3). Questions answered as “No Impact” require no further analysis related to the Project. A discussion justifying a “No Impact” conclusion is provided under each question in Appendix A. All other answers are explained within Subsection 3.1.3.

Table 3.1-1 CEQA Environmental Checklist Questions and Answers for Aesthetics				
I. Aesthetics <i>Would the project:</i>	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?				X
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
c) Substantially degrade the existing visual character or quality of the site and its surroundings?		X		
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				X

3.1.1 Introduction

Both natural and man-made landscape features contribute to visual resources and the perceived aesthetic value of a view. The value is determined by contrasts, forms, and textures exhibited by geology, hydrology, vegetation, wildlife, and man-made features. Individuals respond differently to changes in the physical environment, depending on prior experiences and expectations and proximity and duration of views. Therefore, visual effects analyses tend to be highly subjective in nature.

TRPA and the City have jurisdiction over aesthetic issues within the Project area. The TRPA Compact (Public Law 96-551, revised 1980) provide for the development and implementation of environmental carrying capacities or thresholds. In 1982, TRPA completed inventory work necessary to define and establish threshold standards for preservation of scenic quality (TRPA 1982). Numerical standards were established at that time for roadway and shoreline travel route ratings and roadway and shoreline scenic quality ratings. Additionally, TRPA adopted a management standard policy statement for overall community design elements. In 1993, TRPA adopted numeric standards for designated public recreation areas and bike trails (TRPA 2002a).

These regulations are included within the *TRPA Code of Ordinances* and include guidelines related to design, signs, lighting, height restrictions, vegetation protection,

and shoreline design standards (TRPA 2013a). The City Planning Department would also review the project under their Design Review guidelines. The two agencies generally use the same criteria for aesthetic review.

3.1.2 Existing Conditions

The Lake Tahoe area is well-known for its scenic beauty and aesthetics. A portion of the Project area is visible from State Highway 50 (Lake Tahoe Boulevard) and the rest of the Project area is visible from commercial and private properties surrounding and within the Project area.

This section describes the visual area that could potentially be affected by the Project. The visual area consists of the Sierra Tract ECP Phase 3 and 4 project area. Photos of the study area are included on the following pages.

The surrounding landscapes are urban landscapes consisting of single-family and multi-family residential properties, and commercial properties. The Upper Truckee River corridor is located to the southwest of the Project area. The area is relatively flat and provides few scenic vistas of the Upper Truckee River corridor from properties located next to this area. According to the TRPA's *Lake Tahoe Basin Scenic Resources Inventory*, the Project area is adjacent to TRPA Scenic Road Unit 35 – Al Tahoe. Views from Highway 50 include the commercial strip with low scenic quality and the Upper Truckee River stream zone where scenic quality is rated moderate. (TRPA Undated)



Figure 3.1.1
Typical Residential Street Scape View in the Sierra Tract ECP Phase 3 and 4 Area



Figure 3.1.2
Upper Truckee River Meadow from USFS Property on Lodi



Figure 3.1-3
Commercial Property on Highway 50



Figure 3.1-4
Palmira Avenue behind Commercial Properties on Highway 50

3.1.3 Project Environmental Impacts

Impact statements are listed below with the corresponding CEQA question and answer above it as described in Table 3.1-1. The analysis follows each impact statement for short-term, long-term or permanent impacts as needed.

CEQA Question 1c)

Would the project substantially degrade the existing visual character or quality of the site and its surroundings?

Answer: Less than significant impact.

Construction of parking deterrents could degrade the existing visual character or quality of the existing streetscapes because they would be above grade and inconsistent with the natural landscape.

Long-term Impacts

Most of the proposed improvements would be constructed at grade or below grade with the exception of vegetation and the parking deterrents. Parking deterrents may be used as a resource protection measure of newly vegetated road shoulder in some locations. New vegetation would help to improve the aesthetics of the neighborhood

by adding more natural components to the surroundings. Parking deterrents would be either wooden bollards or another type of structure.

The Project area is composed of a dense urban residential subdivision comprised of many structures, parked cars and other vehicles. The addition of a few parking deterrents would not degrade the visual character or quality of the area because it already includes many structures. The parking deterrents would not be inconsistent with the existing landscape because it already consists of roads, parked vehicles on the roads, and curb and gutter in some places. Vegetation would be planted between the parking deterrents which would also help to offset some of the negative aesthetic impacts of the parking deterrents. **Therefore, the construction of parking deterrents for the Sierra Tract ECP Phase 3 and 4 would be a less than significant impact to aesthetics.**

Short-term Impacts

During construction, the presence of construction equipment and disturbance areas could temporarily degrade the existing visual character or quality of the site and its surroundings.

As stated above the Project area is composed of a dense urban residential subdivision with many parked vehicles on the roadways at certain periods during the day. Construction staging areas have been identified where equipment will be kept when not in use. Disturbed areas will be revegetated once work in those areas is completed. The work will be temporary lasting for approximately 4 to 6 months. **Therefore, during construction, the impacts to aesthetics from the Project would be less than significant because the work is temporary.**

3.1.4 Cumulative Impacts

The project would result in less than significant impacts to aesthetics and the impacts experienced by the project would be limited to the Project area. Therefore, the Project's impact to aesthetics are not cumulatively considerable.

3.1.5 Mitigation Measures

Impacts to aesthetics from the Project would be less than significant, therefore no mitigation measures are required.

3.2 Air Quality

The following CEQA Environmental Checklist questions (Appendix G of the CEQA Guidelines) are used as the significance criteria for analysis of potential adverse impacts to air quality resulting from the Project (Subsection 3.2.3). Questions answered as “No Impact” require no further analysis related to the Project. A discussion justifying a “No Impact” conclusion for Air Quality is provided under each question in Appendix A. All other answers are explained within Subsection 3.2.3.

Table 3.2-1 CEQA Environmental Checklist Questions and Answers for Air Quality				
III. Air Quality <i>Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:</i>	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?				X
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			X	
c) 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			X	
d) Expose sensitive receptors to substantial pollutant concentrations?			X	
e) Create objectionable odors affecting a substantial number of people?				X

3.2.1 Introduction

The study area for the analysis of Project related impacts to air quality is the Project area and surrounding vicinity.

3.2.2 Existing Conditions

3.2.2.1 Climate

South Lake Tahoe lies within El Dorado County Air Pollution Control District (APCD) and the Lake Tahoe Air Basin. The Project area experiences summers that are mostly sunny with temperatures ranging in the upper 70s to low 80s. Summer sunshine often contributes to the photochemical reaction between reactive organic compounds and nitrogen oxides that produces ozone. Additionally, upslope mountain winds transport pollutants from the Sacramento Valley.

3.2.2.2 Air Quality Standards

Air quality is regulated by several local, state, and federal agencies. The U.S. Environmental Protection Agency (EPA) established national ambient air quality standards (NAAQS) and regulates major emissions sources. The EPA designates areas as either attainment or non-attainment for criteria pollutants based on available data and established criteria (USEPA 2012). These designations provide information about the air quality within specific geographic areas (CARB 2012a).

- Attainment: level meets the NAAQS;
- Non-attainment: level is higher than the level allowed by the federal standards.

The California Air Resources Board (CARB) regulates air quality at the state level. CARB establishes California ambient air quality standards (CAAQS) that enforce goals outlined in the California Clean Air Act. CARB also designates areas as either attainment, nonattainment, or unclassified for criteria pollutants based on available air quality data and established designation criteria (CARB 2012a).

- Unclassified: data are incomplete and do not support a designation of attainment or nonattainment;
- Attainment: the state standard was not violated at any site in the area during a three-year period;
- Nonattainment: there was at least one violation of a state standard for that pollutant in the area;
- Nonattainment/Transitional: is a subcategory of the nonattainment designation signifying that the area is close to attaining the standard.

CARB also works with the air districts to achieve national and state standards. The El Dorado County APCD has authority over the Project area. It monitors air quality, establishes permitting requirements, designs programs to attain or continue to maintain CAAQS and NAAQS, and enforces air quality standards. The TRPA is the lead air quality planning agency in the Lake Tahoe area. Its responsibilities include controlling or mitigating air pollution through land use decisions and local ordinances.

Criteria pollutants have an established national standard. These standards are based on studies of health effects criteria that show a relationship between the pollutant concentration and its effect. The criteria pollutants of primary concern in the Project area include carbon monoxide (CO), ozone (O₃), and particulate matter (PM_{2.5} and PM₁₀) and are described below.

The National and California Ambient Air Quality Standards are listed below in Table 3.2-2. Sulfur dioxide (SO₂), nitrogen dioxide and lead are also priority pollutants,

however they are not listed here because there is no monitoring for these pollutants within the Lake Tahoe Basin.

**Table 3.2-2
National Ambient Air Quality Standards
and California Ambient Air Quality Standards**

Pollutant	Avg Time	Standard, as parts per million by volume (ppm)		Standard, as micrograms per cubic meter ($\mu\text{g}/\text{m}^3$)		Violation or Attainment Criteria	
		California	National	California	National	California	National
Ozone (O_3)	8 hours	0.07	0.075	137	147	Violation if exceeded	If the 3-year average of the 4 th highest daily max. 8 hour average
	1 hour	0.09	N/A	180	N/A	Violation if exceeded	N/A
	1 hour Lake Tahoe (TRPA)	0.08	N/A	N/A	N/A	Violation if equaled or exceeded	N/A
Carbon monoxide (CO)	8 hours	9.0	9	10,000	10,000	Violation if exceeded	If exceeded on more than 1 day per year
	1 hour	20	35	23,000	40,000	Violation if exceeded	If exceeded on more than 1 day per year
	8 hour Lake Tahoe	6.0	N/A	7,000	N/A	Violation if equaled or exceeded	N/A
Respirable particulate matter (PM_{10})	Annual Arithmetic Mean	N/A	N/A	20	N/A	Violation if exceeded	N/A
	24 hours	N/A	N/A	50	150	Violation if exceeded	If exceeded on more than 1 day per year on average for 3 years
Fin Particulate Matter ($\text{PM}_{2.5}$)	Annual Arithmetic Mean	N/A	N/A	12	15	Violation if exceeded	If 3-year average of weighted annual mean exceeded
	24 hours	N/A	N/A	N/A	35	Violation if exceeded	If 3-year average of 98 th percentile of 24 hour concentrations exceeded

Source: CARB 2012a

The primary sources of CO emissions in the Lake Tahoe Basin are the combustion of hydrocarbon fuels by motor vehicles, as well as fireplaces, stoves, and furnaces. Within the Project area, the majority of CO emissions are from mobile sources. CO is regulated because of concern for public health. The EPA and California both have the same 8-hour average AAQS of 9 parts per million (ppm). Currently, the area is in attainment for California and unclassified/attainment for the EPA (CARB 2012a). TRPA's 8-hour standard is set at 6 ppm. Ozone can cause respiratory problems, especially for sensitive groups, as well as damage to vegetation. Ozone is a result of photochemical reactions involving hydrocarbon compounds and NO_x . During sunny days, especially during the summer, increased levels of ultraviolet radiation contribute to higher levels of ozone. Because ozone is a secondary pollutant (formed by other primary pollutants in the atmosphere) high concentrations of ozone can be found miles downwind of the source of the primary pollutants. Hydrocarbons and

NO_x are emitted from fossil fuel combustion, chemical processing, fuel storage and handling, and solvent usage. The Project area is designated as a federal unclassified/attainment area for ozone as noted in 40 CFR 81.275, and is designated as a state non-attainment/transitional area by CARB (CARB 2012a).

Particulate matter in the atmosphere results from many sources including fugitive dust, vehicle and residential combustion processes, road abrasives and deicers. The El Dorado County APCD has permit authority over stationary sources of air pollutants. There are currently no high emissions facilities permitted in the Project area. Standards are in place to regulate the amount of inhalable particulate matter in the atmosphere that is smaller than 10 microns in diameter (PM₁₀). The EPA's 24-hour National AAQS for PM₁₀ is 150 µg/m³. State standards are more stringent, set at 50 µg/m³ for the 24-hour California AAQS and 20 µg/m³ for the annual average California AAQS. There is no TRPA threshold for particulate matter measured in total mass. The region is in unclassified/attainment for federal and non-attainment for California PM₁₀ emission standards (CARB 2012a).

Visibility is affected by the amount of fine particulate matter less than 2.5 microns (PM_{2.5}) in the atmosphere. Fine sulfur aerosols and soils, ammonium nitrate, and smoke contribute to the concentrations of PM_{2.5}. Additionally, humidity is a factor in visibility; when relative humidity is above 70 percent, there is a significant decrease in the visual range. A decrease in visibility caused by a layer of haze results in a reduction in clarity, contrast, and color. This is of great concern especially for areas such as the Lake Tahoe basin, known to have such stunning scenery. TRPA's thresholds for air quality include visibility standards for both regional and sub-regional visibility. Regional visibility is defined as the overall visibility in the Lake Tahoe Basin. Sub-regional visibility is characterized by the visibility over an urbanized area, such as the south shore of Lake Tahoe. TRPA's regional thresholds for air quality are to achieve visual ranges as follows:

- 97 miles 50 percent of the time, and
- 71 miles 90 percent of the time.
- TRPA's sub-regional thresholds for air quality are to achieve visual ranges as follows:
 - 48 miles 50 percent of the time, and
 - 19 miles 90 percent of the time.

The regional and sub-regional 50 percent visibility ranges and the 90 percent sub-regional visibility range are in attainment. The 90 percent regional visibility standard is not in attainment.

El Dorado County AQMD has established construction thresholds for air quality for priority pollutants which are presented in Table 3.2-3 below.

Pollutant	Construction Threshold (lbs/day)
ROG	82
NOx	82
PM ₁₀	Project would cause or contribute to a violation of AAQS
CO	

Source: El Dorado County 2002

For construction projects, El Dorado County has identified screening criteria to assist with determining whether or not a construction project would substantially impact air quality. Screening of construction equipment exhaust emissions may be done using one of two possible methods: 1) based on fuel use; and 2) based on incorporation of mitigation measures. Screening of fugitive dust PM₁₀ emissions may be accomplished based on incorporation of mitigation measures. If it is determined that a construction project would have a less than significant effect on air quality after use of the appropriate screening criteria, than modeling or other steps to estimate the amount of emissions that would be generated are not required (El Dorado County 2002).

CARB monitors some criteria pollutants (Ozone and PM₁₀) within the Lake Tahoe Basin at monitoring sites located in South Lake Tahoe . Table 3.2-4 lists the latest recorded air quality conditions for ozone and PM₁₀ for the Lake Tahoe Air Basin. No data is available for CO or PM_{2.5} because air quality monitoring stations do not provide data for these pollutants within the Lake Tahoe basin.

Criteria Air Pollutant (Station Location)	Yearly Monitoring Data		
	2007	2008	2009
Ozone 1-hour (South Lake Tahoe – 1901 Airport Road Station)			
First High (ppm)	0.090	0.091	0.077
Days above CAAQS	0	0	0
Ozone 8-hour (South Lake Tahoe – 1901 Airport Road Station)			
First High (ppm)	0.073	0.077	0.071
Days above CAAQS	5	5	1
2008 Design Value (ppm)	0.067	0.070	0.068
Days above N AAQS	0	1	0
PM₁₀ 24-hour (South Lake Tahoe – Sandy Way Station)			
First High (ug/m ³)	55.6	96.7	52.8
Days above CAAQS	2	10	1

Monitoring data not available for compounds and averaging periods not listed above.

Source: CARB 2012a

3.2.2.3 Sensitive Receptors

Sensitive air receptors include people and facilities that are more susceptible to the effects of air pollution than are the general public. Examples of sensitive air receptors include health care facilities, rehabilitation centers, convalescent centers, residences, schools, playgrounds, child-care centers, and athletic facilities. Residences are the primary sensitive receptor within the Project area. There are no health care facilities, rehabilitation centers, convalescent centers, schools, playgrounds, athletic facilities or child-care centers located within the Project area or one-quarter mile of the Project area.

3.2.3 Potential Environmental Impacts

Impact statements are listed below with the corresponding proposed CEQA question and answer above it as described in Tables 3.2-1. The analysis follows each impact statement for short-term, long-term or permanent impacts as needed.

CEQA Checklist Question III.b)

Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Answer: Less than significant impact.

The Project could violate air quality standards for PM₁₀, ROG, NO_x, and CO because of fugitive dust and vehicle emissions generated during construction activities and vehicle trips to and from the site by workers and deliveries.

Short-term Impacts

Fugitive dust generation contributing to PM₁₀ is a possibility during construction. However, construction controls described in Section 2 include the restriction of vehicles parking on dirt shoulder areas and revegetation of bare dirt areas. Other construction controls include covering of stockpiled soil, if stored for long periods of time, and periodic watering or an equivalent measure of bare dirt areas. A fugitive dust control plan will be included in the SWPPP and will include similar construction control measures to those described in Section 2.

Proposed emissions from construction vehicle traffic and use of construction equipment contributing to ROG, NO_x and CO are considered to be less than significant. The type of equipment proposed for use includes: trucks, backhoes, jackhammers, paving equipment and front end loaders. Construction would take place Monday through Friday for approximately 90 days. The project would disturb less than 5 acres during construction. Air quality emissions analysis was recently performed for the nearby Bijou Area Erosion Control Project which is much larger (32 acres of disturbance) than the Sierra Tract ECP Phase 3 and 4. Daily emissions modeling was conducted for the Bijou Area project which revealed that the maximum daily emissions would not exceed thresholds (City of South Lake Tahoe 2011a). Since the Sierra Tract ECP Phase 3 and 4 is much smaller than the Bijou Area project it can

be inferred that the daily emissions for the Phase 3 and 4 project would not exceed emissions thresholds. Construction controls would also be implemented to further reduce emissions and are described in Section 2.

Since ROG and NO_x emissions are determined to be not significant based on the above criteria, than it can be assumed that emissions of other types of pollutants and worker vehicle trips are less than significant (El Dorado County 2002).

The Project would not violate air emissions standards and have a less than significant impact to air quality because effects would be temporary and construction controls would be implemented as described in Section 2.

3.2.4 Cumulative Impacts

The impact statement is listed below with the corresponding proposed CEQA question and answer above it as described in Table 3.2-1. The cumulative analysis follows this impact statement for short-term impacts.

CEQA Checklist Questions III.c)

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

Answer: Less than significant impact.

During construction fugitive dust, equipment and vehicle emissions could exceed state standards for PM₁₀ and Ozone; which are the only criteria pollutants currently listed as non-attainment or non-attainment/transitional status respectively. As stated above under subsection 3.2.3, fugitive dust and emissions generated during construction would be a less than significant impact to air quality. Construction controls described in Section 2 would be implemented and impacts would be minimal. Therefore, the Project would not result in a cumulatively net increase in any criteria pollutant currently under non-attainment status.

The Sierra Tract ECP Phase 3 and 4 would be constructed in 2014. Environmental documentation for some of the future cumulative projects have been completed or are under various stages of development. The Upper Truckee River Restoration Project Sunset Stables Reach 5 project is currently under construction until 2016. The Upper Truckee River Restoration and Golf Course Reconfiguration Project, located approximately 2 miles upstream of the Airport, could begin construction as early as 2014 with relocation of the new golf course. The river restoration would not start until 2015 or later. Phase 1 of the South Tahoe Greenway project could also begin construction in 2014. All other future cumulative projects mentioned would begin construction after the Sierra Tract ECP Phase 3 and 4 is completed.

