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MITIGATED NEGATIVE DECLARATION

FINDINGS

In accordance with the County of El Dorado (County) Ordinances regarding implementation of the California Environmental Quality Act (CEQA), the County, Community Development Agency, Transportation Division (Transportation), Tahoe Engineering (TE) has prepared an Initial Study to assess the project's potential effects on the environment and the significance of those effects. On the basis of that study the County hereby finds:

- The proposed project will not have a significant adverse effect on the environment; therefore, it does not require the preparation of an Environmental Impact Report and this **Negative Declaration** has been prepared.
- Although the proposed project could have a significant adverse effect on the environment, there will not be a significant adverse effect in this case because the County will adopt the Mitigation Monitoring and Reporting Program (Appendix B) that contains the mitigation measures necessary for the project to have a less than significant impact. A **Mitigated Negative Declaration** has thus been prepared.

Per Section 21082.1 of the CEQA Guidelines, TE has independently reviewed and analyzed the Initial Study and Proposed Mitigated Negative Declaration for the proposed project and finds that they reflect the independent judgment of TE. The environmental documents, which constitute the Initial Study and provide the basis and reasons for this determination are attached and/or referenced herein and are hereby made a part of this document.

Per Section 15072 (f) (5) of the CEQA Guidelines, the project site is not on any list compiled pursuant to Government Code section 65962.5 as a hazardous waste facilities, land designated as a hazardous waste property, or a hazardous waste disposal site.

PROJECT INFORMATION

Title: Tahoe Hills Erosion Control Project (JN 95171)	
Description: Construction of erosion control and water quality improvement facilities.	
Location: The Project area is located in eastern El Dorado County, within the Lake Tahoe Basin, near the west shore of Lake Tahoe. The Project is located in the southwestern section of the Lake Tahoe Basin in Section 29, Township 14 North, Range 17 East, Mount Diablo Meridian. The Project is bounded by State Route 89 to the north, Lake Tahoe to the east, and Lakeview Drive to the South.	
Owner/Applicant: County of El Dorado, Community Development Agency, Transportation Division, Tahoe Engineering	
Lead Agency: County of El Dorado, Community Development Agency, Transportation Division, Tahoe Engineering	
County Contact: Daniel Kikkert, Senior Civil Engineer	Phone: 530-573-7900
Address: 924 B Emerald Bay Road, South Lake Tahoe, CA 96150	

AVAILABILITY OF DOCUMENTS

The Initial Study for this Mitigated Negative Declaration is available for review at the County of El Dorado, Community Development Agency, Transportation Division, Tahoe Engineering office (Office), 924B Emerald Bay Road, South Lake

Tahoe, CA. The Office's hours of operation are from 8:00 am – 5:00 pm, Monday through Friday. The Office is closed on Saturday and Sunday. The document is also available for review at the County of El Dorado South Lake Tahoe Branch Library (Library) at 1000 Rufus Allen Blvd., South Lake Tahoe, CA. The Library's hours of operation are from 10:00 am – 8:00 pm on Tuesday and Wednesday; 10:00 am – 5:00 pm on Thursday, Friday, and Saturday. The Library is closed on Sunday and Monday. In addition to the South Lake Tahoe locations, the document is available at the California State Clearinghouse located at 1400 Tenth St., Sacramento, CA.

PROJECT DESCRIPTION

The County proposes to implement the Tahoe Hills Erosion Control Project (Project) during the 2015 construction season to assist with meeting the goals of the Tahoe Regional Planning Agency's (TRPA) Environmental Improvement Program (EIP). In 1997, the TRPA developed a Basin-wide EIP that defined various projects which, once implemented, would assist in attaining and maintaining TRPA Environmental Threshold Carrying Capacities (ETCC) as well as meet other federal and state environmental goals. TRPA has established thresholds for air quality, water quality, soil conservation, vegetation, noise, scenic resources, recreation, fisheries, and wildlife to address public health and safety of residents and visitors as well as the scenic, recreation, education, scientific, and natural values of the Lake Tahoe Basin. The Project is defined in the TRPA EIP as Project #01.01.01.30 (TRPA 2012; formerly #713, TRPA 2001). This Project is being designed and constructed with financial assistance from the State of California, the United States Forest Service - Lake Tahoe Basin Management Unit (USFS-LTBMU) and TRPA mitigation funds.

The Project site is an existing residential development on the west shore of Lake Tahoe bordered by State Route 89 on the north, Lake Tahoe on the east, and Lakeview Drive on the South (Figure 1). The overall goal of the Project is to design and implement erosion control and water quality improvement measures that will reduce the discharge of sediment and pollutants to Lake Tahoe from County administered rights-of-way (ROW). The Project will not change the use of the site or surrounding area. The Project will benefit the natural environment with the implementation of the proposed improvements. After Project completion, less sediment will enter Lake Tahoe from the Project area, thereby improving water quality in Lake Tahoe.

PROJECT BACKGROUND

TE utilized the Lake Tahoe Basin Storm Water Quality Improvement Committee's (SWQIC) *Formulating and Evaluating Alternatives for Water Quality Improvement Projects* document for guidance in selecting a preferred Project alternative. The Project Development Team (PDT) investigated a range of possibilities for the water quality improvements in the Project area. The process of evaluating and selecting a preferred alternative for this Project included the production and analysis of the following documents in 2013:

- Draft Project Feasibility Report
- Final Project Feasibility Report
- Preferred Alternative Memorandum

In October of 2013, TE completed a Draft Project Feasibility Report that investigated existing conditions and identified problem areas within the Project boundary as well as proposed alternative solutions within the Project boundary. The alternatives evaluated different water quality improvements and erosion control mitigation measures for the problem areas. After receiving feedback from the PDT and the public, TE completed a Final Project Feasibility Report in December 2013. Finally, based upon further feedback, TE completed a Preferred Alternative Memorandum in December 2013.

PROPOSED PROJECT

The proposed Project was selected by TE, the PDT and the public and is described in further detail below (outlined on Figure 2) and is a compilation of the most comprehensive design ideas for each street within the Project area which meets the goals and objectives of the EIP and the Project. All proposed measures will be in compliance with applicable laws and TRPA and the Lahontan Regional Water Quality Control Board (Lahontan) regulations.

The Project area contains an existing storm drain system which collects and conveys storm water through a series of basins, corrugated metal pipe (CMP) risers, drainage inlets, and reinforced concrete pipe (RCP) to an existing outfall

which drains into Lake Tahoe. This Project will be focused on reducing the peak flows and volumes as well as increasing the water quality of the runoff prior to reaching the outfall.

The proposed Project will implement source control, hydrologic control, and treatment options to meet the Project goals and objectives. The source control will be to provide erosion control measures on targeted eroding roadside slopes and shoulders as well as stabilizing roadside drainages. Hydrologic controls will be met through construction of roadside conveyance systems, replacement of ineffective culverts, drainage inlets, and construction of offline/inline infiltration systems which will work towards reductions in peak flows and volumes. Treatment measures will consist of infiltrating channels, a basin, and subsurface infiltration systems which will be designed to capture and infiltrate the first flush of storm water runoff.

Locations within the Project area requiring source control include isolated areas of bare eroding slopes and shoulders on Lakeridge, Sweetwater, and Bay View Drives. Rock slope protection and revegetation are proposed as stabilization measures. The locations to receive this treatment are within County ROW and a California Tahoe Conservancy (CTC) parcel (APN 16-562-09). To improve hydrologic conveyance, two new pipes are proposed to replace two existing damaged pipes at the intersection of Cedar Ridge/Bay View and Lakeview Drives. A hard-armored channel and seed and blanket-lined channel will stabilize an eroded roadside ditch on the west side of Lakeview Drive, between Cedar Ridge and Valley View Drives as well as provide for increased conveyance and infiltration. Flows from these channels will be conveyed to a sediment basin proposed on two USFS parcels (APN 16-321-18 and APN 16-321-17) at the intersection of Valley View and Lakeview Drives.

Ultimately, this basin will intercept runoff from the lower reach of Sweetwater Drive, the upper reach of Valley View Drive, and portions of Lakeview, Cedar Ridge, and Bay View Drives. With the exception of infiltration on the forested urban lots, this runoff pre-project receives no treatment prior to discharging into Lake Tahoe via the RCP storm drain system.

Overflow from the basin will be conveyed into an existing RCP storm drain system via a CMP riser connected to a drainage inlet. The proposed drainage inlet will replace an existing drainage inlet that currently does not provide for sediment capture or infiltration.

Runoff from the southeasterly leg of Lakeview Drive flows untreated down Valley View Drive before entering a lateral storm drain system crossing State Route 89, which connects to the RCP system. These flows will be intercepted in a drainage inlet installed on the northeasterly side of Lakeview Drive, above the Valley View Drive intersection, and conveyed via pipe into an existing basin at the south corner of the Valley View Drive/Lakeview Drive intersection.

A sediment trap is proposed on the northerly side of Valley View Drive, between Lakeview Drive and State Route 89, near an existing driveway. This sediment trap will infiltrate runoff and capture sediment, road sand, and debris prior to flows entering the RCP storm drain system at State Route 89. Another sediment trapping infiltration structure with an offline subsurface infiltration system will be installed at the south corner of the Valley View Drive/State Route 89 intersection. This structure will intercept and treat runoff from an existing pipe connecting two existing drainage inlets that were not constructed with treatment capabilities.

The roadway of Valley View Drive between Lakeview Drive and State Route 89 is steep and not crowned. Therefore, some runoff sheetflows across State Route 89 instead of being intercepted by the existing drainage inlets located on both sides of the road near the State Route. To rectify this, a portion of the AC pavement on Valley View Drive will be removed and replaced with new AC pavement crowned in such a manner that runoff sheetflowing down the road will be directed toward the existing curb and gutter and into the existing drainage inlets.

At the far east end of the Project area, sediment transport and erosion is occurring along Meeks Bay Avenue. Sediment trapping infiltration structures that will capture road sand and sediments and infiltrate runoff are proposed. These will function as stand-alone facilities with no downslope conveyance. Where the RCP storm drain system intersects Meeks Bay Avenue, sediment trapping infiltration structures with an offline subsurface infiltration system will be installed on a CTC parcel (APN 16-062-06) and within County ROW. A subsurface infiltration system is proposed between the two existing drainage inlets in Meeks Bay Avenue in order to maximize treatment of the runoff in the RCP storm drain system prior to discharge into Lake Tahoe.

The exposed section of the RCP near the lakeshore is showing signs of separation between the pipe joints. The proposed Project will involve resealing the pipe joints in place with a sealer suitable for RCP and stabilizing the existing system through tie-downs. Rock rip-rap will be placed on top of the pipe to protect the pipe as well as blend it in with the natural surroundings. The contractor will be required to access the area from Meeks Bay Ave using an existing 10 foot wide

drainage easement. Due to the limited width and height restrictions based on the existing homes abutting the easement, it is anticipated that a compact excavator (i.e. Bobcat) would be used to deliver material via the easement as well as using the equipment to assist with winching the section of pipe back into place and installing rock rip rap to cover. Once the pipe is sealed, tie-downs will be installed on each segment of pipe to keep them in place. Installation of the tie-downs would produce a minor amount excavated material (approximately 1 cubic yard), which would be off-hauled by the Contractor via the existing drainage easement. No excavating will be performed below the high water mark as a result of the proposed resealing and anchoring of the pipe.

It is estimated to take 40 working days for construction of the project with all work anticipated to be completed between May 1st and October 15th.

SUMMARY OF ENVIRONMENTAL ANALYSIS

The County CDA-TD-TE prepared an Initial Study to assess the proposed Project's potential effects on the environment and the significance of those effects. Based on the Initial Study, TE determined that the proposed Project will not have any significant environmental impacts with the implementation of mitigation measures. TE will adopt the mitigation measures located in the Mitigation Monitoring and Reporting Program. This conclusion is supported by the following findings:

- The proposed Project will have no adverse impacts in the areas of agriculture and forest resources, cultural resources, land use and planning, mineral resources, population and housing, recreation and public services.
- The proposed Project will have a less than significant impact in the areas of aesthetics, air quality, biological resources, geology and soils, hazards and hazardous materials, hydrology and water quality, noise, transportation and traffic, utilities and service systems, and greenhouse gas emissions. Discussion on each of these findings is provided below.

Aesthetics: A limited part of the Project area is visible from State Route 89, which is a designated Scenic Highway. The intent of the Project is to improve the quality of the area by stabilizing bare soil areas with native vegetation, by enhancing drainage features and by installing infiltration systems that will benefit the environment. While there will be temporary aesthetic impacts due to construction, there will be no long term degradation of aesthetic quality in the Project area and therefore the Project has a less than significant impact.

Air Quality: The proposed Project will have no long term impacts to air quality. Construction equipment may impact air quality for the short term during construction, but impacts are only temporary and will not result in a cumulative increase of criteria pollutants for which the Project region is in non-attainment nor will it expose sensitive receptors to substantial pollutant concentrations. The Project will not create objectionable odors affecting a substantial number of people. Proper Best Management Practices (BMPs), per TRPA's Handbook of BMPs, and construction controls shall be implemented to prevent the Project activities from violating air quality standards and therefore the Project has a less than significant impact.

Biological Resources: Field surveys and assessments were conducted within the Project survey area for special status botanical and wildlife species on September 26, 2011. The biological assessment surveys observed no federal or state-listed candidate, or proposed botanical or wildlife species in the Project study area. However, there are recorded occurrences of special status species immediately adjacent to the Project area. Suitable botanical habitat conditions do exist within 0.5 miles of the Project area and include Tahoe yellow cress and marsh skullcap. Suitable wildlife habitat conditions do exist within 0.5 miles of the Project area for American marten, American peregrine falcon, bald eagle, California spotted owl, great gray owl, mule deer, osprey, Sierra Nevada mountain beaver (formerly mountain beaver), Sierra Nevada yellow-legged frog, Sierra Nevada snowshoe hare, waterfowl, and willow flycatcher. A noxious weed survey was also conducted within the Project survey area on September 26, 2011. The survey identified a single noxious weed species within the Project area: cheatgrass (*Bromus tectorum*). A Noxious Weed Mitigation/Eradication Protocol (Protocol) will be implemented by TE as part of the Project which will help decrease habitat vulnerability to or below pre-construction levels. The Protocol includes pre-construction elements, such as treating existing noxious weed populations identified in the Project area, as well as during- and post-construction elements. Additionally, TE will specify weed-free seed mix and require all construction equipment be certified steam cleaned prior to accessing the site.

Cultural Resources: A cultural resource study, which included a literature search and an archaeological survey/inventory of the Project survey area, was completed on October 5 and 7, 2011. Twenty five previous cultural resources studies have been conducted in the vicinity of the Project area, including portions of the Area of Potential Effects (APE). No cultural resources have been previously recorded within the APE and none were identified within the APE during the pedestrian survey. The APE is considered to have a low sensitivity for the discovery of prehistoric, ethno historic, or historic cultural material, or subsurface deposits. Because of this, no additional cultural resources work for this Project is recommended. However, in the event that cultural resources are discovered during Project implementation, Project personnel shall halt all activities in the immediate area and notify a qualified archaeologist to determine the appropriate course of action.

Geology/Soils: The proposed Project involves earth-moving activities estimated at approximately 500 cubic yards (20,000 square feet), which will cause temporary soil erosion in the Project area. The County will prepare and require as part of the Contract Documents a Storm Water Pollution Prevention Plan (SWPPP) and a Revegetation Plan that the contractor must adhere to. The contractor will also implement temporary and permanent BMPs per the TRPA Handbook of BMPs prior to and during construction to prevent erosion within the Project area. Transportation will also perform two years of irrigation/vegetation establishment after the Project is complete to ensure that the site is restored to pre-project conditions, at a minimum. The SWPPP will also include and require appropriate measures to help sequence construction and minimize soil erosion through the use of approved sound construction practices to a less than significant level.