All of the other projects where construction timeframes would overlap with the Sierra Tract ECP Phase 3 and 4 would be required to implement either mitigation measures or construction controls to reduce air quality impacts. While several of these projects could be implemented at the same time, they are all relatively small in size and would not result in substantial pollutant concentrations that would exceed state standards for Ozone and PM₁₀.

Therefore, no cumulative impact to Air Quality would result because the overall cumulative impact is not significant and the Project causes no considerable contribution.

3.2.5 Mitigation Measures

The project would result in less than significant impacts to air quality, therefore, no mitigation measures are required.

3.3 Biological Resources

The following CEQA Environmental Checklist questions (Appendix G of the CEQA Guidelines) are used as the significance criteria for analysis of potential adverse impacts to biological resources from the Project (Subsection 3.3.3). Questions answered as “No Impact” require no further analysis related to the Project. A discussion justifying a “No Impact” conclusion is provided under each question in Appendix A. All other answers are explained within Subsection 3.3.3.

Table 3.3-1 CEQA Environmental Checklist Questions and Answers for Biological Resources				
IV. Biological Resources <i>Would the project:</i>	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
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 and Wildlife or U.S. Fish and Wildlife Service?		X		
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 California Department of Fish and Wildlife or US Fish and Wildlife Service?			X	
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				X
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?				X
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.			X	
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?				X

3.3.1 Introduction

The *Biological Evaluation/Biological Assessment For Sierra Tract Erosion Control Project*, (BE/BA) prepared by Wildlife Resource Consultants, evaluates the effects of the Sierra Tract ECP on species listed as threatened, endangered, or proposed for listing by the U.S. Department of Fish and Wildlife Service (USFWS); species designated as sensitive by the Regional Forester of the USFS; and special interest species as defined by the TRPA (Wildlife Resources 2006). This report studied the entire project area for Sierra Tract ECP Phases 1 through 5. A copy of the report is in the administrative record for the Project.

In addition to the BE/BA report, the California Natural Diversity Database (CNDDDB) was queried for special status California species that could be present or may have habitat in the Project area on September 24, 2012. This CEQA document discusses impacts to federal, California and TRPA special status species. Potential impacts to USFS LTBMU special status species are addressed within the USFS NEPA document where they do not overlap with the federal, California or California Native Plant Society (CNPS) special status species discussed in this CEQA document.

The species list included in the BE/BA has been updated as Table 3.3-2 to remove USFS LTBMU sensitive species not included on the CNPS, CNDDDB or USFWS lists because these will be addressed within the USFS NEPA environmental document. TRPA Species of Special Interest information was also updated on Table 3.3-2 based on recent review of the latest version of wildlife and vegetation resource sections of the TRPA Code. Table 3.3-2 includes updated species information from the USFWS, CNDDDB and CNPS.

3.3.2 Existing Conditions

Field surveys were conducted in the Project area for threatened, endangered, sensitive, and candidate (TESC) wildlife and plant species on August 15, 16, and 18, 2004 and on October 27, 2006. The surveys also assessed whether any potential habitat was present for special status species. All federal, State, and City lands were thoroughly surveyed on foot. Private property was not surveyed on foot but was scanned from the adjacent roads. Plant surveys were conducted at an appropriate time of year for species identification. The plant survey included noxious weeds as recognized by the California Department of Food and Agriculture. Landscaping and other horticultural planting on private lands were not evaluated (Wildlife Resources 2006).

A biological existing conditions study report was prepared in July of 2007 by Western Botanical Services that focuses on the Sierra Tract ECP Phase 3 project area only. The report analyzes existing vegetation including noxious weeds, soil resources and jurisdictional wetlands in the Project area (Western Botanical Services 2007). A separate wetlands delineation report (Western Botanical Services 2008) was submitted to the U.S. Army Corp of Engineers based on information from the July 2007 report. A copy of the report is in the administrative record for the Project.

Surveys for the July 2007 report were conducted on June 5, 7 and 13, 2007 which included the identification of wetlands, USFS LTBMU special-status vascular and non-vascular species, evaluation of potential habitat and occurrence and quantification of noxious and invasive weeds in the right of ways and public lands. Soil samples were obtained at two undisturbed sites (baseline data) as well as two disturbed sites (Western Botanical Services 2007).

Table 3.3-2 combines TESC species lists from all of the reports mentioned above to show special status wildlife and plant species addressed in all biological reports for the Sierra Tract ECP Phase 3 and 4. The table identifies the species, status, occurrence and presence of suitable habitat in the Project area. More detail information regarding these species are included in the biological reports which are in the Project record at the City of South Lake Tahoe offices.

Species	Special Status	Known to Occur in the Project Area	Suitable Habitat in the Project Area
Birds			
American peregrine falcon (<i>Falcon Peregrinus anatum</i>)	TRPA Species of Special Interest	No	No
Bald Eagle (<i>Haliaeetus leucocephalus</i>)	TRPA Species of Special Interest	No	No
Golden eagle (<i>Aquila chrysaetos</i>)	TRPA Species of Special Interest	No	No
Northern Goshawk (<i>Accipiter gentiles</i>)	TRPA Species of Special Interest	No	No
Osprey (<i>Pandion haliaeetus</i>)	TRPA Species of Special Interest	No	No
Waterfowl species	TRPA Species of Special Interest	Yes	No
Willow Flycatcher (<i>Empidonax traillii adastus</i>)	California Listed Endangered	No	Yes
Mammals			
Mule Deer (<i>Odocoileus hemionus</i>)	TRPA Species of Special Interest	Yes	No
Pacific fisher (<i>Martes pennanti</i>)	USFWS Candidate Species	No	No
Fish			
Lahontan cutthroat trout (<i>Oncorhynchus clarkii henshawi</i>)	USFWS Threatened Species	No	No
Amphibians			
Mountain yellow-legged frog (<i>Rana muscosa</i>)	USFWS Candidate Species	No	No
Yosemite toad (<i>Bufo canorus</i>)	USFWS Candidate Species	No	No
Vascular Plants			
Common moonwort (<i>Botrychium lunaria</i>)	CNPS 2	No	Yes
Cup Lake draba (<i>Draba asterophora v. macrocarpa</i>)	TRPA Species of Special Interest CNPS 1B	No	No
Donner Pass buckwheat (<i>Eriogonum umbellatum var. torreyanum</i>)	CNPS 1B	No	No

**Table 3.3-2
Threatened, Endangered and Sensitive Species Considered for Effects Analysis¹**

Species	Special Status	Known to Occur in the Project Area	Suitable Habitat in the Project Area
Galena Creek rock cress (<i>Arabis rigidissima v. demota</i>)	TRPA Species of Special Interest CNPS 1B	No	No
Long-petaled lewisia (<i>Lewisia longipetala</i>)	TRPA Species of Special Interest CNPS 1B	No	No
Mingan moonwort (<i>Botrychium minganense</i>)	CNPS 2	No	Yes
Scalloped moonwort (<i>Botrychium crenulatum</i>)	CNPS 2	No	Yes
Short-leaved hulsea (<i>Hulsea brevifolia</i>)	CNPS 1B	No	No
Slender moonwort (<i>Botrychium lineare</i>)	CNPS 2	No	Yes
Starved daisy (<i>Erigeron miser</i>)	CNPS 1B	No	No
Tahoe draba (<i>Draba asterophora v. asterophora</i>)	TRPA Species of Special Interest CNPS 1B	No	No
Tahoe yellow cress (<i>Rorippa subumbellata</i>)	USFWS Candidate Species California Endangered Species TRPA Species of Special Interest CNPS 1B	No	No
Tiehm's rock cress (<i>Arabis tiehmii</i>)	CNPS 1B	No	No
Upswept moonwort (<i>Botrychium ascendens</i>)	CNPS 2	No	Yes
Western goblin (<i>Botrychium montanum</i>)	CNPS 2	No	Yes
Nonvascular Plants			
Blandows bog moss (<i>Helodium blandowii</i>)	CNPS 2	No	No
Bolander's candle moss (<i>Bruchia bolanderi</i>)	CNPS 2	No	Yes
Broad-nerved hump moss (<i>Meesia uliginosa</i>)	CNPS 2	No	Yes
Myurella moss (<i>Myurella julacea</i>)	CNPS 2	No	No
Shevrock's moss (<i>Orthotrichum shevockii</i>)	CNPS 2	No	No
Spjut's bristle-moss (<i>Orthotrichum spjutii</i>)	CNPS 2	No	No
Tundrae pohlia moss (<i>Pohlia tundrae</i>)	CNPS 2	No	No

Source: (Wildlife Resource Consultants 2006 and Western Botanical Services 2007)

¹ Potentially affected species are defined as species either known to occur or that have suitable habitat in the project action area.

CNPS – California Native Plant Society

1B – Rare, threatened or endangered in California and elsewhere.

2 – Rare, threatened or endangered in California but more elsewhere.

3.3.1.1 Habitat

The elevation in the Project area ranges from approximately 6,240 to 6,280 feet. The topography within the Project area is relatively flat and gradually slopes down towards Lake Tahoe, which is located approximately one mile north of the Project area. No significant rock outcrops are present in or near the Project area. Heavily traveled roads include Sierra Boulevard bordering the Project area to the northeast and Highway 50 at the northwest boundary.

The Project area is in an urbanized area of South Lake Tahoe and is a mix of developed and undeveloped parcels. Undeveloped parcels are owned by the USFS, the Conservancy, and the City. Developed parcels are primarily residential. Most residential properties are landscaped. On undeveloped parcels, native vegetation is composed of mixed conifer forest with dominant over story species including Jeffrey pine (*Pinus jeffreyi*), white fir (*Abies concolor*) and lodgepole pine (*Pinus contorta ssp. murrayana*). The Project area also contains small patches of montane chaparral habitats. Many undeveloped parcels have signs of disturbance (e.g., foot paths, bike courses, dumping) and are dominated by introduced species in the under story. These include cheatgrass, (*Bromus tectorum*), bulbous bluegrass (*Poa bulbosa*), and dandelion (*Taraxacum officinale*). (Wildlife Resource Consultants 2006)

The Project area is adjacent to undeveloped lands, including the Upper Truckee River corridor to the southwest. Meadow and riparian (e.g., primarily willows (*salix sp*)) habitat is associated with this area.

Typical bird species recorded to be present in the Project area include dark-eyed junco (*Junco hyemalis*), Steller's jay (*Cyanocitta stelleri*), mountain chickadee (*Parus gambeli*), northern flicker (*Colaptes auratus*), and American robin (*Turdus migratorius*). Bird feeders provided by residents in the Project area might attract a variety of other species including the house finch (*Carpodacus mexicanus*) and band-tailed pigeon (*Columba fasciata*). Western gray squirrels (*Sciurus griseus*) and Douglas squirrels (*Tamiasciurus douglasii*) were observed at various locations throughout the project area. Sign (e.g. tracks, scat) of other mammal species observed in the Project area include coyote (*Canis latrans*). No amphibians or reptiles were observed. People use the undeveloped portions of the Project area and surrounding area for bike riding, dog walking, and hiking.

3.3.1.2 Noxious Weeds

Noxious weeds are plants that provide a negative effect for the indigenous and adaptive plant species by their invasive nature. Two noxious weed species were found in the Phase 3 and 4 Project area during 2007 surveys: bull thistle (*Cirsium vulgare*) and cheatgrass (*Bromus tectorum*) (Western Botanical Services 2007). Bull thistle plants were found at Outfall 2. At Outfall 2 approximately ten to twenty plants were located along the river. The cheatgrass locations found during the 2007 surveys are listed in Table 3.3-3. Surveys conducted in 2012 of USFS lots within the project area found additional locations of cheatgrass and bull thistle (Western Botanical Services 2012). The later survey found cheatgrass scattered along Lodi Avenue on all

three USFS lots and bull thistle at the back of two USFS lots on Williams Avenue. It is recommended that both species be removed from the project area. Bull thistle should be removed prior to flowering and seed set and cheatgrass should be removed prior to seed set. Materials imported to the site must be clean of all seeds of invasive and noxious weeds.

Table 3.3-3
Cheatgrass Occurrences within the Sierra Tract ECP Phase 3 and 4 Area

Invasive/Noxious Weed	Location	Quantity
Cheatgrass	1. Outfall 1 at Highway 50, scattered throughout lot	400 ft ²
Cheatgrass	2. North side of Chris west of Sierra Blvd in right of way	10 ft ²
Cheatgrass	3. Intersection of Palmira and Lodi, all four corners in right of way	40 ft ²
Cheatgrass	4. Southwest and northwest corners of Kubel and Stockton	30 ft ²
Cheatgrass	5. Northeast corner and northwest parcel Bertha and Stockton	800 ft ²
Cheatgrass	6. Along Elwood northeast of Lodi	100 ft ²
Cheatgrass	7. Palmira, northeast of Stockton, behind shopping center	400 ft ²
Cheatgrass	8. Palmira, east of River Drive, Northwest corner	200 ft ²
Cheatgrass	9. Four parcels along River Drive, north side	100 ft ²
Cheatgrass	10. Northwest corner at Lindberg and Lodi	20 ft ²
Cheatgrass	11. East side of Stockton, south of Armstrong	10 ft ²
Cheatgrass	TOTAL	3630 ft ²

Source: Western Botanical Services 2007.

3.3.1.3 Soils

Soil samples are being analyzed at various erosion control projects within the Tahoe Basin to gain an understanding of the soil food web in order to improve restoration of disturbed soils with bacteria, fungi or other inoculants or foods that would be appropriate. Samples were taken at two undisturbed and two disturbed sites. One of the sites is within the Sierra Tract ECP Phase 3 and 4 area and the other 3 areas are no longer within the Project area but still within the general Sierra Tract area. Below is a description of the Sierra and Chris site which is within the Project area and the findings.

Sierra and Chris. This well-vegetated basin appears to be healthy and self-sustaining. Soils show excellent active and total bacteria, excellent total fungi but no activity. The Soil Food Web (SFW) recommends addition of fungal food but this does not appear to be necessary to support the existing plant community. Protozoa numbers were high indicating good nutrient cycling. The SFW reported low nematode numbers and diversity and that the fungal dominated soils could benefit from fungal foods to increase activity (Western Botanical Services 2007).

3.3.1.4 Wetlands

The extent of wetlands within the Project area were determined by using the 1987 *Corps Wetland Delineation Manual*. Soil pits were sampled at Outfalls 1 and 2. Both outfalls were surveyed, however, jurisdictional wetlands only occur at Outfall 2 as shown on Figure 3.3-1. Hydric soil characteristics, wetland vegetation and the appropriate hydrology were present at the Outfall 2 but not at Outfall 1 (Western Botanical Services 2008).

3.3.1.5 SEZ

TRPA has established SEZs within the Tahoe Basin under authority granted to the agency under the Clean Water Act's 208 Plan program. TRPA has developed and implemented an annual tracking system for SEZ restoration. The criteria for SEZ identification is outlined in the *TRPA Code of Ordinances* Section 53.9 Procedures for Establishing SEZ Boundaries and Setbacks (TRPA 2013a). A TRPA Land Capability Verification was conducted in November of 2007 for the project area. Approximately 10.3 acres of the Project area is within verified SEZ. SEZs are considered to be sensitive in the Lake Tahoe basin.

3.3.3 Potential Impacts

Impact statements are listed below with the corresponding proposed CEQA question and answer above it as described in Table 3.3-1. The analysis follows each impact statement for short-term, long-term or permanent impacts as needed.

CEQA Checklist Question IV.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 DFW or USFWS?

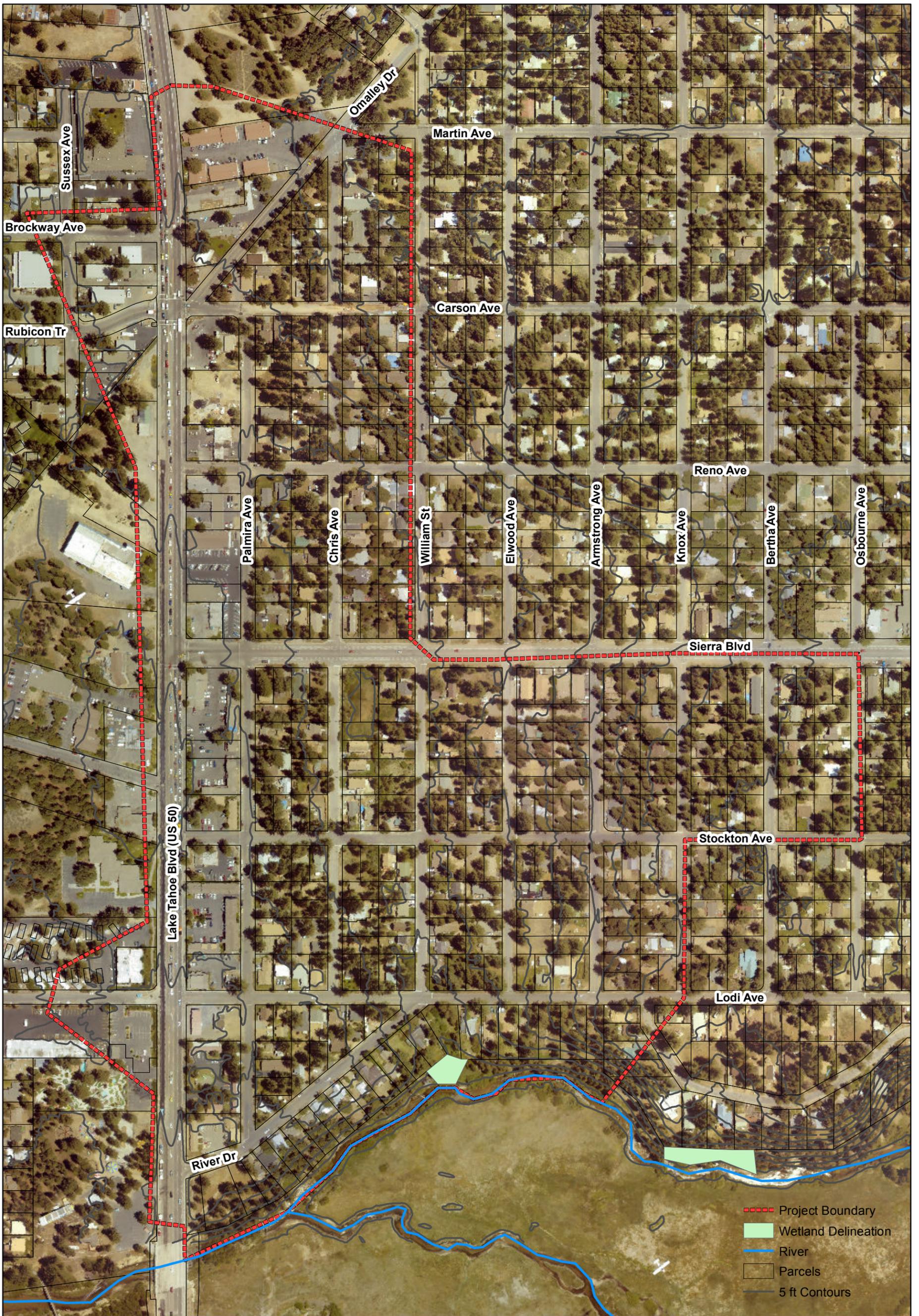
Answer: Less than significant impact with mitigation incorporation.