Hazards/Hazardous Materials: The proposed Project will have no long term impacts from hazards or hazardous materials in the Project area. During construction there is a risk of accidental fuel spills from construction equipment. The contractor will be required to prepare and adhere to a Spill Contingency Plan as part of the SWPPP and shall have spill prevention kits and other approved BMPs and construction controls available to prevent and/or contain any accidental spills.

Hydrology/Water Quality: The primary goal of the proposed Project is to benefit water quality by improving the existing storm water conveyance system and associated facilities in the Project area; thereby reducing the amount of pollutants entering Lake Tahoe. The Project will have no long term negative impacts on hydrology/water quality. Project construction related activities can pose short term water quality impacts during storm events or accidental fuel spills from construction equipment, however TE will prepare a SWPPP, Temporary Erosion Control Plan and a Revegetation Plan that the contractor must adhere to in order to address short term impacts associated with soil disturbance. At a minimum, this will include containing the site with proper BMPs, protecting existing storm water facilities, staging and storing materials properly, and sweeping daily. To ensure all mitigation measures are addressed and monitored, the contractor will prepare and adhere to the SWPPP in accordance with TRPA and Lahontan requirements for storm water pollution prevention.

Noise: Project construction will result in a temporary increase in ambient noise levels due to equipment noise and construction activities. Per TRPA Standard Permit Conditions, operation shall be restricted to the hours of 8:00 a.m. to 6:30 p.m. All equipment and vehicles used for Project construction shall have proper muffler devices and be tuned to the manufacturer's specification. The TE will advise potentially affected residents of the proposed construction activities including duration, schedule, and contacts for filing noise complaints. TE and/or contractor will respond to all noise complaints received within one working day and will work to resolve the issue immediately.

Recreation: The proposed Project will have no impact on recreation within the Project area.

Transportation/Traffic: There will be short term construction impacts on traffic from truck and daily work trips to the Project area. Traffic controls will only be implemented during work hours and when it is necessary to perform work, which will be outlined in a Traffic Control Plan prepared by and adhered to by the contractor. At no time will access for local residents, emergency vehicles, school buses, pedestrians, or bicyclists be prohibited, therefore the Project will have a less than significant impact on transportation and traffic.

Utilities and Service Systems: During Project construction, portions of the site may have exposed soil areas that, during a rain or high wind event or utility line breach, could cause minor erosion. Once construction is complete and the erosion control and water quality improvement measures are in place, surface runoff and erosion will be reduced and water quality will be improved. The contractor will prepare and adhere to a SWPPP and a Temporary Erosion Control Plan which will include TRPA approved BMPs to minimize soil erosion during construction to a less than significant level.

Greenhouse Gas Emissions: Climate change refers to long-term fluctuations in temperature, precipitation, wind, and other elements of Earth's climate system. Natural processes such as solar-irradiance variations, variations in Earth's orbital

parameters, and volcanic activity can produce variations in climate. The climate system can also be influenced by changes in the concentration of various gases in the atmosphere, which affect Earth's absorption of radiation.

During construction, the Project would temporarily cause direct greenhouse gas (GHG) emissions from the combustion of fossil fuels used to run construction equipment and vehicles, both onsite and offsite. These GHG emissions would be temporary and one-time emissions during the construction of the Project. Over its lifetime, the Project would directly and indirectly cause negligible GHG emissions from occasional maintenance and personal vehicle use. Therefore, TE's analysis focused on construction impacts estimated using TE's past project implementation database and the U.S. Environmental Protection Agency (USEPA) GHG emission factors for diesel fuel and gasoline combustion in construction equipment. TE has reviewed past construction logs for projects equivalent in size and scope to the Project to determine the typical number and type of vehicles that are actively working to construct the Project each day. Based on this analysis, the County has formulated the following assumptions:

- Fifteen workers per day, driving five vehicles to work an average of 40 miles round-trip per day
- Vehicles average 20 miles per gallon
- Twelve pieces of construction machinery per day
- Two trucks per day for hauling equipment or material averaging 3 hours per day
- Crews work eight hours per day with machinery running half that time (4 hours)
- Machinery burns an average of two gallons of diesel fuel per hour
- Hauling and dump trucks burn an average of six gallons of diesel fuel per hour
- Diesel fuel contributes approximately 22.5 lbs CO₂/gallon
- Gasoline contributes approximately 20 lbs CO₂/gallon
- The Project will be completed in 40 working days

Based on these assumptions, the Project would emit approximately 58 metric tons of CO₂ equivalents.

This estimated amount is negligible in comparison to the statewide inventory of 480,000,000 metric tons discussed below in the Initial Study (0.00000012 percent). The estimated amount is also significantly less than the San Luis Obispo Air Pollution Control District's (SLOAPCD) significance threshold of 1,150 metric tons of CO₂ equivalents. Because of this and the fact that direct onsite and offsite GHG emissions would terminate following completion construction work, the Project will have a less than significant impact on GHG emissions.

PUBLIC NOTICE

The comment period for this document closes on July 12, 2014. A copy of the Initial Study/Proposed Mitigated Negative Declaration is available for public review at the County of El Dorado, Transportation Division, Tahoe Engineering (Office) at 924 B Emerald Bay Road, South Lake Tahoe, CA 96150 between the hours of 8:00 am and 5:00 pm Monday through Friday. The Office is closed Saturday and Sunday. The document is also available for review at the County of El Dorado Library – South Lake Tahoe Branch at 1000 Rufus Allen Blvd., South Lake Tahoe, CA 96150 between the hours of 10:00 am and 8:00 pm Tuesday and Wednesday and 10:00 am and 5:00 pm Thursday through Saturday. The Library is closed on Sunday and Monday.

All parties providing written comments during this timeframe will be notified of the upcoming hearing before the Board of Supervisors. Additional information may be obtained by contacting the County of El Dorado, Community Development Agency, Transportation Division, Tahoe Engineering at (530) 573-7900 or 924 B Emerald Bay Road, South Lake Tahoe, CA 96150.

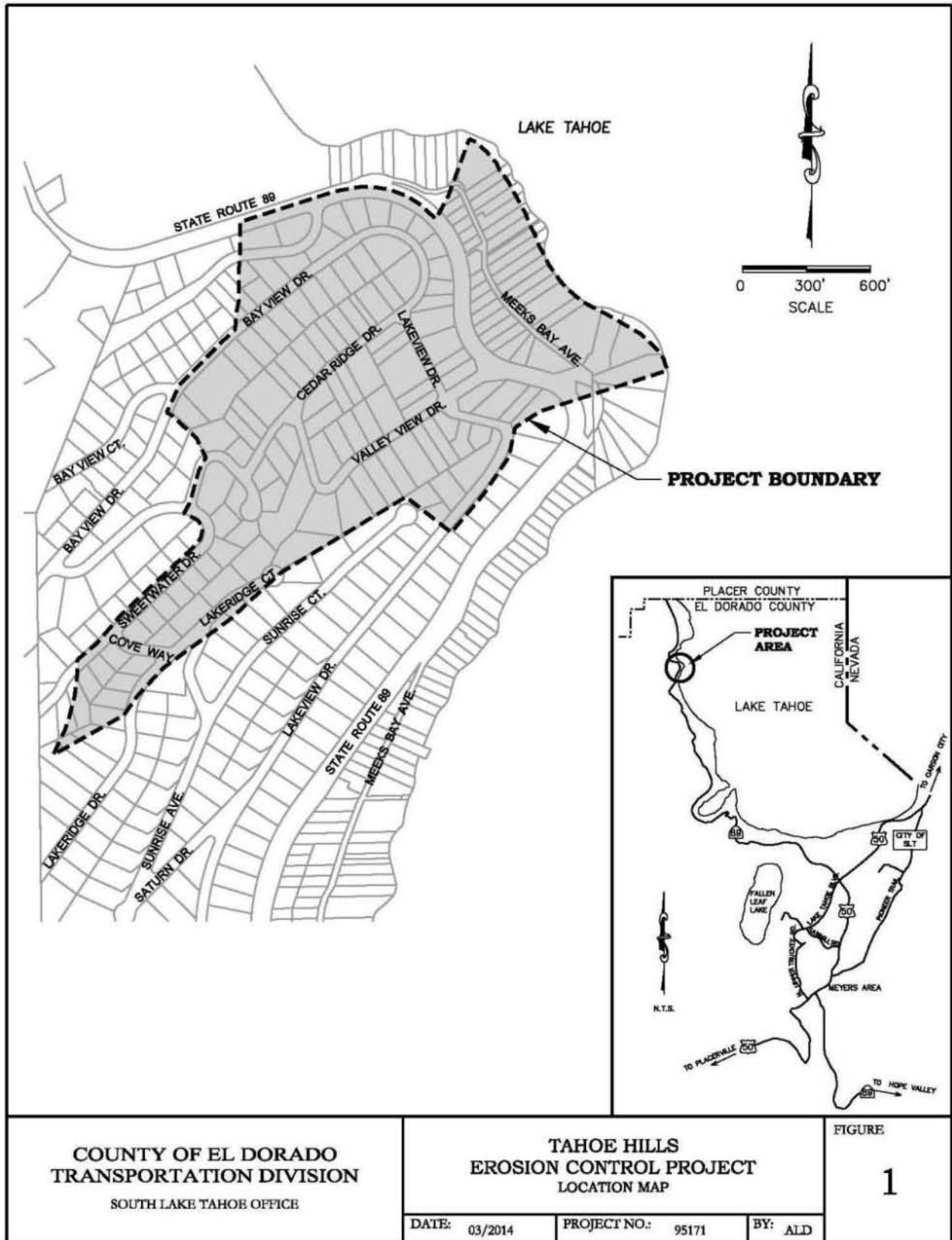
If you wish to appeal the appropriateness or adequacy of this document, address your written comments to our finding that the Project will not have a significant adverse effect on the environment: (1) identify the environmental effect(s), why they would occur, and why they would be significant, and (2) suggest any mitigation measures which you believe would eliminate or reduce the effect to an acceptable level. Regarding item (1) above, explain the basis for your comments and submit any supporting data or references.



Daniel Kikkert, Senior Civil Engineer
County of El Dorado—Lead Agency

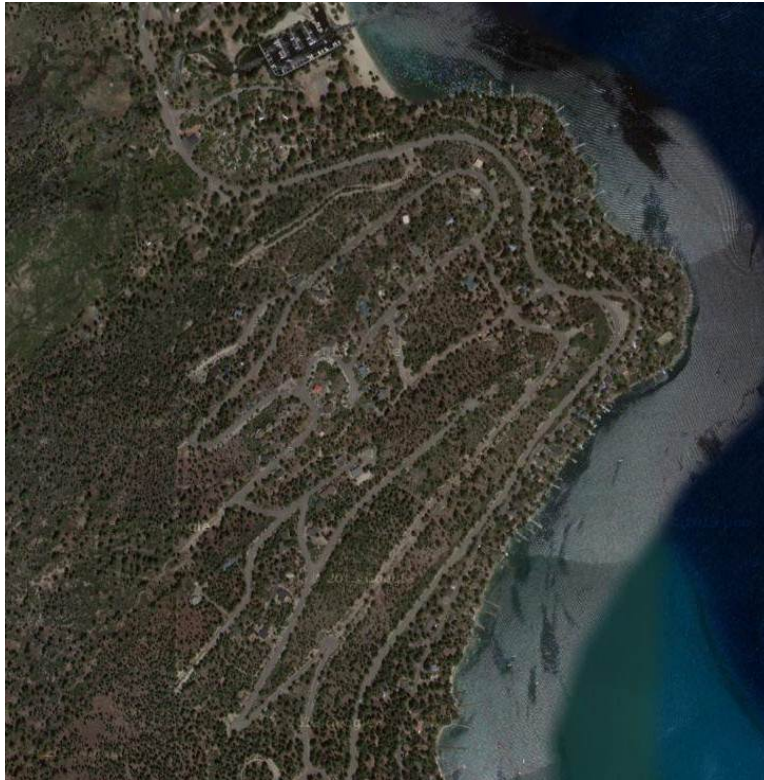
Recorder's Certification

FIGURE 1



**CEQA
INITIAL STUDY/
PROPOSED MITIGATED NEGATIVE DECLARATION**

**TAHOE HILLS
EROSION CONTROL PROJECT
EIP PROJECT # 01.01.01.30
JN 95171**



STATE CLEARINGHOUSE # 2014062044



Prepared by:

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

FINAL
July 2014

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FIGURES

Figure 1 – Project Location Map

Figure 2 – Preferred Alternative

Figure 15 –Problem Areas Map

Figure 16 – Alternative 1

Figure 17 – Alternative 2

Figure 18 – Alternative 3

APPENDICES

Appendix A: CEQA Checklist

Appendix B: Mitigation Monitoring and Reporting Program

Appendix C: Plant, Noxious Weed and Wildlife Tables

1.0 INTRODUCTION

The County of El Dorado (County), Community Development Agency, Transportation Division (Transportation), Tahoe Engineering (TE) prepared this Draft Initial Study to identify and assess the anticipated environmental impacts of the proposed Tahoe Hills Erosion Control Project (Project). This document has been prepared to satisfy the California Environmental Quality Act (CEQA) (Public Resources Code, Section 21000 et seq.), the State CEQA Guidelines (14 CCR 15000 et seq.). CEQA requires that all state and local government agencies consider the environmental consequences of projects over which they have discretionary authority before acting on those projects. This document may rely on previous environmental documents and site-specific studies prepared for the Project.

The Draft Initial Study is a public document used by the decision making lead agency to determine whether a project may have a significant effect on the environment. If the lead agency finds substantial evidence that any aspect of the project, either individually or cumulatively, may have a significant effect on the environment, regardless of whether the overall effect of the project is adverse or beneficial, the lead agency is required to prepare an Environmental Impact Report (EIR). The lead agency may also use a previously-prepared EIR and supplement that EIR, or prepare a Subsequent EIR to analyze the project. If the agency finds no substantial evidence that the project or any of its aspects may cause a significant effect on the environment, a Negative Declaration shall be prepared. If in the course of analysis, the agency recognizes that the project may have a significant impact on the environment, but that by incorporating specific mitigation measures the impact will be reduced to a less than significant effect, a Mitigated Negative Declaration shall be prepared.

TE has reviewed the Project and determined that the Project, with mitigation measures, as identified in this document, will not have a significant effect on the environment. Therefore, a Mitigated Negative Declaration will meet the requirements of CEQA.

A CEQA Checklist (Appendix A) has been completed based on the Project's Final Project Feasibility Report; however, should significant impacts or new mitigation measures result from the CEQA review process, TE will recirculate the document for public review. The public review period for the Draft Initial Study/Proposed Mitigated Negative Declaration shall begin on June 13, 2014 and end on July 12, 2014. Comments received after 5:00 pm on July 12, 2014 will not be considered. Written responses should be sent to Daniel Kikkert, Senior Civil Engineer, at the following address:

County of El Dorado Transportation Division
CEQA Compliance
924 B Emerald Bay Road
South Lake Tahoe, CA 96150
(530) 573-7900
dan.kikkert@edcgov.us