Impact BIO-1 During construction, the Project could adversely affect special status species as listed on Table 3.3-2 or migratory birds and/or their habitat during grading activities and tree removal.

Short-term Impacts

Based upon the habitat found in the Project area and site-specific surveys, the consulting biologists concluded that the following Federally listed threatened, endangered, and candidate species would not be affected by the Project because suitable habitat does not exist in or adjacent to the Project area, or because the species do not currently occur there (Wildlife Resources 2006 and Western Botanical Services 2007).

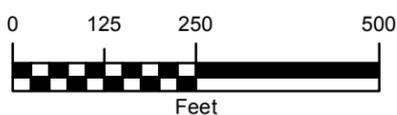
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Data Sources: City of South Lake Tahoe LIDAR (Merrick and Company, 2002)
 El Dorado County Parcel Database, 2007
 City of South Lake Tahoe Aerial Photography, 2002

**Sierra Tract Erosion Control Project
 Phase 3 and 4**

**Figure 3.3-1
 Wetland Delineation Map**



- Lahontan cutthroat trout,
- Yosemite toad,
- Mountain yellow-legged frog,
- Pacific fisher, and
- Tahoe yellow cress

The following California Special Status Species, TRPA Species of Special Interest, and Rare California Native Plants would not be affected by the Project because suitable habitat does not exist in or adjacent to the Project area, or because the species does not currently occur there (Wildlife Resources 2006 and Western Botanical Services 2007).

- American falcon,
- Bald eagle,
- Golden eagle,
- Northern goshawk,
- Osprey,
- Cup Lake draba,
- Donner Pass buckwheat,
- Galena rock cress,
- Long-petaled lewisia,
- Short-leaved hulsea
- Starved daisy,
- Tahoe draba,
- Tahoe yellow cress,
- Tiehm's rock cress,
- Blandows bog moss,
- Myurella moss,
- Shevrock's moss,
- Spjut's bristle-moss,
- Tundrae pohlia moss

The consulting biologists determined that the Sierra Tract ECP Phase 3 and 4 could affect the following species or their habitat (Wildlife Resources 2006 and Western Botanical Services 2007). The species are listed below with a determination of possible Project effects.

- Willow flycatcher – Willow flycatchers are not known to inhabit the Project area, however, suitable habitat is present at the western edge of the Project area near the Upper Truckee River. Work is proposed within 300 feet of this location. However, no willows would be removed and protocol surveys would be required prior to construction within 300 feet of suitable riparian habitat as described in Mitigation

Measure BIO-1 below. While some individuals could be temporarily affected, the Project would not result in a trend toward federal listing or loss of viability.

- Waterfowl – Occasionally a siting of waterfowl occurs at the west end of the Project area near the Upper Truckee River. Suitable habitat for waterfowl does exist in this location. The proposed work in this location would not permanently affect waterfowl habitat or any species. Individuals could be affected but this would not result in a trend toward federal listing or loss of viability for waterfowl.
- Mule deer – Very few occurrences of deer within the Project area have been reported because the area is densely developed. Deer may occasionally forage at the western edge of the Project area near the Upper Truckee River, however, proposed disturbance would be temporary and would not result in a trend toward federal listing or loss of viability for mule deer.
- Bolander’s candle moss – Suitable habitat does exist within the Project area, however, it has not been detected during surveys. If the species is found mitigation or avoidance measures would be implemented.
- Moonworts – Suitable habitat does exist within the Project area however, no plants have been detected. If the species are found, mitigation or avoidance measures would be implemented.
- Broad-nerved hump-moss - Suitable habitat does exist within the Project area however, no plants have been detected. If the species is found, mitigation or avoidance measures would be implemented.
- Migratory birds, in addition to the willow flycatcher and waterfowl discussed above, are protected by the Migratory Bird Treaty Act and State migratory bird protection code. Bird species that may utilize trees or other vegetation that could be removed or disturbed during construction could be adversely affected. To address this potential impact, nesting bird surveys would be conducted as described in Mitigation BIO-4. Implementation of this mitigation measure would reduce impacts to less than significant.

The consulting biologists determined that the Project could temporarily affect some of the species listed in Table 3.3-2 or migratory birds. However, construction controls listed in Section 2 and mitigation measures (BIO-1 through BIO-4) in subsection 3.3.5 would reduce potentially significant impacts to a less than significant level (Wildlife Resource Consultants 2006). With implementation of these measures, listed species would be identified prior to construction or during construction before impacts occur. **Therefore, impacts to special status species or migratory birds would be less than significant with incorporation of mitigation measures BIO-1, BIO-2, BIO-3 and BIO-4 listed in subsection 3.3.5 and implementation of construction controls identified in Section 2.**

CEQA Checklist Question IV.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 California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Answer: Less than significant impact.

Disturbance to SEZ areas during construction could have an adverse effect to these sensitive areas due to grading and construction activities.

Short-term Impacts

Some SEZ area would be impacted during construction. These impacts would be due to grading and installation of erosion control project improvements.

Proposed disturbance within SEZ areas is prohibited according to TRPA and Lahontan; however, Lahontan exempts erosion control projects from this prohibition (Lahontan RWQCB 1995). This project is an erosion control project and the following findings can be made to allow disturbance within SEZ for construction of this project according to the TRPA Code of Ordinances subsection 30.5.2. The text in italics is the required finding followed by an explanation of how that finding can be made.

(a) The project, program, or facility is necessary for environmental protection;

This Project area is considered a Priority 2 watershed for implementation of BMPs. This project is listed on the TRPA EIP list for Water Quality. Projects listed on the EIP list are necessary for environmental protection and in this case water quality protection.

(b) There is no reasonable alternative, including relocation, which avoids or reduces the extent of encroachment in the SEZ;

In order to protect water quality in this location, it is necessary to construct some water quality improvements and to restore portions of the SEZ by revegetating bare dirt areas. Additional BMPs are required to fully implement this Project and protect water quality. Given the location of SEZ within the Project area and the requirement to restore the SEZ, there is no reasonable alternative than to construct these improvements within the SEZ.

(c) Impacts are fully mitigated.

The Project description, plans and specifications would discuss measures that reduce potential impacts to the SEZ. These measures are inherent to the Project. Temporary BMPs would be constructed on the site to reduce impacts to the SEZ during construction. Bare dirt areas would be revegetated and areas disturbed during construction would also be restored and revegetated. These measures are already included as construction controls within the project description and include: installation of temporary stormwater BMPs, covering of open trenches and dirt piles during times of precipitation, and stabilization of disturbed areas with vegetation and

heavy mulch. All SEZ areas disturbed during construction would be revegetated and/or stabilized upon completion of the project.

Therefore, impacts to SEZ and riparian areas would be less than significant during construction because temporary BMPs would be implemented during construction and these areas would be restored after construction is completed.

CEQA Checklist Question IV.e)

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

Answer: Less than significant impact.

The project proposes the removal of five trees between 18 inches and 28 inches in diameter and several trees under 14 inches in diameter which could conflict with the TRPA Code of Ordinances, Tree Removal ordinance (subsection 61.1) (TRPA 2013a).

Long-term Impacts

As the stormwater improvements are constructed, five trees greater than 14 inches in diameter and several trees under 14 inches in diameter will need to be removed. According to the TRPA Code of Ordinances subsection 61.1.5 removal of trees under 14 inches in diameter is exempt from TRPA approval. However, removal of trees over 14 inches in diameter require TRPA approval within the permit for the project (TRPA 2013a). TRPA routinely approves removal of trees between 14 inches and 29 inches in diameter in west side forest types, as necessary, to construct stormwater improvements.

Therefore, there would be no conflict to the TRPA Code of Ordinances Tree Removal ordinance and this would be a less than significant impact to biological resources.

3.3.4 Cumulative Impacts

Confirmed and proposed projects considered for cumulative impacts described at the beginning of this section would not likely lead to adverse cumulative impacts on vegetation, wildlife, SEZ or wetlands within the region. Most of the projects are not close enough to affect the Project area's vegetation, wildlife, SEZ or wetlands. The closest projects are the other phases of the Sierra Tract Erosion Control Project and the Upper Truckee River Middle Reaches 1 and 2 SEZ and Wildlife Enhancement Project. Although these projects would likely require temporary grading activities during construction, compliance with the applicable regulations would require mitigation of significant biological resources impacts.

Future Sierra Tract ECPs would be constructed after the Phase 3 and 4 Project is completed. Cumulative effects to the special status species listed in this section are included in the *Biological Evaluation/Biological Assessment for Sierra Tract Erosion Control*

Project (Wildlife Resource Consultants 2007). No adverse cumulative effects are expected from implementation of the project to any of the species with the possible exception of the Willow flycatcher. Willow flycatcher habitat could be affected in conjunction with implementation of other projects at the same time; however, all of these projects would be required to provide construction controls and/or mitigation measures similar to those provided in Sections 2 and 3.3.5 below if they would be impacting Willow flycatcher habitat or other sensitive species. Mitigation measures BIO-1, BIO-2, BIO-3 and BIO-4 identified in Section 3.3.5 would reduce potential cumulative impacts from the project to a less-than-significant level.

Even though the Project causes a cumulative considerable contribution to impacts to biological resources, the overall cumulative effect is still not significant because of mitigation measures and construction control imposed by the various projects.

3.3.5 Mitigation Measures

The mitigation measures (Wildlife Resource Consultants 2006 and Western Botanical Services 2007) listed below will reduce the potential effects of project activities to a level that is less than significant.

Mitigation BIO-1 Prior to project implementation, protocol-level surveys for willow flycatchers will be conducted in suitable riparian/meadow habitat (situated in the undeveloped western portions of the Project area). Work within the City right of way will not require surveys. Only work beyond the subdivision within 300 feet of the habitat will require the surveys. If willow flycatchers are detected, a Limited Operating Period (LOP) between June 1 and August 31 will be imposed. The location of the LOP will be determined by the consulting wildlife biologist based on site conditions and the type of Project activity. If no surveys are conducted, an LOP will automatically be implemented in suitable habitat within 300 feet of any Project activities.

Protocol level surveys require 2 visits. One must be conducted between June 15-25, while the second can be conducted between June 1 and June 14 or between June 26 and July 15. If snow is gone and spring conditions prevail, the first survey can be conducted the first week of June and the second can be completed the week of June 15.

Mitigation BIO-2 Any sighting of listed or sensitive species, or nests or dens of these species will be reported to the City Planning Department. These nests, dens, or plant locations would be protected in accordance with the Environmental Threshold Carrying Capacities for the Lake Tahoe Region guidelines (TRPA 1982).

Mitigation BIO-3 If special status wildlife species with agency-mandated protected activity centers and LOPs are found breeding in the Project area, a

protected activity center will be delineated and a limited operating period will be implemented.

Mitigation BIO-4 Any construction activities that require remove of trees and shrubs will be conducted outside the avian nesting season (April 1 through August 15) unless a qualified biologist determines that no nesting is occurring. The chronology of each year's nesting could vary due to snow loads. If vegetation removal and/or ground disturbance occurs during the avian nesting season, a qualified biologist will conduct nesting bird surveys of the areas of vegetation and tree removal out to 150 feet to ensure that breeding birds are not adversely affected. To comply with the MBTA, any location containing an active nest will not be disturbed until the young have fledged or it is determined that the nest is inactive. The first survey will be conducted 15 days prior to construction activity. A second survey will be conducted 72 hours prior to construction.

3.4 Cultural Resources

The following CEQA Environmental Checklist questions (Appendix G of the CEQA Guidelines) are used as the significance criteria for analysis of potential adverse impacts to cultural resources from the Project (Subsection 3.4.3). Questions answered as “No Impact” require no further analysis related to the Project. A discussion justifying a “No Impact” conclusion is provided under each question in Appendix A. All other answers are explained within Subsection 3.4.3.

Table 3.4-1
CEQA Environmental Checklist Questions and Answers for Cultural Resources

V. Cultural Resources <i>Would the project:</i>	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in '15064.5?				X
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to '15064.5?				X
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		X		
d) Disturb any human remains, including those interred outside of formal cemeteries?		X		

3.4.1 Introduction

This section describes the cultural resources that have been identified in the Project area and the cultural or historical significance of those resources. An analysis of potential impacts resulting from the Project is discussed in this section.

The following information is directly taken from the *Heritage Resource Inventory Sierra Tract Project Erosion Control Project* prepared by Susan Lindstrom, Ph.D. This document was prepared for the City for all phases of the Sierra Tract project. The information included below is directly related to the Phase 3 and 4 Project. A copy of the report is in the administrative record for the Project.

3.4.2 Existing Conditions

The only historical resources found within the Phase 3 and 4 area are described as ST-IF#1, and ST-IF#2, prehistoric isolate finds.

“The City procedures in the adoption of CEQA guidelines (15065.5) and TRPA policies (Section 3) require the assessment of significant heritage resources within a project’s area of potential effect. In compliance with applicable antiquities regulations, a heritage resource study was directed by Susan Lindstrom, consulting archaeologist to the City for the entire Sierra Tract Project Area. Washoe Indian history and potential Native American concerns were addressed by project ethnographer, Penny

Rucks, assisted by Washoe Tribal Historian, Jo Ann Nevers. The tribe was notified of study results and concurred with the findings presented in the report (Lindstrom 2004).

“A records search at the North Central Information Center (NCIC) at California State University Sacramento (CSUS) and of USFS LTBMU files was completed in order to identify any properties listed on the National Register, state registers and other listings, including the files of the State Historic Preservation Office (SHPO). Research results disclosed that a portion of the Project area had been subject to prior archaeological survey and that heritage sites had been previously recorded within the Project (Lindstrom 2004).

“An archaeological field survey was conducted on August 16-19, 24 and 31, 2004. The field reconnaissance involved various survey techniques. A complete surface inspection was performed of all vacant lots and open space fringe areas and roadways by walking parallel transects at no greater than five meter (15-foot) intervals. Private residences or fenced yards were cursorily viewed from the road and were not inspected by systematic transects (Lindstrom 2004).

“The heritage study resulted in the recordation of two prehistoric isolate finds (ST-IF#1 and ST-IF#2) in the Phase 3 and 4 Project area. These isolated artifacts or artifact clusters are non-diagnostic and do contain important information, towards an understanding of the Native American history of the region. They do not meet criteria for the NRHP or CRHR. All of their potentially significant information recorded within the Project area has been recovered with the completion of the *Heritage Resource Inventory*” (Lindstrom 2004).

Ms. Lindstrom updated records searches in 2010 at the NCIC and the USFS LTBMU to identify newly listed properties on the National Register, state registers and other listings, including the files of the SHPO. No additional heritage resources were encountered during the updated records searches. Ms. Lindstrom also updated contacts with the Washoe Tribe of Nevada and California in 2010. The Tribe continues to concur with Ms. Lindstrom’s findings.

3.4.3 Potential Impacts

Impact statements are listed below with the corresponding proposed CEQA question and answer above it as described in Table 3.4-1. The analysis follows each impact statement for short-term, long-term or permanent impacts as needed.

CEQA Checklist Question V.c)

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

Answer: Less than significant impact with mitigation incorporation.

Impact CR-1 During grading activities the Project could impact unknown or buried paleontological resources on site or unique geologic features.

Long-term or Permanent Impacts

It is possible that buried or concealed heritage resources could be discovered during future ground disturbance activities that were not detectable on the surface. Based upon existing ethnographic information and the archaeological remains existing throughout, the entire Sierra Tract area (Phases 1 through 5), the Project area appears to be highly sensitive and may contain subsurface Native American resources. Selective archeological monitoring by a qualified archaeologist and/or Native American consultant is recommended during project ground disturbance activities, especially in areas closest to the Upper Truckee River (Lindstrom 2004). Mitigation measures recommended by the consulting archeologist are discussed in subsection 3.4.5 and include measures to protect buried or concealed heritage resources.

The Washoe Tribe of Nevada and California has been notified and concurs with the study findings. The tribe wishes to be informed of the construction dates and be given the opportunity to do periodic spot field checks during Project ground disturbance activities (Lindstrom 2004).

Therefore, impacts to cultural resources would be less than significant with implementation of Mitigation Measure CR-1 during construction of the Sierra Tract ECP Phase 3 and 4.

CEQA Checklist Question V.d)

Would the project disturb any human remains, including those interred outside of formal cemeteries?

Answer: Less than significant with mitigation incorporation.

Impact CR-2 During grading activities the Project could disturb unknown human remains interred outside of formal cemeteries.

Long-term or Permanent Impacts

During grading activities, unknown human remains could be impacted if present within proposed disturbance areas. Mitigation Measure CR-2 described in Section 3.4.5 would reduce potentially significant impacts to human remains to a less than significant impact with mitigation. If human remains are found, work would stop immediately and the proper authorities would be contacted as stipulated in Mitigation Measure CR-2.

Therefore, impacts to cultural resources would be less than significant with implementation of Mitigation Measure CR-2 during construction of the Sierra Tract ECP Phase 3 and 4.

3.4.4 Cumulative Impacts

As none of the identified cultural resources appear eligible for listing on the National or California Registers (Lindstrom 2004), there would be no cumulative impacts to historic resources. Therefore, impacts from the Project would not be cumulatively considerable.

3.4.5 Mitigation Measures

The mitigation measures listed below will reduce the potential significant effects of Project activities to a level that is less than significant with mitigation incorporation.

Mitigation CR-1 The Washoe tribe shall be invited to spot check the Project during construction. Selective archaeological monitoring by a qualified archaeologist and/or Native American consultant shall be conducted during project ground disturbance activities, especially in areas closest to the Upper Truckee River. In the event of fortuitous discoveries of buried or concealed heritage resources, ground disturbance activities shall cease in the area of the find and the City of South Lake Tahoe shall consult a qualified archaeologist for recommended procedures (Lindstrom 2004).

Mitigation CR-2 If human remains are inadvertently discovered, California law requires that work must stop immediately and the County coroner must be notified. If the remains are Native American, the coroner shall notify the members of the Washoe Tribe to insure that proper treatment is given to the burial site (Lindstrom 2004).

3.5 Geology and Soils

The following CEQA Environmental Checklist questions (Appendix G of the CEQA Guidelines) are used as the significance criteria for analysis of potential adverse impacts to geology and soils from the Project (Subsection 3.5.3). Questions answered as “No Impact” require no further analysis related to the Project. A discussion justifying a “No Impact” conclusion is provided under each question in Appendix A. All other answers are explained within Subsection 3.5.3.