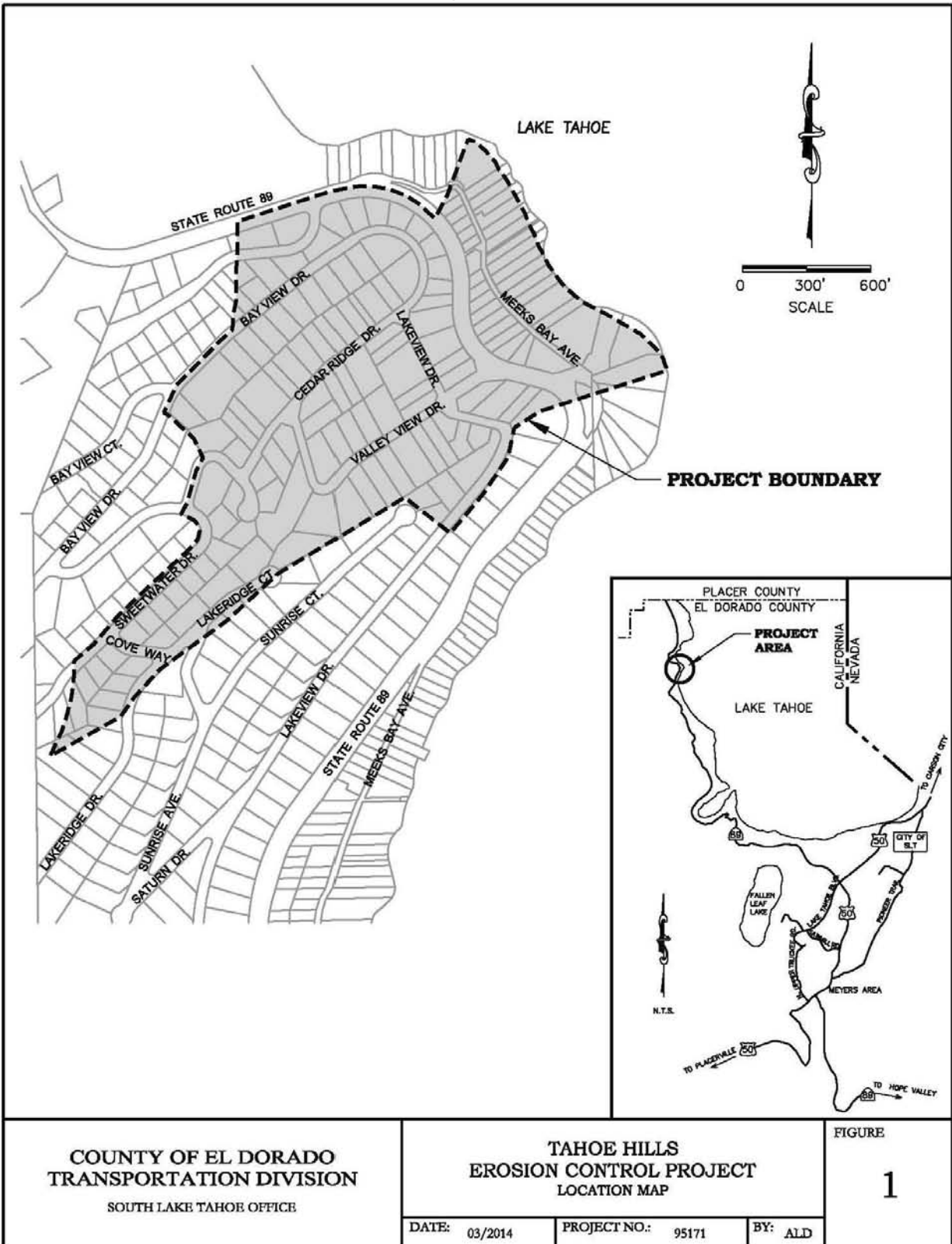
2.0 PROJECT DESCRIPTION AND LOCATION

TE proposes to implement the proposed Project during the 2015 construction season to assist with meeting the goals of the Tahoe Regional Planning Agency's (TRPA) Environmental Improvement Program (EIP). In 1997, the TRPA developed a Basin-wide EIP that defined various projects which, once implemented, would assist in attaining and maintaining TRPA Environmental Threshold Carrying Capacities (ETCC) as well as meet other federal and state environmental goals. TRPA has established thresholds for air quality, water quality, soil conservation, vegetation, noise, scenic resources, recreation, fisheries, and wildlife to address public health and safety of residents and visitors as well as the scenic, recreation, education, scientific, and natural values of the Lake Tahoe Basin. The Project is defined in the TRPA EIP as Project #01.01.01.30. This proposed Project is being designed and constructed with financial assistance from the United States Forest Service - Lake Tahoe Basin Management Unit (USFS-LTBMU) and TRPA mitigation funds.

The Project site is an existing residential development on the west shore of Lake Tahoe bordered by State Route 89 on the north, Lake Tahoe on the east, and Lakeview Drive on the South (Figure 1). The overall goal of the Project is to design and implement erosion control and water quality improvement measures that will reduce the discharge of sediment and pollutants to Lake Tahoe from County administered rights-of-way (ROW). The Project

will not change the use of the site or surrounding area. The proposed Project will benefit the natural environment with the implementation of the proposed improvements. After Project completion, less sediment will enter Lake Tahoe from the Project area, thereby improving water quality in Lake Tahoe.

Figure 1



The proposed Project is intended to improve water quality by reducing erosion and treating storm water runoff from the existing roadway infrastructure within the Project corridor by installing appropriate Best Management Practices (BMPs). Figure 2 outlines the proposed Project alternative, and can be found at the end of this Initial Study.

2.1 Project Need and Existing Conditions

Pursuant to the requirements of Section 208 of the Clean Water Act, the TRPA prepared a Water Quality Management Plan for the Lake Tahoe Basin (208 Plan). The 208 Plan identified erosion, runoff and disturbance resulting from developments, such as subdivision roads, in the Lake Tahoe Basin as major causes of the decline of Lake Tahoe's water quality and clarity. The 208 Plan also mandates that capital improvement projects such as the Project be implemented to bring all County roads into compliance with BMPs requirements. Additionally, the TRPA developed the EIP to assist in attaining and maintaining TRPA's Environmental Thresholds. The EIP identified the need to improve the quality of water entering Lake Tahoe by controlling upstream pollutant sources. Pollutant sources primarily include fine sediment and nutrients like nitrogen and phosphorus.

The Project Development Team (PDT) identified erosion, water quality and drainage/infrastructure problems within the Project area. The problems within the Project area are typical of those found within older residential subdivisions and commercially developed areas in the Tahoe Basin. The problems were evaluated during site inspections by TE, California Tahoe Conservancy (CTC), TRPA and USFS-LTBMU staff. The problem areas the Project intends to address are listed below.

Source Erosion

- Eroding Slopes
- Eroding Roadside Shoulders

Water Quality

- Road Sand and Cinder Accumulation
- Sediment Deposition and Tracking
- Concentration of Storm Water Flows
- Discharge of Untreated Storm Water

Drainage and Infrastructure

- Eroding Drainage Ditches and Channels
- Undersized and Damaged Culverts
- Undersized or Nonexistent Roadside Ditches

The Project area contains an existing storm drain system which collects and conveys storm water through a series of basins, corrugated metal pipe (CMP) risers, drainage inlets, and reinforced concrete pipe (RCP) to an existing outfall which drains into Lake Tahoe. This Project will be focused on reducing the peak flows and volumes as well as increasing the water quality of the runoff prior to reaching the outfall.

2.2 Project Approach

TE utilized the Lake Tahoe Basin Storm Water Quality Improvement Committee's (SWQIC) *Formulating and Evaluating Alternatives for Water Quality Improvement Projects* document for guidance in selecting a preferred Project alternative. The PDT investigated a range of possibilities for the water quality improvements in the Project area. The process of evaluating and selecting a preferred alternative for this Project included the production and analysis of the following documents:

- Draft Project Feasibility Report (County, 2013)
- Final Project Feasibility Report (County, 2013)
- Preferred Alternative Memorandum (County, 2013)

In October of 2013, TE completed a Draft Project Feasibility Report that investigated existing conditions and identified problem areas within the Project boundary as well as proposed alternative solutions with the Project boundary. The alternatives evaluated different water quality improvements and erosion control mitigation

measures for the problem areas. After receiving feedback from the PDT and the public, TE completed a Final Project Feasibility Report in December 2013. Finally, based upon further feedback, TE completed a Preferred Alternative Memorandum in December 2013.

The above documents are available through the County. A synopsis of alternatives that were evaluated as part of the planning process is presented below.

2.3 Concept Alternatives

In order to develop the Project alternatives, TE presented three feasible alternatives for the erosion control and water quality aspects of the Project. Each had pros and cons that were outlined and analyzed in the Final Project Feasibility Report. Each alternative was evaluated using a matrix consisting of several factors that affected the feasibility and effectiveness of each alternative. These were factors such as cost, affects to sensitive species and cultural sites, safety, scenic issues, permissibility, fundability, etc. Once each alternative was evaluated, the PDT and public had a chance to weigh in and decide, with TE, on the preferred Project alternative.

TE utilized a comprehensive watershed-based approach to develop BMP alternatives for each watershed within the Project area. This strategy helped to identify the existing storm water flow paths, sources of sediment and hydrologic and hydraulic characteristics in a very practical fashion and identified how to properly address the erosion and water quality issues. The Project design focuses mainly on capturing and treating storm water and fine sediment. The BMP alternatives were designed for each problem area and were analyzed at the Project site for effectiveness at solving the water quality issue in a cost effective, easily maintainable manner. The BMP alternatives were developed using proven erosion source control, hydrologic design, and runoff treatment strategies.

The three Project alternatives that were considered are presented below, along with erosion control measures that were considered but not presented. Figure 15 outlines the existing conditions and known problem areas within the Project area. Figure 2 identifies the proposed improvements for the preferred Project alternative, which is described in further detail below in Section 2.4.

The three alternatives formulated to address the erosion, hydrologic, and treatment deficiencies within the Project area are described below.

Alternative 1

Figure 16 depicts the facilities and treatments proposed for Alternative 1.

Due to the implementation of previous erosion control projects (ECPs), the only source control needs were found to be ten small, isolated areas of bare and eroding shoulders and eroding slopes. Rock slope protection and revegetation are proposed for these areas. The locations to receive this treatment are within County ROW and one CTC parcel.

To improve hydrologic conveyance, two new pipes are proposed to replace two existing damaged pipes at the intersection of Cedar Ridge Drive/Bay View Drive and Lakeview Drive. To treat the runoff reaching the reinforced concrete pipe (RCP) system, surface flow from a portion of Sweetwater Court, the westernmost portion of Valley View Drive, Cedar Ridge Drive, a portion of Bay View Drive, and a portion Lakeview Drive is conveyed in a rock-lined channel and a seed and blanket channel along Lakeview Drive to a sediment basin spanning two USFS parcels. By-pass from the basin will be conveyed, via corrugated metal pipe (CMP) riser, to a new infiltrating drainage inlet which replaces the existing drainage inlet at the corner. Runoff is then conveyed into the existing RCP system.

Runoff from the southeasterly leg of Lakeview Drive flows untreated down Valley View Drive before entering the lateral storm drain system crossing State Route 89, which connects to the RCP system. These flows will be intercepted in an infiltrating drainage inlet installed on the northeasterly side of Lakeview Drive, above the Valley View Drive intersection, and conveyed via pipe into the existing basin at the south corner of the Valley View Drive/Lakeview Drive intersection.

A sediment trap is proposed on the northerly side of Valley View Drive, between Lakeview Drive and State Route 89, near an existing driveway. This sediment trap will infiltrate runoff and capture sediment, road sand, and debris prior to flows entering the RCP storm drain system at State Route 89.

A sediment trap is proposed at the south corner of the Valley View Drive/Highway 89 intersection. This structure will intercept and treat runoff from an existing pipe connecting two existing drainage inlets that were not constructed with treatment capabilities. By-pass runoff from this sediment trap is then conveyed into the existing RCP system.

The roadway of Valley View Drive between Lakeview Drive and State Route 89 is steep and not crowned. Therefore, some runoff sheetflows across the State Route instead of being intercepted by the existing drainage inlets located on both sides of the road near the highway. To rectify this, a portion of the AC pavement on Valley View Drive will be removed and replaced with new AC pavement crowned in such a manner that runoff sheetflowing down the road will be directed toward the existing curb and gutter and into the existing drainage inlets.

At the far eastern end of the Project area, sediment transport and erosion is occurring along Meeks Bay Avenue. Sediment trapping infiltration structures that will capture road sand and sediments and infiltrate runoff are proposed along this portion of Meeks Bay Avenue.

Where the RCP storm drain system intersects Meeks Bay Avenue, sediment trapping infiltration structures will be installed on a CTC parcel and within County ROW. By-pass runoff from these facilities is then conveyed into the existing RCP system.

The reach of RCP in Meeks Bay Avenue between the two existing drainage inlets can be replaced or augmented with perforated pipe. With the exposed reach of RCP near Lake Tahoe, the joints will be resealed and stabilized with rock rip-rap placed on top of the pipe to protect the pipe as well as blend it in with the natural surroundings.

Alternative 2

Figure 17 depicts the facilities and treatments proposed for Alternative 2.

The source control needs have been reduced from the ten locations depicted in Alternative 1 to five areas that appear to exhibit the most critical need for stabilization and/or which could adversely affect runoff to the RCP system. Rock slope protection and revegetation are proposed for these areas. The locations to receive this treatment are within County ROW and one CTC parcel.

The runoff from a portion of Sweetwater Court, the westernmost portion of Valley View Drive, Cedar Ridge Drive, a portion of Bay View Drive, and a portion Lakeview Drive is conveyed in a rock-lined channel and a seed and blanket channel along Lakeview Drive to a sediment basin spanning two USFS parcels. By-pass from the basin will be conveyed, via CMP riser, to a new infiltrating drainage inlet which replaces the existing drainage inlet at the corner. Runoff is then conveyed into the existing RCP system.

The two drainage inlets at the base of Valley View Drive, near State Route 89, will be replaced with infiltrating drainage inlets. By-pass runoff from these drainage inlets is then conveyed into the existing RCP system.

The roadway of Valley View Drive between Lakeview Drive and State Route 89 is steep and not crowned. Therefore, some runoff sheetflows across State Route 89 instead of being intercepted by the drainage inlets located on both sides of the road near State Route 89. To rectify this, a portion of the AC pavement on Valley View Drive will be removed and replaced with new AC pavement crowned in such a manner that runoff sheetflowing down the road will be directed toward the existing curb and gutter and into the drainage inlets.

The first existing drainage inlet on Meeks Bay Avenue will be replaced by two infiltrating drainage inlets, designed in a first flush configuration. By-pass runoff is conveyed into a perforated pipe which replaces a portion of the existing RCP in Meeks Bay Avenue.

Alternative 3

Figure 18 depicts the facilities and treatments proposed for Alternative 3.

The source control needs have been eliminated from the Project and the focus directed only to the treatment of runoff through the RCP system.

The runoff from a portion of Sweetwater Court, the westernmost portion of Valley View Drive, Cedar Ridge Drive, a portion of Bay View Drive, and a portion Lakeview Drive is conveyed in a rock-lined channel and a seed and blanket channel along Lakeview Drive to a sediment basin spanning two USFS parcels. By-pass from the basin

will be conveyed, via CMP riser, to a new infiltrating drainage inlet which replaces the existing drainage inlet at the corner. Runoff is then conveyed into the existing RCP system.

The two drainage inlets at the base of Valley View Drive, near State Route 89, will be replaced with infiltrating drainage inlets. By-pass runoff from these drainage inlets is then conveyed into the existing RCP system.

The roadway of Valley View Drive between Lakeview Drive and State Route 89 is steep and not crowned. Therefore, some runoff sheetflows across State Route 89 instead of being intercepted by the drainage inlets located on both sides of the road near the highway. To rectify this, a portion of the AC pavement on Valley View Drive will be removed and replaced with new AC pavement crowned in such a manner that runoff sheetflowing down the road will be directed toward the existing curb and gutter and into the drainage inlets.

Sediment traps will be installed on the CTC parcel, between State Route 89 and Meeks Bay Avenue, in order to intercept and infiltrate flow from the RCP in first flush configurations.

2.4 Detailed Site Conditions and Proposed Project

The proposed Project was selected by TE, the PDT and the public and is described in further detail below and is a compilation of the most comprehensive design ideas for each street within the Project area which meets the goals and objectives of the EIP and the Project. All proposed measures will be in compliance with applicable laws and TRPA and Lahontan regulations.

In order to meet the goals and objectives of the Project, the Final Project Feasibility Report outlined three alternatives for consideration by the public and the PDT. Based on the comments received, the professional judgment of TE personnel, and the analyses outlined in the Final Project Feasibility Report, Alternative 1 was chosen as the preferred alternative and is presented in Figure 2.