VI. Geology and Soils <i>Would the project:</i>	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				X
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.				X
ii) Strong seismic ground shaking?				X
iii) Seismic-related ground failure, including liquefaction?				X
iv) Landslides?				X
b) Result in substantial soil erosion or the loss of topsoil?			X	
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?				X
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				X
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				X

3.5.1 Introduction

CDM Smith performed a geotechnical field investigation on July 10, 2008 of the Phase 3 Project area. The Phase 3 field investigation included backhoe excavation of four test pits and two hand auger borings up to a maximum depth of approximately 8 feet below the existing ground surface (bgs). The infiltration tests at selected test pit/hand auger boring locations were performed at varying depths. The objective of the study was to evaluate the suitability of proposed erosion control improvements related to soil types and groundwater conditions within the Project area.

A supplemental geotechnical investigation was performed in 2012 in Sub-basin Upper SB2 to evaluate the feasibility of infiltrating runoff in the newly added project area. Data from existing nearby groundwater monitoring wells and available soils mapping was evaluated and reviewed. Caltrans recently conducted a subsurface investigation on Conservancy owned lots on Sierra Boulevard near Chris Avenue. And this data was also reviewed.

3.5.2 Existing Conditions

The Sierra Tract ECP Phase 3 and 4 area is underlain by Pleistocene aged lacustrine terrace deposits occurring from approximately 10,000 to 2 million years ago. Lacustrine terrace deposits were formed when the water surface of Lake Tahoe was estimated to be as much as 600 feet higher than present lake levels as a result of massive ice dams forming during periods of glaciation in the northern and western portions of the basin. This area is described as poorly to moderately sorted silt, sand and gravel forming broad low terraces 5 to 10 meters above lake level and also contains localized delta deposits (Saucedo 2005).

3.5.2.1 Geotechnical Field Investigation

Based on review of the available data and CDM Smith's geotechnical investigation, the soil is stable and there is no potential for landslide, lateral spreading subsidence liquefaction, collapse or expansive soil. No groundwater was encountered, however, mottling was observed at one of the test locations at 4.5 feet bgs. Increased moisture in the soils was observed after 3.5 feet bgs in other locations. Infiltration tests were performed between 2 to 5 feet bgs at these locations. At some test locations standing water was present at ground surface. These test pit locations are located at the intersection of River Drive and Lodi Avenue.

Monitoring well data available from the Conservancy, Caltrans and the State Water Resources Control Board (SWRCB) at wells within the vicinity of the proposed infiltration facilities was reviewed by the Project team. After review of the data, it was determined that groundwater would not be encountered at the projected depth of the proposed infiltration facilities in the Phase 4 portion of the Project area.

During the supplemental geotechnical study in 2012, the monitoring well data indicate minimum groundwater depths of 12 feet below ground surface and maximum groundwater depths of 20 feet below ground surface. Caltrans excavated to a depth of 5 feet at Test Pit #11 and did not observe any groundwater or soil

redoxomorphic features indicating seasonal high groundwater at this depth during their investigation. However, at Test Pit #16, redoxomorphic features were observed at 3.75 below ground surface which indicates seasonal high groundwater at 3.75 feet below ground surface.

3.5.3 Potential Impacts

Impact statements are listed below with the corresponding CEQA question and answer above it as described in Table 3.5-1. The analysis follows each impact statement for short-term, long-term or permanent impacts as needed.

CEQA Checklist Question VI.b)

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

Answer: Less than significant impact.

During construction, grading activities and areas cleared of vegetation associated with the Project could have the potential to cause soil erosion or cause a substantial loss of topsoil.

Short-term Impacts

Grading activities would take place between May 1 and October 15 during periods of no precipitation. Temporary erosion control measures are described as construction controls in Section 2. These measures include the following.

- Temporary erosion control devices shall be placed on the downhill side of all excavation and dirt piles. These shall include: sediment fencing and/or sediment rolls.
- Dirt piles shall be covered during non working hours and during times of precipitation.
- All open trenches shall be covered during periods of precipitation.
- Vegetation protection fencing shall be placed around all vegetated areas near construction.
- All construction equipment shall be parked on paved areas.
- Stabilize all disturbed areas with vegetation and heavy mulch until vegetation is established.
- Clean up and remove all construction site waste including trash, debris and spoil piles.

Therefore, potentially significant impacts to soils and geology from Sierra Tract ECP Phase 3 and 4 would be less than significant with implementation of construction controls.

3.5.4 Cumulative Impacts

The Project's impact to soils and geology is less than significant and the impacts are not cumulatively considerable.

3.5.5 Mitigation Measures

Impacts to geology and soils would be less than significant therefore no mitigation measures are required.

3.6 Greenhouse Gas Emissions

The following CEQA Environmental Checklist questions (Appendix G of the CEQA Guidelines) are used as the significance criteria for analysis of potential adverse impacts to greenhouse gas (GHG) emissions (Subsection 3.6.3). Questions answered as “No Impact” require no further analysis related to the Project. A discussion justifying a “No Impact” conclusion is provided under each question in Appendix A. All other answers are explained within Subsection 3.6.3.

Table 3.6-1
CEQA Environmental Checklist Questions and Answers for Greenhouse Gas Emissions

Greenhouse Gas Emissions <i>The Proposed Project would be significant if it would:</i>	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?			X	

3.6.1 Introduction

The study area for the analysis of Project-related impacts on GHG is the Project area. In October 2008 CARB released a Preliminary Draft Staff Proposal for Recommended Approaches for Setting Interim Significance Thresholds for GHG emissions under CEQA. The analysis presented represents GHG effects during construction of the Project.

3.6.2 Existing Conditions

Parts of the earth's atmosphere act as an insulating blanket, trapping sufficient solar energy to keep the global average temperature in a suitable range. The blanket is a collection of atmospheric gases called GHGs. These gases [water vapor, carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), Ozone, chlorofluorocarbons (CFCs), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆)] all act as effective global insulators, reflecting back to earth visible light and infrared radiation. Human activities such as producing electricity and driving vehicles have elevated the concentration of these gases in the atmosphere. Many scientists believe that these elevated levels, in turn, are causing the earth's temperature to rise. A warmer earth may lead to changes in rainfall patterns, much smaller polar ice caps, a rise in sea level, and a wide range of impacts on plants, wildlife, and humans.

The global warming potential (GWP) quantifies the potential of a gas or aerosol to trap heat in the atmosphere. The reference gas for GWP is CO₂; CO₂ has a GWP of one. In comparison, CH₄ has a greater global warming effect than CO₂ with a GWP of 21. The mass emissions of an individual GHG multiplied by its GWP, or the CO₂

equivalent (CO₂e), is the standard methodology for comparing GHG emissions since it normalizes various GHG emissions to a consistent metric.

According to a white paper on GHG emissions and global climate change prepared by the Association of Environmental Professionals (AEP), total worldwide GHG emissions in 2004 were estimated to be 20,135 million metric tons (MMT) CO₂ Eq., excluding emissions/removals from land use, land use change, and forestry (AEP 2007). In 2004, GHG emissions in the U.S. were 7,074.4 MMT CO₂ Eq. California is a substantial contributor of GHG, as it is the second largest contributor in the U.S. and the sixteenth largest in the world (as compared to other nations). In 2004, California produced 494 MMT CO₂e, (California Energy Commission 2007) which is approximately seven percent of U.S. emissions. The major source of GHG in California is transportation, contributing 41 percent of the State's total GHG emissions. Electricity generation is the second largest source, contributing 22 percent of the State's GHG emissions.

3.6.2.1 California Assembly Bill 32

In December 2008, the CARB released a Climate Change Scoping Plan (CARB 2008) outlining the State's strategy to achieve the 2020 GHG emissions limit mandated by Assembly Bill (AB) 32. AB 32 requires the State to reduce GHG emissions to 1990 levels by 2020. GHG emissions in the State are expected to increase by nearly 30 percent between the average 2002-2004 emissions and 2020 levels under the business-as-usual (BAU) conditions. In a staff report entitled "California 1990 Greenhouse Gas Emissions Level and 2020 Emissions Limit," CARB estimated the 1990 emission level as approximately 427 MMT of CO₂e (CARB 2007). The State would need to reduce emissions by 169 MMT CO₂e in 2020 as compared to BAU to meet the emission targets; that amount of reduction represents a nearly 30 percent decrease in emissions from BAU.

In its Scoping Plan (CARB 2008), CARB proposed a series of measures to reduce GHG emissions. The California Light-Duty Vehicle GHG Standards ("Pavley Regulations"), for example, are predicted to reduce emissions by 31.7 MMT of CO₂e or 18 percent of the total emission reductions included in the Scoping Plan. Other reductions include the Low Carbon Fuel Standard (15 MMT of CO₂e reduction), regional transportation-related GHG targets (5 MMT of CO₂e reduction), and medium/heavy-duty vehicle reduction measures (1.4 MMT of CO₂e reduction). The EPA and the Department of Transportation's National Highway Traffic Safety Administration (NHTSA) are also developing rules to establish programs designed to reduce GHG emissions and to improve fuel economy for cars and trucks.

El Dorado County APCD and all other local air quality management districts mainly regulate primary criteria pollution and not GHG. However, the City of South Lake Tahoe has adopted new policies related to GHG within the newly adopted General Plan Policy Document (City 2011b). The City has not adopted thresholds of significance for construction or operations related GHG emissions. However, they do "support local, TRPA and statewide efforts to reduce emission of greenhouse gases linked to climate

change” and shall establish reduction targets consistent with AB 32 and SB 375. All policies related to GHG shall be implemented between 2013 and 2015 (City 2011).

3.6.3 Potential Impacts

Heavy equipment and vehicles (haul trucks and worker commute) are sources of GHG emissions from construction projects. There are no operational emissions associated with this Project.

CEQA Significance Criteria VII.a)

Would the Project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

Answer: Less than significant impact.

The Project would temporarily generate GHG emissions because of the operation of equipment required to construct the Project and vehicle trips by workers, deliveries.

Short-term Impacts

The construction period is short (approximately three months or 90 working days) and would involve only a few pieces of equipment operating at one time. The emissions from the Project would be a one-time impact as the Project would not create any permanent, long term GHG emitting facilities.

Some of the following construction controls would be implemented to reduce GHG emissions: maintaining equipment per manufactures specifications, minimizing idling times, and encouragement of worker carpooling. **Since the Project would contribute GHG emissions temporarily, incorporate construction controls to minimize impacts, and no long term GHG generating facilities are proposed, the Project would have a less than significant impact to GHG emissions.**

CEQA Significance Criteria VII.b)

Would the Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?

Answer: Less than significant impact.

The Project would generate GHG emissions during construction which could conflict with goals defined in AB 32.

Short-term Impacts

The City has adopted General Plan policies for the purpose of reducing GHG emissions. One of their policies requires development of a comprehensive strategy to reduce GHG emissions between 2013 and 2015. However, there currently are no

construction thresholds related to GHG emissions at the local or state level. Reduction goals are stated in Section 3.6.2.1 above. The GHG emissions generated during construction would not hinder the State's ability to attain the goals identified in AB 32 because impacts would be temporary. **Therefore, the Project would have a less than significant impact to GHG emissions and would not conflict with goals defined in AB 32.**

3.6.4 Cumulative Impacts

The Project's impact to GHG emissions is not cumulatively considerable because all impacts are temporary and less than significant.

3.6.5 Mitigation Measures

Impacts to GHG emissions are less than significant, therefore, no mitigation measures are needed.

3.7 Hazards and Hazardous Materials

The following CEQA Environmental Checklist questions (Appendix G of the CEQA Guidelines) are used as the significance criteria for analysis of potential adverse impacts to hazards and hazardous materials (Subsection 3.7.3). Questions answered as “No Impact” require no further analysis related to the Project. A discussion justifying a “No Impact” conclusion is provided under each question in Appendix A. All other answers are explained within Subsection 3.7.3.

Table 3.7-1 CEQA Environmental Checklist Questions and Answers for Hazards and Hazardous Materials				
VII. Hazards and Hazardous Materials <i>Would the project:</i>	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
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?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				X
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				X
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X

Table 3.7-1 CEQA Environmental Checklist Questions and Answers for Hazards and Hazardous Materials				
VII. Hazards and Hazardous Materials <i>Would the project:</i>	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				X

3.7.1 Introduction

The Project would require some grading activities that could disturb existing underground facilities. This section reviews the potential impacts of disturbing or impacting existing underground utilities, hazardous sites, and impacts to the safety of the residents and construction workers during construction. A small amount of hazardous materials would be used onsite during construction to service construction equipment. These may include gasoline, diesel fuel, motor oil, grease and other lubricants.

3.7.2 Existing Conditions

Data available on the Lahontan RWQCB Geotracker and California Department of Toxic Substances Control EnviroStor websites was reviewed for existing hazardous sites located in or near the Sierra Tract ECP Phase 3 and 4 area. The databases track cleanup sites, permitted sites and leaking underground fuel tank (LUFT) sites. Several sites were identified in or near the Project area. These sites include those listed on Table 3.7-2.

Table 3.7-2 EnviroStor and Geotracker Sites Within or Near the Sierra Tract ECP Phase 3 and 4 Area				
Site Name	Location	Inside or Outside of Project Area	Site Type	Status
Former Midas Muffler	2709 Lake Tahoe Blvd. (Hwy 50)	Outside	LUST Cleanup Site	Open-Site Assessment – Chlorinated Solvents & Hydrocarbons in Groundwater
Tahoe Auto Recyclers	2709 Lake Tahoe Blvd. (Hwy 50)	Outside	Evaluation	None specified
Yellow Cab Company	948 Link Road	Outside	Evaluation	None specified
7-Eleven	2620 Lake Tahoe Blvd.	Inside	LUST Cleanup Site	Completed - Case Closed
7-Eleven	2620 Lake Tahoe Blvd.	Inside	Permitted UST	No violations reported
Hanna Magic Car Wash	2596 Lake Tahoe Blvd.	Inside	LUST Cleanup Site	Completed – Case Closed
Liquor Shack	2525 Lake Tahoe Blvd.	Inside	LUST	Completed – Case Closed

Table 3.7-2
EnviroStor and Geotracker Sites Within or Near the Sierra Tract ECP Phase 3 and 4 Area

Site Name	Location	Inside or Outside of Project Area	Site Type	Status
Rotten Robbie	2601 Lake Tahoe Blvd.	Inside	LUST Cleanup Site	Completed - Case Closed
Stop 'N' Save	2470 Lake Tahoe Blvd.	Inside	LUST Cleanup Site	Completed – Case Closed
US Gas	2470 Lake Tahoe Blvd.	Inside	Permitted UST	No violations reported

Source: EnviroStor 2012 and Geotracker 2012
LUST = Leaking Underground Storage Tank
UST = Underground Storage Tank
Hwy = Highway

Several utility companies have service lines located within the Project area. Power, cable TV and telephone service lines are all above ground. Natural gas, sewer and water service lines are located underground.

3.7.3 Potential Impacts

Impact statements are listed below with the corresponding CEQA question and answer above it as described in Table 3.7-1. The analysis follows each impact statement for short-term, long-term or permanent impacts as needed.

CEQA Checklist Question VII.a)

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

Answer: Less than significant impact.

During construction, the Project could create a hazard to the public or the environment through the routine use and transport of hazardous materials to maintain construction equipment.

Short-term Impacts

The Project would require the transport and use of a minimal amount of hazardous materials to maintain construction equipment on the site which may include: motor oil, gasoline, diesel fuel, solvents and degreasers. All hazardous materials would be secured and stored in an area away from waterways and workers would be instructed to follow guidelines outlined with the SWPPP, a requirement for approval of the NPDES permit issued by the Lahontan RWQCB. All hazardous materials would be removed from the site after the Project is completed.

Therefore, the Project would have a less than significant impact to hazards and hazardous materials due to the use and transport of hazardous materials.

CEQA Checklist Question VII.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?

Answer: Less than significant impact.

During construction, the Project could create a hazard to the public or the environment due to an explosion and/or spill of hazardous materials into the ground, groundwater or surface water.

Short-term Impacts

The SWPPP would describe procedures to follow in case of an accidental spill of the material and the contractor would be required to implement these procedures in case of a spill. Hazardous materials would be stored in a secured area and all personnel would be trained in the proper use of the materials. Any vehicle or equipment maintenance work would be conducted within a designated area equipped with BMPs and in upland areas away from drainage ways. All hazardous materials would be removed from the site after the Project is completed.

During construction of the project grading activities, the potential to impact or disturb underground utilities which could be a safety hazard to area residents and construction workers is of concern. If an underground utility line was impacted service from that particular utility service could be disrupted. During the early design phase of the Project, existing underground utility plans were reviewed and pot-holing will be conducted prior to final design to determine the approximate locations of the underground utilities. This information would be included on the construction plans and specifications. Direction to the contractor would also be included on the plans and specifications to contact Underground Service Alert (USA) to locate the utility lines in the field and mark their location prior to ground disturbance. These construction controls described in the Project Description would be implemented and result in a less than significant impact to hazards and hazardous materials.

Table 3.7-2 lists one open LUST site at the Former Midas Muffler shop located outside of the Project area to the northeast. The contaminants of concern are chlorinated solvents and hydrocarbons in groundwater. Two other sites located outside of the Project area to the northeast were listed as evaluation sites where no status updates have been recorded for over 10 years. These sites include the Yellow Cab Company site on Link Road and Tahoe Auto Recyclers on Lake Tahoe Boulevard. Several LUST sites within the Project area have been closed and most involved minor spills that were cleaned up to applicable regulatory standards (Geotracker 2012). During construction, grading and construction of stormwater improvements may occur at some of the closed sites. However, the cleanup of hazardous materials has been completed so no hazardous materials would be encountered. Existing permitted USTs will be avoided during construction. Therefore, there would be no impact to hazards and hazardous materials during construction of the Project at existing hazardous sites.

Therefore, the Project would have a less than significant impact to hazards and hazardous materials due to an explosion or accidental spill of hazardous materials with implementation of construction controls described in Section 2, Project Description and adherence to the SWPPP.

3.7.4 Cumulative Impacts

The Project's impact to hazardous and hazardous materials is less than significant and is not cumulatively considerable.

3.7.5 Mitigation Measures

Impacts to hazards and hazardous materials would be less than significant therefore no mitigation measures are required.

3.8 Hydrology and Water Quality

The following CEQA Environmental Checklist questions (Appendix G of the CEQA Guidelines) are used as the significance criteria for analysis of potential adverse impacts to hydrology and water quality (Subsection 3.8.3). Questions answered as “No Impact” require no further analysis related to the Project. A discussion justifying a “No Impact” conclusion is provided under each question in Appendix A. All other answers are explained within Subsection 3.8.3.

Table 3.8-1 CEQA Environmental Checklist Questions and Answers for Hydrology and Water Quality				
VIII. Hydrology and Water Quality <i>Would the project:</i>	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?			X	
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?				X
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?			X	
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?			X	
e) 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?				X
f) Otherwise substantially degrade water quality?			X	

VIII. Hydrology and Water Quality <i>Would the project:</i>	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				X
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				X
j) Inundation by seiche, tsunami, or mudflow?				X

3.8.1 Introduction

This section describes the environmental setting for the Project including: watershed and drainage, water quality problems, hydrology and TRPA land capability verification.

3.8.2 Existing Conditions

3.8.2.1 Watershed and Drainage

The Phase 3 and 4 project topography is relatively flat and generally drains to the southwest toward the Upper Truckee River. Sub-basins within the drainage areas have been delineated by considering the natural topography of the site, the effects of development on runoff patterns and the existing drainage systems (CDM Smith 2007).

Three sub basins were delineated and include Sub-Basin (SB) 1, Upper SB 2 and Lower SB 2 and these are shown on Figure 2-2. The following paragraphs describe each sub-basin and its general runoff patterns.

Sub-basin 1 is the northwestern most sub-basin and includes commercial properties between Highway 50 (Lake Tahoe Blvd.) and Palmira Avenue. Runoff from Highway 50 is collected via drainage inlets (DIs) and piping to Outfall 1 which is a piped outfall discharging to the Upper Truckee River. Runoff from a portion of Lodi Avenue, Palmira Avenue, and River Drive commingle with runoff from Highway 50 at these DIs. Palmira Avenue and River Drive have unimproved road shoulders which receive runoff from the paved surfaces. A portion of this runoff ponds on the shoulders while most of it drains overland toward the Upper Truckee River (CDM Smith 2007).

Upper Sub-basin 2 generally extends northeast from Martin Avenue to Sierra Boulevard on the southwest, and is between Highway 50 and William Street. It also includes drainage area on the north side of Highway 50. Drainage runoff comes from City, Caltrans and private commercial properties. Stormwater is currently comingled and flows to the Chris Avenue Basin (corner of Chris Avenue and Sierra Boulevard). Stormwater then flows to Outfall 2 located in lower sub-basin 2 to the Upper Truckee River.

Lower Sub-basin 2 includes residential portions of Palmira Avenue, and portions of residential streets bordered by Sierra Boulevard, Osbourne Avenue, Palmira Avenue and the Upper Truckee River. In some areas of the sub-basin drainage is conveyed via curb and gutter and the remainder is sheet flow runoff from the paved roads and impervious surfaces onto compacted soil road shoulders. Some of the roads in this sub-basin have unimproved compacted soil road shoulders. Some runoff flows towards the drainage basin on the southeast corner of Chris Avenue and Sierra Boulevard. The discharge from the drainage basin on Chris Avenue is conveyed via storm drain pipe and heavily vegetated swales running through private parcels. A portion of the runoff from this sub-basin enters directly into this swale while the rest is collected into DIs and piped under Lodi Avenue and River Drive towards Outfall 2. At the southwestern edge of this sub-basin undisturbed forested slopes lead down to the Upper Truckee River where runoff travels overland as sheet flow to the Upper Truckee River. An existing vegetated swale on a vacant private parcel collects flow from the drainage basin at Chris Avenue and Sierra Boulevard and some runoff from curb and gutter, as well as on River Drive and Lodi Avenue. This vegetated swale terminates at Outfall 2 at the edge of the Upper Truckee River corridor (CDM Smith 2007).

Existing Drainage Infrastructure

One erosion control project has previously been constructed within the Project area, the Western Sierra Tract ECP in 1989 by the City (CDM Smith 2007).

Improvements constructed as part of the Western Sierra Tract ECP include curb and gutter, DIs and storm drain piping along portions of Sierra Boulevard between William Street and Palmira Avenue, Chris Avenue, Reno Avenue, William Avenue, Lodi Avenue and River Drive. Drainage generated northeast of Stockton is routed to a large drainage basin located at the corner of Sierra Boulevard and Chris Avenue. The basin outlet consist of pipes and a vegetated swale that travel along the rear of properties located on Chris Avenue, crosses Stockton Avenue in a culvert and then continues along the rear of private properties on Chris Avenue towards the intersection of William Street, Lodi Avenue and River Drive. Here, stormwater is conveyed to a vegetated swale southwest of Lodi Avenue and discharges to the Upper Truckee River at Outfall 2. Runoff enters DIs and drain pipe along William Street between Stockton Avenue and Lodi Avenue and is conveyed to the same vegetated channel to Outfall 2. The as-built drawings for the Western Sierra Tract ECP do not indicate that there is a drainage easement through the private properties for

the piping or channels conveying overflow from the Chris drainage basin to Outfall 2 (CDM Smith 2007).

One additional drainage Outfall within the Project area is not associated with a prior City ECP. Located at a Conservancy-owned parcel north of the Highway 50, Outfall 1 collects drainage from Highway 50. This Caltrans owned outfall captures drainage from the Caltrans right of way and a portion of Palmira Avenue, Lodi Avenue, and River Drive. Caltrans is currently designing a drainage project on Highway 50 from the South Lake Tahoe “wye” to Trout Creek which would include replacing storm drain piping and asphalt concrete berm along this stretch of roadway. Caltrans plans to reconstruct Outfall 1 as part of this Project. Caltrans and the City are making efforts to coordinate the design of these two projects. The Caltrans project is likely to be completed after Sierra Tract ECP Phase 3 and 4 (CDM Smith 2007).

3.8.2.2 Water Quality Problem Areas

Field investigations conducted for the Phase 3 project area revealed that the majority of water quality erosion source problems are associated with road side shoulders. A problem source area was identified where the Upper Truckee River crosses under Hwy 50. An additional source problem associated with winter sanding and plowing activities exists project-wide at various locations.

Drainage problems were also identified for the Phase 3 and 4 project areas. Drainage problems can cause erosion, flooding and often facilitate pollutant transport mechanisms. Drainage problems are located within the project boundaries but are not limited to within the City right of way (CDM Smith 2007). The drainage problems can be grouped as follows:

- ponding during and/or following storm events as a result of low spots on compacted road shoulders or road surfaces and inadequate or lack of appropriate stormwater conveyance;
- flooding of private parcels from road surfaces due to inadequate or lack of appropriate stormwater conveyance; and
- improperly functioning stormwater infrastructure (channels that flood, overgrown basin inlet/outlet, poorly functioning treatment vault).

PLRM results conducted for both the original Phase 3 and 4 projects noted the following existing conditions of water quality concern (NHC 2010).

- The Chris Avenue Basin treats a very low percentage of the average annual runoff discharged to it. This is because the Chris Avenue Basin has a small amount of capacity relative to its tributary area of roughly 75 acres.
- Caltrans catchments contribute significantly more fine sediment particles pollutant load and surface runoff relative to City catchments. The quality of runoff from

Caltrans catchments is significantly poorer than from City land uses, and Caltrans has a high percentage of total impervious area that is directly connected.

3.8.2.3 Hydrology

A initial Hydrology Assessment was performed by CDM Smith as part of the Phase 3 Existing Conditions Assessment Memorandum (ECAM) (CDM Smith 2007) and it was updated in the Addendum Alternatives Formulation and Evaluation Memoranda for Phase 3 and 4 (CDM Smith 2012). The results of the updated assessment are summarized in this subsection. A more detailed discussion of the Project area hydrology may be reviewed in the ECAM which is in the public record at the City offices in South Lake Tahoe.

The mean annual precipitation for the Project area ranges from 25 to 30 inches per year. Generally, this precipitation falls as snow during the winter months (October through May) with periods of rain or hail possible during the entire year. In some instances it may snow in every month except August. Depth-Duration-Frequency (DDF)/Intensity-Duration-Frequency (IDF) data was compiled from the El Dorado County Drainage Manual (EDDM) and National Oceanic and Atmospheric Administration (NOAA) Hydrometeorological Design Studies Center (HDSC). The data is nearly identical for the shorter duration 25-year 1-hour storm. The NOAA IDF curves are slightly more conservative for high intensity shorter storm durations, while the County data is slightly more conservative for longer storm durations with lower intensities (CDM Smith 2007).

The Project area is a TRPA priority 2 watershed with a deadline of 2006 for BMP implementation. Some properties within the Project area had received certificates for completing BMPs. Impervious surfaces on certified properties are considered to be indirectly connected (Friedman, Personal Communication 2012)

Using the GIS analysis, the area of private and public, directly and indirectly connected impervious surface was calculated for each sub-basin. These areas were used for subsequent volume and runoff flow calculations.

- Sub-basin 1 is the smallest of the three sub-basins with an area of 13.2 acres, but it has the largest percentage of directly connected impervious surface area with a value of 69 percent. Approximately 55 percent of the directly connected impervious areas are privately owned. The 9.1 acres of impervious area in Sub-basin 1 makes up 21 percent of the total impervious area in the Project.
- Upper Sub-basin 2 is the second largest sub-basin with an area of 33 acres, and it contains a large portion of impervious area at 62 percent. This sub-basin is considered indirectly connected because it discharges into an existing treatment basin on the corner of Sierra Boulevard and Chris Avenue which has been performing adequately. Approximately 55 percent of the indirectly connected impervious areas are privately owned. Upper Sub-basin 2 contains 20.4 acres of impervious area which is approximately 46 percent of the total impervious area in the Project.

- Lower Sub-basin 2 is the largest of the sub-basins at 34.7 acres, but it contains the lowest percentage of impervious area at 42 percent. The impervious area is roughly half public and half private indirectly connected. The impervious area of Lower Sub-basin 2 is 14.7 acres which corresponds to approximately 33 percent of the total impervious area in the Project. This sub-basin is considered to be indirectly connected because there are no drainage or water quality improvements, and most of the runoff collects on road shoulders as opposed to being discharged downstream.
- Approximately one fifth (21 percent) of the impervious surface within the Project area is directly connected to Lake Tahoe, via the tributary, the Upper Truckee River.
- Properties that are certified as BMP compliant should be considered indirectly connected as runoff from these properties is infiltrated on site.
- Results from the SWQIC model are presented in a series of output sheets for each sub-basin. The information provided by the model output includes precipitation statistics such as average number of events, average event duration, and runoff characteristics including flow duration curves and percent contribution of flows to total runoff volume. Peak design flows from the SWQIC model vary from approximately 6 cubic feet per second (cfs) at Outfall 1 to 19 cfs at Outfall 2 for the 2-year storm; and 9 cfs at Outfall 1 to 28 cfs at Outfall 2 for the 10-year storm. Based on the results of the SWQIC hydrology models, the cumulative probabilities computed may be most applicable for preliminary sizing of flow-dependent water quality improvement structures (CDM Smith 2007).

3.8.2.4 Land Capability

Since the 1970's, the "Bailey System" (Land Capability Classification of the Lake Tahoe Basin, California-Nevada, A Guide to Planning, Bailey, 1974) has been used to evaluate applications that add land coverage to developed and undeveloped multifamily-type residential, commercial, recreation and tourist accommodation projects. Soil types are mapped and grouped into land capability districts or classes. These classes represent the land's relative sensitivity to development, based largely upon their erosion and runoff potential. TRPA assigns each land capability classification a total area allowed as base impervious surface coverage. This program was developed to mitigate the deleterious effects to water quality that result from excessive land coverage. Land coverage is an essential element of the TRPA's environmental program for protecting the lake. Maintaining open space and limiting the amount of land coverage is a proven method for improving water quality. Permanent land disturbance is most commonly measured in terms of land coverage, also called impervious surface, and includes all man-made structures such as homes, driveways, and parking lots.

Most of the Phase 3 and 4 area consists of Class 7 soil type. The rest of the Project area is classified as 1b also known as SEZ. Figure 3.8-1 is a verified land capability map for the Project area. Class 7 lands are considered the least sensitive for erosion potential. SEZs are considered the most sensitive and therefore restricted from future development.

3.8.3 Potential Impacts

Impact statements are listed below with the corresponding CEQA question and answer above it as described in Table 3.8-1. The analysis follows each impact statement for short-term, long-term or permanent impacts as needed.

The potential impacts are analyzed as long-term impacts and short-term impacts during construction. No long-term impacts are expected because the project is for the purpose of water quality improvement. There is, however, the potential for significant short-term impacts during construction.

CEQA Checklist Question VIII.a)

Would the project violate any water quality standards or waste discharge requirements?

Answer: Less than significant impact.

Proposed grading and construction activities within drainage areas, SEZ and upland areas could cause violations of water quality standards or waste discharge requirements (under Lahontan RWQCB and TRPA standards) to occur.

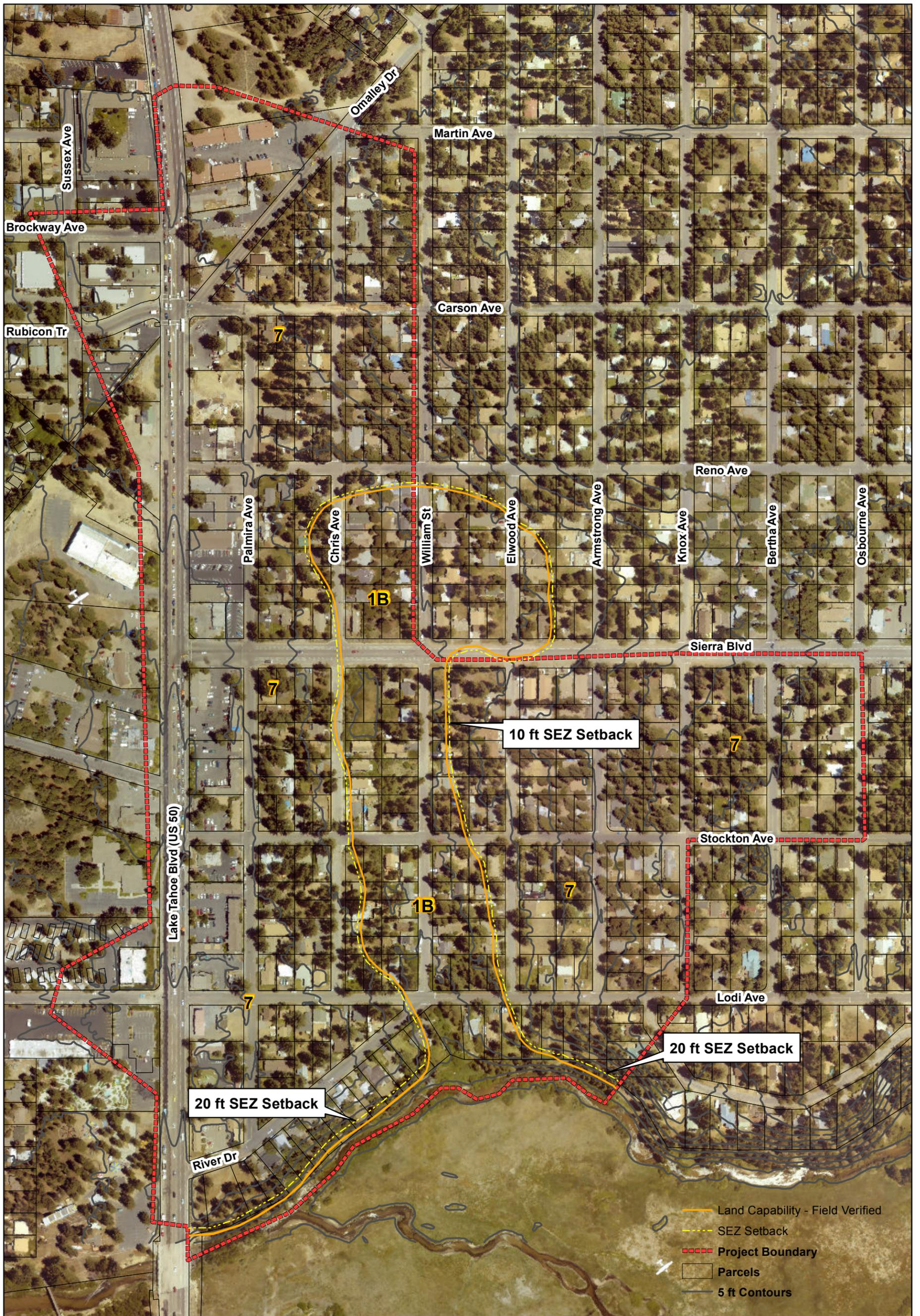
Short-term Impacts

Temporary BMPs would be installed prior to grading activities and during construction causing impacts to water quality to be less than significant. The temporary BMPs are listed as construction controls in Section 2. A Storm Water Pollution Prevention Plan (SWPPP) would be prepared to obtain an NPDES permit from the Lahontan RWQCB prior to construction. Detailed BMPs and measures to protect the SEZ and wetland areas would be described in the SWPPP. Measures to prevent accidental discharges of hazardous materials into surface or groundwater would also be described in the SWPPP. Construction of the Sierra Tract ECP Phase 3 and 4 would not violate any water quality standards or waste discharge requirements with implementation of construction controls described in Section 2.

Therefore impacts to water quality caused by violation of standards or waste discharge requirements would be less than significant.

CEQA Checklist Question VIII.c)

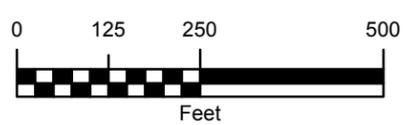
Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?



Data Sources: City of South Lake Tahoe LIDAR (Merrick and Company, 2002)
 El Dorado County Parcel Database, 2007
 City of South Lake Tahoe Aerial Photography, 2002
 TRPA LCV Field Verification, 11/26/07

Sierra Tract Erosion Control Project Phase 3 and 4

**Figure 3.8-1
 Land Capability Verification Map**



Answer: Less than significant impact.

Under the Project, existing drainage patterns would be altered permanently due to construction of drainage facilities and rerouting of drainage flow which could result in substantial erosion or siltation on or off site.

Long-term Impacts

The Project proposes permanent stormwater drainage facilities that would capture flow in drainage inlets, sediment traps and basins and route it into conveyance facilities including: new and existing storm drain pipe, vegetated swales and concrete curb and gutter. The flow would be transported to infiltration facilities for treatment prior to discharge to the Upper Truckee River. Infiltration facilities would consist of existing and proposed basins, and infiltration galleries. Vegetated swales, retention structures and proposed vegetated road shoulder would also help to infiltrate drainage and reduce flow volume to the infiltration facilities. Once the Project is completed, the area would be stabilized and permanent BMPs would eliminate the potential for substantial erosion on- or off-site. Parking deterrents may be constructed as needed and battered curb and gutter would be constructed to keep vehicles from parking on revegetated areas.

The Project features and construction controls identified in Section 2 would cause the Project to have a less than significant impact to water quality from erosion.

CEQA Checklist Question VIII.d)

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

Answer: Less than significant impact.

Under the Project, existing drainage patterns would be altered permanently due to construction of drainage facilities and rerouting of drainage flow which could cause flooding.

Long-term Impacts

Under existing conditions, some flooding occurs within some areas. Once the project is constructed, more areas would be available for infiltration. All flow would be routed through proposed conveyance structures to these new and improved infiltration areas. Project modeling to date shows that once the Project is constructed flooding would not be exacerbated. It is likely that flooding would decrease within the Project area due to the construction of the Project. **Therefore, the Project's impact to flooding would be less than significant once it is constructed because facilities to be constructed would capture, convey and treat flow at specified locations.**

CEQA Checklist Question VIII.f)

Would the project otherwise substantially degrade water quality?

Answer: Less than significant impact.

During construction, the Project could degrade water quality due to grading activities and work within drainage areas and SEZs.

Short-term Impacts

The TRPA and the Lahontan RWQCB require findings to be made to allow disturbance within SEZs. This Project is an ECP and these findings can be made to allow disturbance within the SEZ during construction. An explanation supporting the required findings is in subsection 3.3.3 – Biological Resources, Potential Impacts. The design of the project would comply with the findings allowing SEZ disturbance and would be a less than significant impact to water quality

Therefore, the Project would have a less than significant impact to water quality and hydrology in both the long- and short-term with implementation of construction controls and Project features listed in Section 2.