Locations requiring source control include isolated areas of bare eroding slopes and shoulders on Lakeridge, Sweetwater, and Bay View Drives. Rock slope protection and revegetation are proposed for stabilization. The locations to receive this treatment are within County ROW and a CTC parcel (APN 16-562-09). To improve hydrologic conveyance, two new pipes are proposed to replace two existing damaged pipes at the intersection of Cedar Ridge/Bay View and Lakeview Drives. A hard-armored channel and seed and blanket-lined channel will stabilize an eroded roadside ditch on the west side of Lakeview Drive, between Cedar Ridge and Valley View Drives as well as provide for increased conveyance and infiltration. Flows from these channels will be conveyed to a sediment basin proposed on two USFS parcels (APN 16-321-18 and APN 16-321-17) at the intersection of Valley View and Lakeview Drives.

Ultimately, this basin will intercept runoff from the lower reach of Sweetwater Drive, the upper reach of Valley View Drive, and portions of Lakeview, Cedar Ridge, and Bay View Drives. With the exception of infiltration on the forested urban lots, this runoff receives no treatment prior to discharging into Lake Tahoe via the reinforced RCP storm drain system.

Overflow from the basin will be conveyed into the existing RCP storm drain system via a CMP riser connected to a drainage inlet. The proposed drainage inlet will replace an existing drainage inlet that currently does not provide for sediment capture or infiltration.

Runoff from the southeasterly leg of Lakeview Drive flows untreated down Valley View Drive before entering the lateral storm drain system crossing State Route 89, which connects to the RCP system. These flows will be intercepted in a drainage inlet installed on the northeasterly side of Lakeview Drive, above the Valley View Drive intersection, and conveyed via pipe into the existing basin at the south corner of the Valley View Drive/Lakeview Drive intersection.

A sediment trap is proposed on the northerly side of Valley View Drive, between Lakeview Drive and State Route 89, near an existing driveway. This sediment trap will infiltrate runoff and capture sediment, road sand, and debris prior to flows entering the RCP storm drain system at State Route 89. Another sediment trapping infiltration structure with an offline subsurface infiltration system will be installed at the south corner of the Valley View Drive/State Route 89 intersection. This structure will intercept and treat runoff from an existing pipe connecting two existing drainage inlets that were not constructed with treatment capabilities.

The roadway of Valley View Drive between Lakeview Drive and Highway 89 is steep and not crowned. Therefore, some runoff sheetflows across State Route 89 instead of being intercepted by the existing drainage inlets located on both sides of the road near the State Route. To rectify this, a portion of the AC pavement on Valley View Drive

will be removed and replaced with new AC pavement crowned in such a manner that runoff sheetflowing down the road will be directed toward the existing curb and gutter and into the existing drainage inlets.

At the far eastern end of the Project area, sediment transport and erosion is occurring along Meeks Bay Avenue. Sediment trapping infiltration structures that will capture road sand and sediments and infiltrate runoff are proposed. These will function as stand-alone facilities with no downslope conveyance. Where the RCP storm drain system intersects Meeks Bay Avenue, sediment trapping infiltration structures with an offline subsurface infiltration system will be installed on a CTC parcel (APN 16-062-06) and within County ROW. A subsurface infiltration system is proposed between the two existing drainage inlets in Meeks Bay Avenue in order to maximize treatment of the runoff in the RCP storm drain system prior to discharge into Lake Tahoe.

The exposed section of the RCP near the lakeshore is showing signs of separation between the pipe joints. The proposed Project will involve resealing the pipe joints and stabilizing the existing system. Rock rip-rap will be placed on top of the pipe to protect the pipe as well as blend it in with the natural surroundings. The contractor will be required to access the area from Meeks Bay Ave using an existing 10 foot wide drainage easement. Due to the limited width and height restrictions based on the existing homes abutting the easement, it is anticipated that a compact excavator (i.e. Bobcat) would be used to deliver material via the easement as well as using the equipment to assist with winching the section of pipe back into place and installing rock rip rap to cover. Once the pipe is sealed, tie-downs will be installed on each segment of pipe to keep them in place. Installation of the tie-downs would produce a minor amount excavated material (approximately 1 cubic yard), which would be off-hauled by the Contractor via the existing drainage easement. No excavating will be performed below the high water mark as a result of the proposed resealing and anchoring of the pipe.

It is estimated to take 40 working days for construction of the project with all work anticipated to be completed between May 1st and October 15th.

2.5 Project Benefits

The following Project goals were recommended by the PDT to guide the Project through the planning, design and formulating alternatives phase:

1. Reduce the amount of very fine inorganic sediment by 12%, fine inorganic sediment by 25%, and coarse inorganic sediment by 33% from the urbanized watershed bounded by the Project boundary or to the maximum extent practicable prior to discharging into Lake Tahoe. Very fine sediment is defined as particles with a diameter of 20 microns or less (<20 µm), fine sediment is defined as particles which pass a #200 sieve (<74 µm), and coarse sediment is defined as particles retained on or greater than the #200 sieve (>74 µm).
2. Reduce the 25-year, 1-hour storm surface water volume and surface water peak flow from the urbanized watershed bounded by the Project boundary by 33% or to the maximum extent practicable prior to discharging into Lake Tahoe.
3. Complete a comprehensive BMP Retrofit Watershed Master Plan which will include the private BMP development as part of the Project Delivery Process (PDP). Achieve 25% participation with the private homeowners within the limits of the Project.

The Project objectives represent physical conditions that can be measured to assess the success of the Project in achieving the Project goals. The Project will conform to the Preferred Design Approach as detailed in the SWQIC process.

Goal # 1 Objectives

1. Stabilize eroding slopes and channels/ditches with County approved stabilization (Source Control) BMPs.
2. Utilize various County approved sediment trapping BMPs (Sediment Traps, Infiltration, Sedimentation/Infiltration Basins, etc.) to capture sediment and de-icing abrasives from impervious surfaces and eroding areas.
3. Define and maximize the sweeping frequency within the ROW as funding and resources are available. Current County sweeping frequency is approximately once per year.
4. Utilize publicly owned parcels to capture more sediment prior to discharging into Lake Tahoe.

Goal # 2 Objectives

1. Utilize County ROW and publicly owned parcels to capture, store, and infiltrate a portion of the 25-year, 1-hour storm water volume, which are at main discharge points within the watersheds.
2. Utilize various County approved infiltration and storage BMPs prior to discharging into Lake Tahoe.
3. Utilize various storm water drainage systems to increase the time of concentration and reduce the peak discharge to the main discharge point near Lake Tahoe.

Goal # 3 Objectives

1. Utilize the TRPA Home Landscaping Guide for evaluating and developing BMP solutions for each driveway within the limits of the Project area.
2. Coordinate the private BMPs design within ROW with the Tahoe Resource Conservation District (TRCD)/National Resources Conservation Service (NRCS).

3.0 ENVIRONMENTAL SETTING AND SITE CHARACTERISTICS

The Project is located in the southwestern section of the Lake Tahoe Basin in Section 29, Township 14 North, Range 17 East, Mount Diablo Meridian. The total Project area is approximately 65 acres and encompasses County and Caltrans ROW as well as County, CTC, USFS, Tahoe City Public Utility District (TCPUD), and privately owned residential property and includes portions of Tahoe Hills Unit No. 1, Resubdivision of a Portion of Tahoe Hills Unit No. 1, Rubicon Palisades, Meeks Bay Vista, and Meeks Bay Vista Addition to North Tract. Improvements within the Project area include approximately 28-foot wide paved County roads within 50-foot wide ROW west and south of State Route 89, approximately 16-foot wide paved County roads within 20-foot wide ROW in the Meeks Bay Vista subdivisions, unpaved roads, rock slope protection, timber retaining walls, curb and gutter, dike, storm drain systems, sediment basins, channels, and overhead and underground utilities. The paved county roads are generally not centered within the ROW. State Route 89 improvements include a 24-foot wide paved road within an 80-foot wide ROW, dike, overhead and underground utilities, and drainage improvements conveying runoff under the State Route at a number of locations.