3.8.4 Cumulative Impacts

Cumulative projects that may impact hydrology and water quality are discussed at the beginning of Section 3. The cumulative projects would potentially affect hydrology or water quality in the area if they result in increases in runoff volume or pollutant loadings that would enter the Upper Truckee River or Lake Tahoe.

Many of the cumulative projects involve construction activities that could increase the potential for sediment loads in the Upper Truckee River. When considered in conjunction with the proposed project, a cumulative impact could potentially occur if the Sierra Tract ECP Phase 3 and 4 was unable to achieve effluent discharge with pollutant levels below reporting requirements. The construction controls described in Section 2 have been structured to make sure that this effluent discharge goal is achieved. The Project and other cumulative projects would implement erosion and runoff mitigation measures and/or construction controls required by the TRPA, Lahontan RWQCB, California DFW, the NPDES permit and SWPPP. Implementation of these water quality control measures support the expectation of a less than cumulatively considerable impact associated with hydrology and water quality.

The Sierra Tract ECP Phase 3 and 4 would have a less than significant impact to water quality and hydrology and therefore, would not contribute to cumulative impacts to water quality or hydrology.

3.8.5 Mitigation Measures

The Project would have a less than significant impact to Hydrology and Water Quality, therefore, no mitigation measures are needed.

3.9 Land Use and Planning

The following CEQA Environmental Checklist questions (Appendix G of the CEQA Guidelines) are used as the significance criteria for analysis of potential adverse impacts to land use and planning (Subsection 3.9.3). Questions answered as “No Impact” require no further analysis related to the Project. A discussion justifying a “No Impact” conclusion is provided under each question in Appendix A. All other answers are explained within Subsection 3.9.3.

IX. Land Use and Planning <i>Would the project:</i>	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Physically divide an established community?				X
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?			X	
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				X

3.9.1 Introduction

Planning documents that apply to the Project area include the TRPA Regional Plan which encompasses the TRPA Code of Ordinances (TRPA 2013a) and TRPA Plan Area Statements (PASs), the Lahontan Basin Plan administered by the Lahontan RWQCB, and the City of South Lake Tahoe General Plan and City Code (City 2008). El Dorado County and the City have adopted the TRPA PASs as zoning for the area. The TRPA Regional Plan is currently being updated and is scheduled to be adopted in December of 2012. The TRPA Code of Ordinances has already been modified and was implemented in March of 2012.

3.9.2 Existing Conditions

3.9.2.1 Existing Land Uses

Existing land uses within the Project area are comprised mainly of single family residences and multi-family residences with some general commercial uses in the northeast portion along Lake Tahoe Boulevard. The 81-acre Project area is comprised of small lots, most of which were developed in the 1950’s and 1960’s. Many of these lots are 5,000 square feet, which is less than the City’s current 6,000 square foot minimum lot size, and contain legally-existing excess residential density and excess land coverage (impervious surfaces). It appears that the majority of the residential properties consist of primary residences with a few vacation homes throughout. This

area is densely populated with a few vacant properties located throughout the Sierra Tract subdivision. Most of these vacant properties are privately owned and others are owned by the California Tahoe Conservancy or the USFS as environmentally sensitive parcels.

Commercial land uses include: retail, tourist accommodation, and professional offices located on Lake Tahoe Boulevard. No public recreation facilities exist within the Project area with the exception of some user-created dirt trails that lead to the Upper Truckee River corridor through some publicly owned vacant parcels. These trails are primarily used for dog walking and accessing the Upper Truckee River.

3.9.2.2 Applicable Planning Policies and Regulations

TRPA

TRPA has jurisdiction of all projects implemented within the Tahoe Basin, develops and enforces policies, and is the administering agency for the EIP. All of these efforts exist to protect Lake Tahoe and the Lake Tahoe basin. The Regional Plan was adopted in 1987 and was amended in 2012 with the Regional Plan Update. These amendments came into effect in February of 2013 (TRPA 2013b). In the 1987 Regional Plan, nine environmental thresholds have been identified and are still the same today including: water quality, air quality, soil conservation, wildlife habitat, fish habitat, vegetation, noise, recreation and scenic resources. The TRPA Code of Ordinances regulates land use, density, rate of growth, land coverage, excavation and scenic impacts among other things. The TRPA Regional Plan PASs contain zoning information for all areas within the Lake Tahoe basin.

The Project area is located within PASs 103 – Sierra Tract/Commercial and 105 – Sierra Tract. PASs provide specific policy and land use direction for small geographic areas throughout the Lake Tahoe Region (TRPA 2004 and 2002). The Region is divided into 175 separate plan areas, each with a PAS providing special goals and policies, a list of permissible uses, maximum allowed densities, eligibility for bonus programs, commercial use allocations, and maximum acceptable noise levels. All projects and activities must be consistent with the provisions of the applicable PAS.

Lahontan RWQCB

The Lahontan Basin Plan (Region 6 of the State Water Quality Control Board) includes the Tahoe Basin and specifies water quality standards and policies related to potential discharges which could affect water quality. Lahontan RWQCB is the implementing agency of the recently adopted Lake Tahoe TMDL for lake clarity. It has been determined after many years of study that clarity of Lake Tahoe is most affected by fine sediment particles which are transported in part by stormwater from urban areas. Local jurisdictions including the City as well as Nevada and California transportation agencies are required to implement water quality improvement projects to help to improve the clarity of Lake Tahoe. The TMDL includes the establishment of the Lake Clarity Crediting Program in which each jurisdiction received credits based on constructed water quality improvements and must monitor their effectiveness over time.

Region 6 is the largest region in California located along the eastern slope of the Sierra Nevada to the Nevada/California border and from the Oregon border to the northern Mojave Desert. The Basin Plan discusses present and potential beneficial uses, water quality objectives, implementation, water quality standards and control measures for the Lake Tahoe Basin, plans and policies, monitoring and assessment.

City of South Lake Tahoe

The City is the Project proponent, local regulating agency for the Project area and the lead agency for CEQA. The City General Plan includes, among other things, goals, objectives and action plans for Land Use and Community Design, Economic Development, Transportation and Circulation, Housing, Public/Quasi-Public Facilities and Services, Recreation and Open Space, Health and Safety, and Natural and Cultural Resources.

The City Code regulates many things including the following which are applicable to this Project.

- Land Use Development Standards;
- Motor Vehicles and Traffic;
- Streets and Sidewalks;
- Trees;
- PASs and Other Land Use Regulations;
- Stormwater Drainage; and
- Grading, Erosion and Sediment Control.

The Lake Tahoe Airport is located within two miles of the Sierra Tract ECP Phase 3 and 4 area and is owned and operated by the City. The Lake Tahoe Airport utilizes a Comprehensive Land Use Plan (CLUP) which identifies a plan area, findings, policies and guidelines for safety (South Lake Tahoe ALUC 2007). The CLUP is concerned with the following land use planning issues.

- Height restrictions protecting the navigable airspace near the airport and for aircraft safety
- Noise compatibility minimizing the degree to which noise from air craft affects the communities around airports.
- Safety of persons on the ground around the airport by minimizing the danger to workers and others from aircraft accidents.

The three major functions of the findings, policies and guidelines contained in the CLUP are the following (South Lake Tahoe ALUC 2007).

- To protect the airport from encroachment by incompatible land uses.
- To safeguard the general welfare of the inhabitants within the vicinity of the airport and the public in general by protecting them from adverse effects and related hazards.
- To ensure that no structures effect navigable airspace.

3.9.3 Potential Impacts

Impact statements are listed below with the corresponding CEQA question and answer above it as described in Table 3.9-1. The analysis follows each impact statement for short-term, long-term or permanent impacts as needed.

CEQA Checklist Question IX.b)

Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

Answer: Less than significant impact.

The Project may conflict with local land use plans, policies or codes including: the TRPA Regional Plan, PASs for zoning, and Code of Ordinances; the Lahontan Basin Plan - Water Quality Control Plan for the Lahontan Region; the City General Plan and Code; and the Lake Tahoe Airport CLUP.

TRPA

The Sierra Tract ECP Phase 3 and 4 is included in the TRPA EIP for water quality improvement. All projects listed in the EIP would help TRPA comply with environmental thresholds for water quality and would comply with the Regional Plan. The Project is designed to comply with guidelines within the Code of Ordinances. Findings are needed for disturbance within SEZ areas and grading in excess of 5 feet below ground surface. The findings related to SEZ disturbance may be found in Section 3.3 Biological Resources.

According to the TRPA Code of Ordinances, excavations over 5 feet in depth or that may interfere with groundwater is prohibited unless the following findings can be made. Below is the required finding with an explanation allowing approval of the proposed excavations over 5 feet below ground surface and where groundwater is present.

TRPA Code Ordinance subsection 33.3.6.B states:

Excavations in excess of 5 feet in depth or where there exists a reasonable possibility of interference or interception of a water table, shall be prohibited unless TRPA finds that:

- (1) A soils/hydrologic report prepared by a qualified professional, whose proposed content and methodology has been reviewed and approved in advance by TRPA, demonstrates that no interference or interception of groundwater will occur as a result of the excavation; and
- (2) The excavation is designed such that no damage occurs to mature trees, except where tree removal is allowed pursuant to Subsection 33.6.5: *Tree Removal*, including root systems and hydrologic conditions of the soil. To ensure the protection of vegetation necessary for screening, a special vegetation protection report shall be prepared by a qualified professional identifying measures necessary to ensure damage will not occur as a result of the excavation; and
- (3) Excavated material is disposed of pursuant to subsection 33.3.4: *Disposal of Materials*, and the project area's natural topography is maintained pursuant to Subparagraph 36.5.1.A. If groundwater interception or interference will occur as demonstrated by a soils/hydrologic report prepared by a qualified professional, then the excavation can be made as an exception pursuant to subparagraph 33.3.6.A.2, provided measures are included in the project to maintain groundwater flows to avoid adverse impacts to SEZ vegetation and to prevent any groundwater or subsurface water flow from leaving the project area as surface flow.

CDM Smith prepared a soils/hydrologic report and conducted a field investigation with TRPA staff present to address the issues stated above. Subsection 3.5.2.1 – Geotechnical Field Investigation, reports the results of the filed investigation and TRPA's design requirements for Project excavation and infiltration features. These requirements are incorporated into the Project design. Vegetation protection is described under Construction Controls in Section 2 – Project Description. All excavated material would be backfilled onsite and the area's natural topography would be maintained except where surface water infiltration facilities are proposed.

ECPs are a permissible use within both PAS 103 and 105 and the Project would comply with the PASs. (TRPA 2004 and 2002).

Plan Area 103 – Sierra Tract/Commercial

The Land Use Classification for this plan area is commercial/public service. This area should continue to provide commercial services for the residents and visitors of the south shore. The Project does not conflict with any of the Planning Considerations or Special Policies for this Plan Area (TRPA 2004).

The Project would revegetate SEZ areas within the Project area. SEZ restoration is proposed in some locations. The Project proposes to discharge treated stormwater to the Upper Truckee River.

The PAS lists permissible uses for this area. Erosion Control is considered a permissible resource management use in this plan area. The capital improvement required by the EIP for this area shall be implemented. Therefore this Project is consistent and does not conflict with zoning as regulated by PAS 103 (TRPA 2004).

Plan Area 105 - Sierra Tract

The Land Use Classification for this plan area is residential. This area should continue to be residential, improving the character of the neighborhood. The Project does not conflict with any of the Planning Considerations or Special Policies for this Plan Area (TRPA 2002b).

The Project will specifically address and reduce flooding problems in the subdivision. Where possible, disturbed SEZ areas would be restored and revegetated. This is possible in the public right of way and publicly owned parcels. This ECP would reduce sediment loads to the Upper Truckee River and Lake Tahoe. A separate Upper Truckee River Restoration project is proposed in the EIP. Five different projects along the Upper Truckee River are in various stages of planning and design. This project would positively impact future Upper Truckee River Restoration efforts.

The PASs lists permissible uses for this area. Erosion Control is considered a permissible resource management use in this Plan Area. The capital improvement required by the EIP for this area shall be implemented. Therefore this Project is consistent and does not conflict with zoning as regulated by PAS 105 (TRPA 2002b).

Therefore, the Project would comply with the TRPA Regional Plan, Code of Ordinances and PASs.

Lahontan RWQCB

Lahontan uses the *Water Quality Control Plan for the Lahontan Region* as its regulating document. Chapters 4 Implementation and 5 Water Quality Standards and Control Measures for the Lake Tahoe Basin were considered when designing the Project. Lahontan will consider compliance with the *Water Quality Control Plan* when writing the conditional permit for this Project. The Project design would comply with stormwater runoff and sedimentation standards and meet prohibition exemption criteria for the Truckee River Hydrologic Zone where necessary in Chapter 4. The Project must also comply with water quality standards, BMPs, contaminated soil restrictions, monitoring requirements and meet prohibition exemption criteria for SEZ disturbance discussed in Chapter 5 (similar to exemption criteria described in subsection 3.3.3). Project designers referred to the *Water Quality Control Plan* when designing the Project to ensure compliance with Lahontan regulations. The design of the Project complies with the *Water Quality Control Plan for the Lahontan Region*.

City of South Lake Tahoe

The City's General Plan Land Use and Community Design, Transportation and Circulation, Public/Quasi-Public Facilities and Services, Natural and Cultural Resources and Health and Safety elements contain goals, objectives and action plans applicable to the Sierra Tract ECP Phase 3 and 4. The Project design considers these elements within the design and complies with the General Plan. The Economic Development, Housing, and Recreation, and Open Space elements do not apply to this Project.

The *City of South Lake Tahoe Code* is the regulating document for the area within the City limits. The Project design must comply with all applicable standards outlined in the Code. Chapter 5 Land Use and Development Standards, Chapter 16 Motor Vehicles and Traffic, Chapter 26 Streets and Sidewalks and Chapter 34 Floodplain Management were considered by Project designers. City staff would consider Project compliance with the City General Plan and Code when permitting the Project. The design of the Project complies with the City Code and General Plan.

The Project would not conflict with any of the issues identified within the Lake Tahoe Airport CLUP as it does not proposed any new land uses or structures that would encroach into airspace.

The Project is in compliance with all applicable land use plans, policies and regulations of local, state and federal agencies with jurisdiction over the Project. Therefore, the Project would have a less than significant impact to land use and planning.

3.9.4 Cumulative Impacts

The Project would not impact Land Use and Planning to a significant level, therefore, it is not cumulatively considerable.

3.9.5 Mitigation Measures

The Project would not have any significant impacts to Land Use and Planning, therefore, no mitigation measures are needed.

3.10 Noise

The following CEQA Environmental Checklist questions (Appendix G of the CEQA Guidelines) are used as the significance criteria for analysis of potential adverse impacts to Noise (Subsection 3.10.3). Questions answered as “No Impact” require no further analysis related to the Project. A discussion justifying a “No Impact” conclusion is provided under each question in Appendix A. All other answers are explained within Subsection 3.10.3.

Table 3.10-1 CEQA Environmental Checklist Questions and Answers for Noise				
XI. Noise <i>Would the project result in:</i>	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				X
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			X	
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				X
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
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 expose people residing or working in the project area to excessive noise levels?				X
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				X

3.10.1 Introduction

The TRPA has established noise thresholds throughout the Lake Tahoe basin. PASs, the regulating zoning documents throughout the basin, define the maximum community noise equivalent (CNEL) level for each community. This Project is located in Plan Area 103 – Sierra Tract – Commercial and Plan Area 105 – Sierra Tract. The maximum CNEL for the Commercial plan area is 65 and 55 in the Residential area (TRPA 2004 and 2002). The City has adopted the PASs and CNEL levels defined within the PASs.

3.10.2 Existing Conditions

The Project area is a densely populated residential neighborhood consisting of primarily single family residences with some multi-family residential properties throughout. Commercial properties are located to the northeast along Highway 50. A visual survey of the Project area did not reveal any sensitive receptors such as schools, child care facilities, hospitals or senior care facilities.

The Project area is located within the Lake Tahoe Airport CLUP area. CNEL noise contours show approximately 55 dB generated from the airport at the northwest corner of the Project area. The rest of the Project area is within the 50 dB noise contour.

According to Chapter 68, Noise Limitations of the TRPA Code of Ordinances, noise generated from a TRPA approved construction projects is exempt provided work is between 8 a.m. and 6:30 p.m. (TRPA 2013a).

3.10.3 Potential Impacts

Impact statements are listed below with the corresponding CEQA question and answer above it as described in Table 3.10-1. The analysis follows each impact statement for short-term, long-term or permanent impacts as needed.

CEQA Checklist Question XI.b)

Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Answer: Less than significant impact.

During construction, people would be exposed to groundborne vibration and noise levels generated by use of construction equipment.

Short-term Impact

Potential sources of noise and vibrations from Project construction include onsite construction equipment. All noise resulting from the Project would be temporary during construction only. Construction of the Project would require the use of heavy equipment such as backhoes, loaders and trucks. Noise and vibration levels produced by construction equipment would vary throughout the day and move around within the Project area. While the noise levels during some periods of construction could exceed the maximum CNEL for the residential area, the City and TRPA allow this exceedance during construction provided that this work is conducted between 8:00 a.m. and 6:30 p.m. Monday through Friday. Vibration levels generated from trucks and compaction of soil would not damage existing structures. No sensitive receptors are located within the Project area. Construction controls to reduce noise impacts during construction are proposed and described in Section 2 Project Description. **Therefore, the project's impact to noise during construction would be less than significant because increased noise and vibration levels would be temporary, and**

work would be conducted during construction noise ordinance exempt periods according to TRPA and City regulations.

CEQA Checklist Question XI.d)

Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Answer: Less than significant impact.

During construction, the Project would cause temporary and periodic increases in ambient noise above existing levels due to the use of construction equipment.

Short-term Impact

As stated above, the Project would use heavy equipment during construction at various times and locations within the Project area. This would cause temporary periodic increases in ambient noise levels within the Project area compared to existing levels. However, TRPA and the City allow these exceedances during construction provided the work is conducted between 8:00 a.m. and 6:30 p.m. Monday through Friday. The Project work would be conducted during this time period. People are exposed to noise generated by construction everyday and at different locations. While this could be a nuisance, the effects would be less than significant because they would be temporary and during day time hours when many people would be working and away from home. The noise from this work would not be excessively loud within buildings. Most of the work would take place within public roads and on public undeveloped parcels.

Therefore, the Sierra Tract ECP Phase 3 and 4 would have a less than significant impact to noise because impacts would be temporary and construction controls listed in Section 2 would be implemented.

3.10.4 Cumulative Impacts

Impacts to noise from the project would only occur during construction. There would be no impacts to noise once the project is completed. Cumulative projects listed at the beginning of Section 3 could also have impacts to noise during construction. Cumulative projects being constructed at the same time as Sierra Tract ECP Phase 3 and 4 could contribute to cumulative noise impacts. The conclusion is that these projects are all at distances from the Project area, such that the combined construction noise levels at Sierra Tract ECP Phase 3 and 4 would be imperceptibly higher than from the Project alone. Therefore, while noise generated from the Project are cumulative considerable, the overall cumulative effect is still less than significant.

3.10.5 Mitigation Measures

The Project would have a less than significant impact to noise, therefore, no mitigation measures are required.

3.11 Recreation

The following CEQA Environmental Checklist questions (Appendix G of the CEQA Guidelines) and other criteria listed in Table 3.11-2 are used as the significance criteria for analysis of potential adverse impacts to recreation (Subsection 3.11.3). The criteria described in Table 3.11-2 is based on components of the Project description which could affect recreation. Questions answered as “No Impact” require no further analysis related to the Project. A discussion justifying a “No Impact” conclusion is provided under each question in Appendix A. All other answers are explained within Subsection 3.11.3.

Table 3.11-1 CEQA Environmental Checklist Questions and Answers for Recreation				
<i>XIV. Recreation</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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?				X
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X

Table 3.11-2 Additional Significance Criteria for Recreation				
	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<i>Would the project result in the physical deterioration of a recreational facility or major loss of recreational use.</i>			X	

3.11.1 Introduction

The Lake Tahoe area is known for outdoor recreation opportunities. The Project area’s close proximity to the Upper Truckee River and adjacent open space attract local residents and seasonal visitors.

3.11.2 Existing Conditions

Very little public outdoor recreation facilities are located within the Project area. User-created trails do exist at some public undeveloped parcels providing access to the Upper Truckee River and adjacent meadow located on private property. These trails

are primarily used by local residents and seasonal visitors for hiking and dog walking.

3.11.3 Potential Impacts

Impact statements are listed below with the corresponding significance criteria question and answer above it as described in Table 3.11-2. The analysis follows each impact statement for short-term, long-term or permanent impacts as needed.

Significance Criteria Question

Would the project result in the physical deterioration of a recreational facility or major loss of recreational use.

Answer: Less than significant impact.

During construction, user-created trail access on public parcels would be restricted due to public safety concerns while construction activities are proceeding. After construction, existing access patterns on some public parcels for pedestrians would be modified.

Short-term Impacts

The project would affect some existing user-created trails on public parcels. Some portions of the trails may be closed during construction. However, trail closures would be temporary during construction hours and would not extend for more than a day or two. In some locations, Project components would temporarily alter existing trails such at the Conservancy-owned parcel at the corner of River Drive and Highway 50 where a new infiltration gallery is proposed, and at the City-owned parcel at the intersection of Lodi Avenue and River Drive where a vegetated swale exists. Once construction is completed, these trails will be re-established and access to the Upper Truckee River would remain.

Therefore, short-term impacts to recreation would be less than significant because trail closures would be temporary while other accesses would be available and trails affected temporarily during construction would be re-established.

Long-term Impacts

Redundant trails would be closed and revegetated, however, some trails would be left as is to allow continued access through the public parcels. Non-redundant trails affected during construction would be re-established once construction is completed.

Therefore, long-term impacts to recreation would be less than significant because public access to the Upper Truckee River and adjacent meadow areas would still be available and non-redundant trails will be re-established after construction.

3.11.4 Cumulative Impacts

The project would not result in any impacts to Recreation, therefore, there would be no cumulatively considerable impacts to Recreation as a result of the Project.

3.11.5 Mitigation Measures

The Project would have a less than significant impact to recreation, therefore, no mitigation measures are needed.

3.12 Transportation and Traffic

The following CEQA Environmental Checklist questions (Appendix G of the CEQA Guidelines) are used as the significance criteria for analysis of potential adverse impacts to transportation and traffic (Subsection 3.12.3). Questions answered as “No Impact” require no further analysis related to the Project. A discussion justifying a “No Impact” conclusion is provided under each question in Appendix A. All other answers are explained within Subsection 3.12.3.

Table 3.12-1 CEQA Environmental Checklist Questions and Answers for Transportation and Traffic				
XV. Transportation and Traffic <i>Would the project:</i>	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measure of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?				X
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by county congestion management agency for designated roads or highways?				X
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?				X
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
e) Result in inadequate emergency access?				X
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?				X

3.12.1 Introduction

This section describes the existing traffic conditions and analyzes potential impacts to traffic in the Project area during construction. The study area encompasses all roads within the City right of way and Highway 50 within the Project area.

3.12.2 Existing Conditions

The Sierra Tract roadways are primarily arranged in a grid system with Sierra Boulevard being the widest and main access into the neighborhood from Highway 50. Many other roads within the Project area intersect with Highway 50 including: Omalley Drive, Carson Avenue, Reno Avenue, Stockton Avenue, Lodi Avenue, River Drive, Brockway Avenue and Rubicon Trail. The traffic flow in the subdivision is typical of a densely populated area with higher traffic concentrations entering and exiting multi-family residential properties and road intersections with Highway 50. The roadways are currently designed to City standards and maintained by the City. Adequate circulation is provided for emergency access.

Highway 50, also known as Lake Tahoe Boulevard, is the main corridor traveling through South Lake Tahoe. The speed limit is 35 miles per hour (mph) through the Project area. A four-way traffic signal exists at the intersection of Sierra Boulevard and Highway 50. A right turn lane is available from Highway 50 onto Sierra Boulevard when traveling eastbound and a left turn lane onto Sierra Boulevard is available in the westbound direction.

3.12.3 Potential Impacts

Impact statements are listed below with the corresponding CEQA question and answer above it as described in Table 3.12-1. The analysis follows each impact statement for short-term, long-term or permanent impacts as needed.

CEQA Checklist Question XV.d)

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

Answer: Less than significant impact.

The Project may construct parking deterrents (other than battered curb), which could increase hazards for traffic as they would be located in the City right of way where vehicles currently park.

Long-term Impact

Parking deterrents other than battered curb may be constructed in some locations to deter people from parking their vehicles on areas that have been revegetated. The parking deterrents may include wooden bollards or another type of small structure. The deterrents would be placed within the City right of way yet outside of the travel way of the roads. On-street parking would still be available in other locations where

there is no danger of impacting vegetated areas. The parking deterrents would be designed to include reflective material where needed to avoid collisions at night time.

Therefore, the construction of parking deterrents would not increase traffic hazards and have a less than significant impact to traffic and transportation because the design would preclude it and they would be placed outside of the travel way.

3.12.4 Cumulative Impacts

The Project would have a less than significant impact to traffic and transportation, therefore, the Project is not cumulatively considerable for impacts to traffic and transportation.

3.12.5 Mitigation Measures

The Project would have a less than significant impact to traffic and transportation, therefore, no mitigation measures are required.

3.13 CEQA Mandatory Findings of Significance

This Initial Study considers CEQA Mandatory Findings of Significance within this section. It has been determined through preparation of the Initial Study and environmental analysis presented in Section 3 that the Project would not have a significant effect on the environment with mitigation measures implemented as described within each resource section.

The CEQA Mandatory Findings of Significance are described below.

Table 3.13-1 CEQA Mandatory Findings of Significance				
XVII.	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, 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?		X		
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, and the effects of probable future projects)?		X		
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

3.13.1 CEQA Mandatory Findings of Significance of the Project

Impact statements are listed below with the corresponding CEQA question and answer above it as described in Table 3.13-1. The analysis follows each impact statement as needed.

CEQA Checklist Question XVII.a)

Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, 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?

Answer: Less than significant with mitigation implementation.

Short-term Impacts

Impact MFS-1 Under the Project the quality of the environment could be degraded during construction and habitat for wildlife species could be reduced temporarily due to grading activities and modifications to the natural environment.

Subsection 3.3.3 describes potentially significant impacts to biological resources. Construction controls described in Section 2, Project Description would help to eliminate potentially significant impacts to biological resources. **Mitigation measures described in subsection 3.3.5 would reduce these potentially significant impacts to a less than significant level with mitigation implementation.**

Impact MFS-2 Under the Project unknown cultural resources which are important examples of major periods of California history or prehistory could be eliminated during construction and grading activities.

Subsection 3.4.3 describes potentially significant impacts to cultural resources. **Mitigation measures described in subsection 3.4.5 would reduce potentially significant impacts to a less than significant level with mitigation implementation.**

CEQA Checklist Question XVII.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, and the effects of probable future projects)?

Answer: Less than significant with mitigation incorporation

Cumulative considerable impacts from the Project to biological resources and noise would occur. However, it has been determined that the overall cumulative effects from the Sierra Tract ECP Phase 3 and 4 combined with other cumulative projects to biological resources and noise would be less than significant. **Mitigation measures are identified for biological resources impacts which helps to reduce the level of impact.**

CEQA Checklist Question XVII.c)

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

Answer: No impact.

No significant unavoidable environmental effects of the Project were identified in this environmental analysis and no substantial adverse effects on human beings, either directly, or indirectly, would occur.

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Section 4

Table of Mitigation Measures and Monitoring Responsibilities

The Project would not result in any significant permanent or temporary adverse impacts to the environment. The initial study identified potentially significant impacts that can be mitigated to a less than significant level with the mitigation for biological resources, and cultural resources. The mitigation measures are listed in Table 4-1. The table also describes the responsibility of ensuring implementation of the required mitigation measures and monitoring.

**Table 4-1
Environmental Commitments/Mitigation Measures and Mitigation Monitoring Reporting Program
for the Sierra Tract ECP Phase 3 and 4**

Potential Significant Impacts	Environmental Commitment/Mitigation Required	Implementing Responsibility	Monitoring Responsibilities	Timing and Frequency
Aesthetics				
No potentially significant impacts	None		None	
Air Quality				
No potentially significant impacts	None		None	
Biological Resources				
Impact BIO-1 During construction, the Project could adversely affect special status species as listed on Table 3.3-2 or migratory birds and/or their habitat during grading activities and tree removal.	Mitigation BIO-1 Prior to project implementation, protocol-level surveys for willow flycatchers will be conducted in suitable riparian/meadow habitat (situated in the undeveloped western portions of the Project area). Work within the City right of way will not require surveys. Only work beyond the subdivision within 300 feet of the habitat will require the surveys. If willow flycatchers are detected, a Limited Operating Period (LOP) between June 1 and August 31 will be imposed. The location of the LOP will be determined by the consulting wildlife biologist based on site conditions and the type of Project activity. If no surveys are conducted, an LOP will automatically be implemented in suitable habitat within 300 feet of any Project activities. Protocol level surveys require 2 visits. One must be conducted between June 15-25, while the second can be conducted between June 1 and June 14 or between June 26 and July 15. If snow is gone and spring conditions prevail, the first survey can be conducted the first week of June and the second can be completed the week of June 15.	The City of South Lake Tahoe or its contractor	Biologist consulting for the City of South Lake Tahoe and/or TRPA or USFS LTBMU biologist	Prior to construction

Table 4-1 Environmental Commitments/Mitigation Measures and Mitigation Monitoring Reporting Program for the Sierra Tract ECP Phase 3 and 4				
Potential Significant Impacts	Environmental Commitment/Mitigation Required	Implementing Responsibility	Monitoring Responsibilities	Timing and Frequency
	Mitigation BIO-2 Any sighting of listed species, sensitive species, or location of nest or dens of these species will be reported to the City Planning Department. These nests, dens, or plant locations would be protected in accordance with the Environmental Threshold Carrying Capacities for the Lake Tahoe Region guidelines (TRPA 1982).	The City of South Lake Tahoe or its contractor	The City of South Lake Tahoe or its contractor	During construction
	Mitigation BIO-3 If special status wildlife species with agency-mandated protected activity centers and LOPs are found breeding in the project area, a protected activity center will be delineated and a limited operating period will be implemented.	The City of South Lake Tahoe or its contractor	The City of South Lake Tahoe or its contractor	During construction
	Mitigation BIO-4 Any construction activities that require remove of trees and shrubs will be conducted outside the avian nesting season (April 1 through August 15) unless a qualified biologist determines that no nesting is occurring. The chronology of each year's nesting could vary due to snow loads. If vegetation removal and/or ground disturbance occurs during the avian nesting season, a qualified biologist will conduct nesting bird surveys of the areas of vegetation and tree removal out to 150 feet to ensure that breeding birds are not adversely affected. To comply with the MBTA, any location containing an active nest will not be disturbed until the young have fledged or it is determined that the nest is inactive. The first survey will be conducted 15 days prior to construction activity. A second survey will be conducted 72 hours prior to construction.	The City of South Lake Tahoe or its contractor	Biologist consulting for the City of South Lake Tahoe and/or TRPA or USFS LTBMU biologist	Prior to construction

**Table 4-1
Environmental Commitments/Mitigation Measures and Mitigation Monitoring Reporting Program
for the Sierra Tract ECP Phase 3 and 4**

Potential Significant Impacts	Environmental Commitment/Mitigation Required	Implementing Responsibility	Monitoring Responsibilities	Timing and Frequency
Cultural Resources				
Impact CR-1 During grading activities the Project could impact unknown or buried paleontological resources on site or unique geologic features.	Mitigation CR-1 The Washoe tribe shall be invited to spot check the project during construction. Selective archaeological monitoring by a qualified archaeologist and/or Native American consultant is recommended during project ground disturbance activities, especially in areas closest to the Upper Truckee River. In the event of fortuitous discoveries of buried or concealed heritage resources, ground disturbance activities shall cease in the area of the find and the project sponsor shall consult a qualified archaeologist for recommended procedures.	City of South Lake Tahoe or its construction manager	Washoe Tribe archaeologist	During construction
Impact CR-2 During grading activities the Proposed Project could disturb unknown human remains interred outside of formal cemeteries.	Mitigation CR-2 If human remains are inadvertently discovered, California law requires that work must stop immediately and the County coroner must be notified. If the remains are Native American the coroner shall notify the members of the Washoe Tribe to insure that proper treatment is given the burial site.	City of South Lake Tahoe or its construction manager	Contractor	During construction

Table 4-1 Environmental Commitments/Mitigation Measures and Mitigation Monitoring Reporting Program for the Sierra Tract ECP Phase 3 and 4				
Potential Significant Impacts	Environmental Commitment/Mitigation Required	Implementing Responsibility	Monitoring Responsibilities	Timing and Frequency
Geology and Soils				
No potentially significant impacts	None		None	
Hazards and Hazardous Materials				
No potentially significant impacts	None		None	
Hydrology and Water Quality				
No potentially significant impacts	None		None	
Land Use and Planning				
No potentially significant impacts	None		None	
Noise				
No potentially significant impacts	None		None	
Recreation				
No potentially significant impacts	None		None	
Transportation and Traffic				
No potentially significant impacts	None		None	

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Section 5

List of Preparers

<i>Table 5-1</i>	
<i>List of CEQA Document Preparers</i>	
<i>Name/Expertise</i>	<i>Role in Preparation</i>
<i>CDM Smith</i>	
Stefan Schuster, P.E. - Project Manager	Technical Review
Suzanne Wilkins, AICP - Project Planner	Initial Study and Mitigated Negative Declaration
<i>Other Consultants</i>	
Susan Lindstrom, Ph.D. - Archaeologist	Cultural Resources
<i>Wildlife Resource Consultants</i>	
Susan Fox - Biologist	Biological Resources – Wildlife and Vegetation
<i>Western Botanical Services</i>	
Julie Etra - Botanist	Biological Resources – Vegetation and Wetlands

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Section 6

References

Association of Environmental Professionals (AEP), *Final Alternative Approaches to Analyzing Greenhouse Gas Emissions and Global Climate Change in CEQA Documents*, June 29, 2007.

California Air Resources Board (CARB). 2007. *California 1990 Greenhouse Gas Emissions Level and 2020 Emissions Limit*. November 16, 2007.

California Air Resources Board (CARB). 2008. *Climate Change Proposed Scoping Plan: A Framework for Change*. October 2008.

California Air Resources Board (CARB). 2012a. *State Standard Area Designations*. Accessed on: September 24, 2012. Available at: <http://www.arb.ca.gov/desig/statedesig.htm>

California Department of Toxic Substances Control EnviroStor (EnviroStor) website. 2012. Database. Accessed on: September 26, 2012. Available at: <http://www.envirostor.dtsc.ca.gov/public/>

California Energy Commission on January 23, 2007 in *Revisions to the 1990 to 2004 Greenhouse Gas Emissions Inventory Report, (CEC-600-2006-013)*, December 2006.

Carroll, Scott (Personal Communication). Email dated October 4, 2012 from Scott Carroll to Suzanne Wilkins, CDM Smith in Truckee, California.

CDM Smith. September 2007. *Sierra Tract Erosion Control Project Phase 3, Existing Conditions Analysis Memorandum Addendum*.

CDM Smith. 2012. *Sierra Tract Erosion Control Project Phase 3 and 4, Addendum Alternatives Formulation and Evaluation Memoranda*. October 2012

CDM Smith. March 2013. *Sierra Tract Erosion Control Project Phase 3 and 4, Draft Recommended Alternative Project Report*.

CEQAnet website. 2012. CEQAnet Query, Upper Truckee River and South Tahoe Greenway. Accessed on September 20, 2012. Available at: <http://www.ceqanet.ca.gov/QueryForm.asp>

City of South Lake Tahoe (City). January 2008. *City of South Lake Tahoe City Code*.

City of South Lake Tahoe (City). 2011a. *Bijou Area Erosion Control Project – Phase 1 Mitigated Negative Declaration (CEQA) and Initial Environmental Checklist (TRPA)*. August 2011.

City of South Lake Tahoe (City). 2011b. *City of South Lake Tahoe General Plan Policy Document*. Adopted on May 17, 2011. Accessed on: September 26, 2011. Available at: <http://www.cityofslt.us/index.aspx?nid=575>

El Dorado County Air Pollution Control District. 2002. *Guide to Air Quality Assessment: Determining Significance of Air Quality Impacts Under the California Environmental Quality Act*. First Edition.

Friedman, Shannon, Personnel Communication, TRPA – Associate Environmental Specialist II. September 27, 2012.

Hussong Johnson, Sara (Personnel Communication), Director of Engineering. Meeting on September 27, 2012 at the City of South Lake Tahoe Offices in South Lake Tahoe, CA.

K.B. Foster Civil Engineering, Inc. 2003. *Sierra Tract Erosion Control Project Conceptual Plan Existing Conditions Memorandum*.

Lahontan RWQCB. 1995. *Water Quality Control Plan for the Lahontan Region*.

Lahontan Regional Water Quality Control Board (RWQCB) Geotracker (Geotracker) website. 2012 Accessed on: September 26, 2012. Available at: <http://geotracker.waterboards.ca.gov/>

Lindstrom, Susan. November 2004. *Heritage Resource Inventory Sierra Tract Project Erosion Control Project*.

Northwest Hydraulics Consultants (NHC). 2010. Memorandum: Sierra Tract Phase 3 and 4 PLRM Analysis. July, 2010.

Saucedo, G.J. 2005. *Geologic Map of the Lake Tahoe Basin, California and Nevada*.

South Lake Tahoe Airport Land Use Commission (ALUC). 2007. *Lake Tahoe Airport, Comprehensive Land Use Plan*. May 2007.

Stormwater Quality Improvement Committee. July 2004, *Formulation and Evaluation of Alternatives for Water Quality Improvement Projects*.

Tahoe Regional Planning Agency (TRPA), *Lake Tahoe Basin Scenic Resources Inventory*, Undated.

Tahoe Regional Planning Agency (TRPA). 1982. *Environmental Threshold Carrying Capacities*.

Tahoe Regional Planning Agency (TRPA). 2001. *Environmental Improvement Program, Volume 2 Master List of Threshold Needs*. April 25, 2001. Accessed on: September 20, 2012. Available at: <http://www.trpa.org/documents/docdownlds/EIP/volume2.pdf>

TRPA. 2002a. 2001 Threshold Evaluation Report.

TRPA. 2002b. *Plan Area Statement 105 – Sierra Tract*. May 22, 2002.

TRPA. 2004. *Plan Area Statement 103 – Sierra Tract-Commercial*. May 26, 2004.

TRPA. February 2013a. *TRPA Code of Ordinances*.

TRPA website. 2013b. Regional Plan and Regulations. Available at:
<http://www.trpa.org/default.aspx?tabindex=2&tabid=171>. Accessed on: April 22, 2013.

U.S. Environmental Protection Agency (USEPA) Website. 2012. The Plain English guide to the Clean Air Act. March 6, 2012. Accessed on: September 24, 2012. Available at: <http://www.epa.gov/air/caa/peg/cleanup.html>

U.S. Forest Service (USFS), Lake Tahoe Basin Management Unit (LTBMU) website. 2012. Upper Truckee River (Sunset Reach) Restoration. Accessed on: September 20, 2012. Available at:
http://www.fs.usda.gov/detail/ltbmu/landmanagement/projects/?cid=fsm9_046768

Western Botanical Services. 2008. Wetlands Delineations Sierra Tract Erosion Control Project Phase 3. January 7, 2008.

Western Botanical Services. July 2007. *Existing Conditions Analysis, Sierra Tract Erosion Control Project Phase III*.

Western Botanical Services. November 2012. *Invasive, Noxious Weed and TES Vegetation Survey, Sierra Tract Erosion Control Project phase 3 and 4*.

Wildlife Resource Consultants. October 2006. *Biological Evaluation/Biological Assessment for Sierra Tract Erosion Control Project*.

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Appendix A

Project Impacts CEQA Checklist

The California Environmental Quality Act (CEQA) checklist was used to identify potential project impacts based on the criteria identified in section 3. The following pages include the completed Environmental Checklist Form with information to support each “No Impact” answer to the checklist questions below the question. Questions answered as Less Than Significant, Less Than Significant with Mitigation Incorporation, or Potentially Significant Impact are addressed in Section 3 of the CEQA environmental document. CEQA requires a brief explanation of all answers except for those answered as “No Impact.” CEQA also requires information sources supporting a “No Impact” answer. Information sources are included for each “No Impact” answer as well as brief explanations of all other answers.

Environmental Checklist

1.	Project title: Sierra Tract Erosion Control Project 3and 4		
2.	Lead agency name and address: City of South Lake Tahoe 1052 Tata Lane, South Lake Tahoe, CA 96150		
3.	Contact person and phone number: <u>Stan Hill, Engineer (530) 542-6039</u>		
4.	Project location: South Lake Tahoe, California		
5.	Project sponsor's name and address: City of South Lake Tahoe 1052 Tata Lane, South Lake Tahoe, CA 96150		
6.	General plan designation: PAS 103 Sierra Tract Commercial and PAS 105 Sierra Tract	7.	Zoning: Commercial & Residential
8.	Description of project: (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.) See Section 2 Project Description in <i>Sierra Tract Erosion Control Project Phase 3 and 4, CEQA Initial Study/Mitigated Negative Declaration</i> .		
9.	Surrounding land uses and setting: Briefly describe the project's surroundings: Commercial land uses including retail, tourist accommodation and service entities along Lake Tahoe Boulevard (U.S. Highway 50). A mix of single family and multi-family residential.		
10.	Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.) Tahoe Regional Planning Agency, California Tahoe Conservancy, Regional Water Quality Control Board, Lahontan, and U.S. Forest Service		

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

	Aesthetics		Agriculture and Forestry Resources		Air Quality
	Biological Resources		Cultural Resources		Geology /Soils
	Greenhouse Gas Emissions		Hazards & Hazardous Materials		Hydrology / Water Quality
	Land Use / Planning		Mineral Resources		Noise
	Population / Housing		Public Services		Recreation
	Transportation/Traffic		Utilities / Service Systems		Mandatory Findings of Significance

DETERMINATION: (To be completed by the Lead Agency)

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 is required.
	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
	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

EVALUATION OF ENVIRONMENTAL IMPACTS:

- 1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a) Earlier Analysis Used. Identify and state where they are available for review.
 - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9) The explanation of each issue should identify:
 - a) the significance criteria or threshold, if any, used to evaluate each question; and
 - b) the mitigation measure identified, if any, to reduce the impact to less than significance

Issues:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
I. AESTHETICS -- Would the project:				
a) Have a substantial adverse effect on a scenic vista? <i>No Impact. The project area is located within a residential subdivision with commercial properties along Lake Tahoe Boulevard. The project area does not provide any significant scenic vistas to Lake Tahoe. All improvements are low profile improvements and will not have any affect on a scenic vista.</i>				X
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? <i>No Impact. The Project is not proposed within a state scenic highway according to the Project area map.</i>				X
c) Substantially degrade the existing visual character or quality of the site and its surroundings? <i>See section 3.1 of the CEQA Initial Study/Mitigated Negative Declaration</i>		X		
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? <i>No Impact. The project does not include any new sources of light or glare in the project description or on the project plans.</i>				X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
<p>II. AGRICULTURE AND FORESTRY RESOURCES -- In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:</p>				
<p>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? <i>No Impact. This land is not located on Prime Farmland, Unique Farmland or Farmland of Statewide Importance as shown on California Resources Agency maps.</i></p>				X
<p>b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? <i>No Impact. See answer II.a above.</i></p>				X
<p>c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? <i>No Impact. Existing forest land will not be rezoned.</i></p>				X
<p>d) Result in the loss of forest land or conversion of forest land to non-forest use? <i>No Impact. Forest land will not be lost or converted.</i></p>				X
<p>c) 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? <i>No Impact. See answers II.a and II.d above.</i></p>				X
<p>III. AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:</p>				
<p>a) Conflict with or obstruct implementation of the applicable air quality plan? <i>No Impact. The Project would not conflict with the implementation of any applicable air quality plans. Applicable air quality plans include the TRPA Regional Plan, TRPA Regional Transportation Plan, Federal Clean Air Act, and Sacramento Regional Clear Air Plan (adopted by El Dorado County). Dust construction controls are described in Section 2 to address fugitive dust issues. Emissions from the use of heavy equipment and traffic to and from the site are minimal and not significant.</i></p>				X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation? <i>See Section 3.2, Air Quality, in the CEQA Initial Study/Mitigated Negative Declaration</i>			X	
c) 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)? <i>See Section 3.2, Air Quality, in the CEQA Initial Study/Mitigated Negative Declaration</i>			X	
d) Expose sensitive receptors to substantial pollutant concentrations? <i>See Section 3.2, Air Quality in the CEQA Initial Study/Mitigated Negative Declaration</i>			X	
e) Create objectionable odors affecting a substantial number of people? <i>No Impact. This project is designed to treat stormwater runoff and will not create stationary or long-term sources of odor such as a wastewater treatment plant. Any odors attributed to construction emissions would be short-term and rapidly dissipated by air movements.</i>				X
IV. BIOLOGICAL RESOURCES -- Would the project:				
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 and Wildlife or U.S. Fish and Wildlife Service? <i>See Section 3.3, Biological Resources, in the CEQA Initial Study/Mitigated Negative Declaration</i>		X		
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 California Department of Fish and Wildlife or US Fish and Wildlife Service? <i>See Section 3.3, Biological Resources, in the CEQA Initial Study/Mitigated Negative Declaration</i>			X	
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? <i>The project is avoiding disturbance to federally protected wetlands.</i>				X
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? <i>No Impact. No wildlife corridors, migratory fish, or wildlife species were identified within the Project area according to the Biological Assessment/Biological Survey for the Sierra Tract Erosion Control Project report (Wildlife Resource Consultants 2006) and later surveys (Western Botanical Services 2007 and 2012).</i>				X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? <i>See Section 3.3, Biological Resources, in the CEQA Initial Study/Mitigated Negative Declaration</i>			X	
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? <i>No Impact. The Project is not located within any conservation plan areas. The project is located in an urban subdivision and commercial project area fronting U.S. Highway 50.</i>				X
V. CULTURAL RESOURCES -- Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in ' 15064.5? <i>No Impact. Two resources (isolated finds) were identified and recorded within the Project area by Susan Lindstrom according to Heritage Resource Inventory Sierra Tract Project Erosion Control Project, November 2004. In this report, Ms. Lindstrom stated that the isolated finds do not meet criteria for National Register of Historic Properties (NRHP) or California Register of Historic Resources (CRHR).</i>				X
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to ' 15064.5? <i>See answer V.a above.</i>				X
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? <i>See Section 3.4, Cultural Resources, in the CEQA Initial Study/Mitigated Negative Declaration</i>		X		
d) Disturb any human remains, including those interred outside of formal cemeteries? <i>See Section 3.4, Cultural Resources, in the CEQA Initial Study/Mitigated Negative Declaration</i>		X		
VI. GEOLOGY AND SOILS -- Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. <i>No Impact. The project does not propose any new housing or structures that would result in increased exposure for people to earthquake risks beyond existing conditions..</i>				X
ii) Strong seismic ground shaking? <i>No Impact. The Project does not propose any construction activity that would qualify as strong seismic ground shaking.</i>				X
iii) Seismic-related ground failure, including liquefaction? <i>No Impact. The Project does not propose any construction activity that will result in seismic-related ground failure or liquefaction, nor does is</i>				X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
<i>propose any new housing or structures that would result in increased risk to people from seismic related ground failure..</i>				
iv) Landslides? <i>No Impact. Due to the topography of the project area and the surrounding area, no danger from landslides exists.</i>				X
b) Result in substantial soil erosion or the loss of topsoil? <i>See Section 3.5, Geology and Soils, in the CEQA Initial Study/Mitigated Negative Declaration.</i>			X	
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? <i>No Impact. According to the results of CDM Smith's geotechnical study and potholing investigations the site appears to be suitable for construction of the proposed improvements.</i>				X
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? <i>No Impact. According to the results of CDM Smith's geotechnical study and potholing investigations the site appears to be suitable for construction of the proposed improvements.</i>				X
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? <i>No Impact. The project does not propose the construction of any septic tanks or waste water disposal systems.</i>				X
VII. GREENHOUSE GAS EMISSIONS Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? <i>See Section 3.6, Greenhouse Gas Emissions, in the CEQA Initial Study/Mitigated Negative Declaration.</i>			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases (GHGs)? <i>See Section 3.6, Greenhouse Gas Emissions, in the CEQA Initial Study/Mitigated Negative Declaration.</i>			X	
VIII. HAZARDS AND HAZARDOUS MATERIALS Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? <i>See Section 3.7, Hazards and Hazardous Materials, in the CEQA Initial Study/Mitigated Negative Declaration.</i>			X	
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? <i>See Section 3.7, Hazards and Hazardous Materials, in the CEQA Initial Study/Mitigated Negative Declaration.</i>			X	

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No 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? <i>No Impact. The project is not located within 1/4 mile of an existing or proposed school.</i>				X
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? <i>No impact. A search was conducted on the California Department of Health Services EnviroStor database and the Lahontan Regional Water Quality Control Board's Geotracker database for hazardous sites. None were listed to be within the project area (EnviroStor and Geotracker 2012).</i>				X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? <i>No Impact. The Project does not affect the hazard potential from the location of the public airport. There will be no increase in population to the Project area resulting from the project.</i>				X
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? <i>No Impact. No private airstrip is located near the project area.</i>				X
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? <i>No Impact. The project is to provide water quality improvements to the area. Emergency vehicles will be given access, if required, through the project area.</i>				X
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? <i>No Impact. The project is located in an urbanized area and all construction equipment will be restricted to the urbanized area.</i>				X
VIII. HYDROLOGY AND WATER QUALITY -- Would the project:				
a) Violate any water quality standards or waste discharge requirements? <i>See Section 3.8, Hydrology and Water Quality, in the CEQA Initial Study/Mitigated Negative Declaration.</i>			X	
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? <i>No Impact. The Project is designed to allow stormwater runoff to infiltrate to groundwater. During construction, no interference with groundwater is expected due to the depth of proposed structures which is higher than</i>				X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
<i>groundwater levels as determined during geotechnical investigations (see Subsection 3.5.2.1).</i>				
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site? <i>See Section 3.8, Hydrology and Water Quality, in the CEQA Initial Study/Mitigated Negative Declaration.</i>			X	
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site? <i>See Section 3.8, Hydrology and Water Quality, in the CEQA Initial Study/Mitigated Negative Declaration.</i>			X	
e) 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? <i>No Impact. The Project includes design of a stormwater drainage system and source control measures to reduce the amount of polluted runoff.</i>				X
f) Otherwise substantially degrade water quality? <i>See Section 3.8, Hydrology and Water Quality, in the CEQA Initial Study/Mitigated Negative Declaration.</i>			X	
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? <i>No Impact. The project does not propose any new housing.</i>				X
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows? <i>No Impact. The project is not located within a 100-year flood plain.</i>				X
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam? <i>No Impact. The Project is not located within the 100-year flood zone. No levees or dams are located in the project area.</i>				X
j) Inundation by seiche, tsunami, or mudflow? <i>No Impact. The project does not propose any new development or modifications that could be affected by a seiche, tsunami or mudflow.</i>				X
IX. LAND USE AND PLANNING - Would the project:				
a) Physically divide an established community? <i>No Impact. The project does not propose any improvements that could physically divide the community.</i>				X
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?			X	

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
<i>See Section 3.9, Land Use and Planning, in the CEQA Initial Study/Mitigated Negative Declaration.</i>				
c) Conflict with any applicable habitat conservation plan or natural community conservation plan? <i>No Impact. The Project area is not located within any habitat conservation plan or natural community conservation plan. areas</i>				X
X. MINERAL RESOURCES -- Would the project:				
a) 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? <i>No Impact. No mineral resources are located in the Project area.</i>				X
b) 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? <i>No Impact. The Project does not propose the use of an important mineral resource. No mineral recovery site is located in the Project area.</i>				X
XI. NOISE -- Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? <i>No Impact. Construction noise is exempt from noise limitation regulations according to the TRPA Code of Ordinances (adopted by the City of South Lake Tahoe) as long as construction activities are completed between 8:00 am and 6:30 pm Monday through Friday.</i>				X
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? <i>See Section 3.10, Noise, in the CEQA Initial Study/Mitigated Negative Declaration.</i>			X	
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? <i>No Impact. Any increase to ambient noise levels would be temporary during construction. Construction controls are proposed and discussed within the Section 2, Project Description.</i>				X
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? <i>See Section 3.10, Noise, in the CEQA Initial Study/Mitigated Negative Declaration.</i>			X	
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 expose people residing or working in the project area to excessive noise levels? <i>No Impact. The project would not result in excessive noise beyond that required for construction.</i>				X
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
<i>No Impact. The project is not within the vicinity of a private airstrip.</i>				
XII. POPULATION AND HOUSING -- Would the project:				
a) Induce substantial 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)? <i>No Impact. The Project is a stormwater drainage project and has no effect on population growth.</i>				X
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? <i>No Impact. The Project is a stormwater drainage project and will have no effect on housing.</i>				X
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? <i>No Impact. The Project is a stormwater drainage project and will have no effect on housing.</i>				X
XIII. PUBLIC SERVICES				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection? <i>No Impact. The Project is an erosion control project and would not increase demand for new fire protection facilities.</i>				X
Police protection? <i>No Impact. The Project is an erosion control project and would not increase demand for new police protection facilities.</i>				X
Schools? <i>No Impact. The Project is an erosion control project and will not increase demand for new schools.</i>				X
Parks? <i>No Impact. The Project is an erosion control project and will not increase demand for new parks.</i>				X
Other public facilities? <i>No Impact. The Project is an erosion control project and will not increase demand for other public facilities.</i>				X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
XIV. RECREATION --				
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? <i>No Impact. The project is an erosion control project and would not increase the use of any recreational facilities in the area.</i>				X
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? <i>No Impact. The project is an erosion control project and does not include any recreational facilities or create demand for the expansion of recreational facilities.</i>				X
XV. TRANSPORTATION/TRAFFIC -- Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measure of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? <i>No Impact. The Project would not increase traffic which is substantial in relation to the existing traffic load. The Project is an erosion control project and any increase in traffic would be during construction due to construction related activities and would not be substantial. The project would have no effect to mass transit or non-motorized travel.</i>				X
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by county congestion management agency for designated roads or highways? <i>No impact. The Project will not impact the level of service standard established by the county congestion management agency for designed roads or highways.</i>				X
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? <i>No Impact. The Project would not affect air traffic patterns or increase traffic levels or change in location in traffic levels.</i>				X
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? <i>See Section 3.12, Transportation and Traffic, in the CEQA Initial Study/Mitigated Negative Declaration.</i>			X	
e) Result in inadequate emergency access? <i>During construction, traffic control will be implemented while working within City and State right of ways. Emergency vehicles will be provided access at all times.</i>				X
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities? <i>No Impact. The Project is an erosion control project and will not conflict</i>				X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
<i>with any adopted policies, plans, or programs supporting alternative transportation nor will it decrease the performance or safety of such facilities.</i>				
XVI. UTILITIES AND SERVICE SYSTEMS – Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? <i>No Impact. The Project will not be discharging any water to the sewer system.</i>				X
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? <i>No Impact. The project is an erosion control project and does not increase demand for wastewater treatment.</i>				X
c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? <i>No Impact. The project description includes the construction of new stormwater drainage facilities and environmental effects have been found to not be significant.</i>				X
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? <i>The project may need to water vegetation while it is being established. However, adequate water supplies are available through the public water system.</i>				X
e) 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? <i>No Impact. The project will not require a will serve determination from the wastewater treatment provider.</i>				X
f) Be served by a landfill with sufficient permitted capacity to accommodate the project ' s solid waste disposal needs? <i>No Impact. Solid waste is required to be hauled to a City approved dump site which has sufficient capacity available.</i>				X
g) Comply with federal, state, and local statutes and regulations related to solid waste? <i>No Impact. The proposed project would comply with all federal, state, and local statutes and regulations related to solid waste.</i>				X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
XVII. MANDATORY FINDINGS OF SIGNIFICANCE --				
<p>a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, 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?</p> <p><i>See Section 3.13, CEQA Mandatory Findings of Significance, in the CEQA Initial Study/Mitigated Negative Declaration.</i></p>		X		
<p>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, and the effects of probable future projects)?</p> <p><i>See Section 3.13, CEQA Mandatory Findings of Significance, in the CEQA Initial Study/Mitigated Negative Declaration.</i></p>		X		
<p>c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?</p> <p><i>No Impact. No significant unavoidable environmental effects of the proposed project were identified in this environmental analysis. Therefore, no substantial adverse effects on human beings, either directly, or indirectly, would occur.</i></p>				X



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