The Project area consists of private parcels and public parcels owned by the CTC and the USFS. The majority of the privately owned parcels have been developed with single-family residences. See Figure 15 for further detail.

Topography: The approximate elevation range of the Project site is from 6,230 to 6,740 feet above mean sea level (NGVD 1929). The terrain ranges in slope from 12-35% slope with some areas exceeding 46%.

Hydrology: The United States Geological Survey (USGS) has divided the Tahoe Basin into 110 hydrologic basins and intervening areas contributing to outflow from Lake Tahoe. The Project area is located within USGS Basin 89 (Intervening Area) and 90/90A (Meeks Creek at mouth and Meeks Creek at Meeks Bay). The intervening area can be defined as that area between Basin 88A (Lake Tahoe tributary near Meeks Bay) and Basin 90. Basin 89 has a drainage area of 0.30 square miles and Basin 90/90A has a combined drainage area of 16.24 square miles, all of which drains into Lake Tahoe.

Runoff flowing into and throughout the Project area is directed toward drainage facilities within County and Caltrans ROW. TE has divided the Project area into 2 primary watersheds using topographic maps based on aerial photography developed in 2000 and field surveys. The 45.7 acre southern watershed drains to Lake Tahoe and the 13.0 acre northern watershed drains toward Meeks Bay (and into Lake Tahoe).

Groundwater/Wetlands: Jurisdictional waters of the U.S. are classified into multiple types based on topography, edaphics (soils), vegetation, and hydrologic regime. Primarily, the U.S. Army Corps of Engineers establishes two distinctions: Wetland and non-wetland waters of the U.S. Non-wetland waters are commonly referred to as other waters. In October of 2011, TE's consultant, Nichols Consulting Engineers (NCE) performed a review of published documents and conducted a field inspection to determine the presence of wetlands within the Project boundary. During the review and field inspection no potentially jurisdictional wetland types were mapped with the survey area.

Soils in the Project area are generally well drained with groundwater measured in one well within the Project area exceeding 100 feet in depth.

Geology/Soils: A preliminary review of regional geology within the Project area has shown that this geomorphic unit has a moderate to steep slope, rock outcrops, and two main geologic map units outlined below.

- *Tioga Glacial Till (Qti)*: This soil type is found within the northwestern portion of the Project area and makes up approximately two-thirds of the Project site. The Tioga glacial deposits are a result of younger Pleistocene glaciation. They are dated at 9,990 to 25,500 years old. This soil is unconsolidated, gray to light tan, bouldery polymict till characterized by large granitic boulders, generally not weathered; preserved as sharp-crested moraines. May include outwash deposits.
- *Tahoe Glacial Till (Qta)*: This soil type is found within the southeastern portion of the Project area and makes up approximately one-third of the Project site. The Tahoe glacial deposits are a result of Pleistocene glaciation. They are dated at 56,000 to 118,000 years old. This till is directly deposited underneath the glacier and is an unconsolidated bouldery material with a distinct yellow-brown weathered matrix. The deposits are preserved as larger moraines with more rounded and broader crests. May include outwash deposits.

Land Use: TRPA has primary jurisdiction over land use and regulatory decisions for the Lake Tahoe Basin. According to TRPA Plan Area Statements (PAS), the Project area falls into two plan areas:

- 149 – Rubicon
- 150 – Meeks Bay

The majority of the Project area lies in Plan Area 149, representing most of the developed, central portions of the Project area. The primary use of Plan Area 149 is residential at a density of one single family dwelling per parcel. The Plan Area is approximately 50-percent built out. The management plan has the focus of maintaining the residential status and existing character of the neighborhood. The subsequent information briefly summarizes information regarding plan area 149 found on the TRPA plan area statements:

- | | |
|---|-------------|
| <input type="checkbox"/> TRPA Plan Area # | 149 |
| <input type="checkbox"/> TRPA Plan Area Statement | Rubicon |
| <input type="checkbox"/> Land Use Classification | Residential |
| <input type="checkbox"/> Special Designation | None |

A small section of the northern limits of the Project area are located in the Meeks Bay area (PAS 150). This is a recreational area with a management strategy of redirection and a special designation of scenic restoration area. All proposed improvements are outside of this area.

Cultural Resources: A cultural resource study, which included a literature search and an archaeological survey/inventory of the Project survey area, was completed on October 5 and 7, 2011. Twenty five previous cultural resources studies have been conducted in the vicinity of the Project area, including portions of the Area of Potential Effects (APE). No cultural resources have been previously recorded within the APE and none were identified within the APE during the pedestrian survey. The APE is considered to have a low sensitivity for the discovery of prehistoric, ethno historic, or historic cultural material, or subsurface deposits. Because of this, no additional cultural resources work for this Project is recommended. However, in the event that cultural resources are discovered during Project implementation, Project personnel shall halt all activities in the immediate area and notify a qualified archaeologist to determine the appropriate course of action.

Botanical Resources: Field surveys and assessments were conducted within the Project survey area for special status botanical species on September 26, 2011. The biological assessment surveys observed no federal or state-listed candidate, or proposed botanical species in the Project study area. However, there are recorded occurrences of special status species immediately adjacent to the Project areas. Suitable habitat conditions do exist within 0.5 miles of the Project area and include Tahoe yellow cress and marsh skullcap. A noxious weed survey was also conducted within the Project survey area on September 26, 2011. The survey identified a single noxious weed species within the Project area: cheatgrass (*Bromus tectorum*). A Noxious Weed Mitigation/Eradication Protocol (Protocol) will be implemented by TE as part of the Project which will help decrease habitat vulnerability to or below pre-construction levels. The Protocol includes pre-construction elements, such as treating existing noxious weed populations identified in the Project area, as well as during- and post-construction elements. Additionally, TE will specify weed-free seed mix and require all construction equipment be certified steam cleaned prior to accessing the site.

Vegetation types found in and/or adjacent to the Project area are typical of those found in the Lake Tahoe Basin. The Project area is composed primarily of mixed conifer – fir alliance. The Project area also contains isolated

pickets of jeffrey pine, upper montane mixed chaparral, and urban/developed. An assessment of habitat types is described in depth in Appendix C.

Wildlife Resources: Field surveys and assessments were conducted within the Project survey area for special status botanical and wildlife species on September 26, 2011. The biological assessment surveys observed no federal or state-listed candidate, or proposed botanical or wildlife species in the Project study area. However, there are recorded occurrences of special status species immediately adjacent to the Project areas. Suitable habitat conditions do exist within 0.5 miles of the Project area for American marten, American peregrine falcon, bald eagle, California spotted owl, great gray owl, mule deer, osprey, Sierra Nevada mountain beaver (formerly mountain beaver), Sierra Nevada yellow-legged frog, Sierra Nevada snowshoe hare, waterfowl, and willow flycatcher. An assessment of habitat types is described in depth in Appendix C.

Greenhouse Gas Emissions: Climate change refers to long-term fluctuations in temperature, precipitation, wind, and other elements of Earth's climate system. Natural processes such as solar-irradiance variations, variations in Earth's orbital parameters, and volcanic activity can produce variations in climate. The climate system can also be influenced by changes in the concentration of various gases in the atmosphere, which affect Earth's absorption of radiation.

State law defines greenhouse gases (GHG) to include the following: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride (Health and Safety Code, Section 38505(g)). According to the Governor's Office of Planning and Research (OPR), the most common GHG that results from human activity is carbon dioxide, followed by methane and nitrous oxide.

According to California Air Resources Board (CARB) emission inventory estimates, California emitted approximately 480 million metric tons of carbon dioxide equivalents (CO₂eq) in 2004. The California EPA Climate Action Team stated in its March 2006 report that the composition of gross climate change pollutant emissions in California in 2002 (expressed in terms of CO₂eq) was as follows:

- Carbon dioxide (CO₂) accounted for 83.3 percent;
- Methane (CH₄) accounted for 6.4 percent;
- Nitrous oxide (N₂O) accounted for 6.8 percent; and
- Fluorinated gases (HFCs, PFC, and SF₆) accounted for 3.5 percent.

CARB estimates that transportation was the source of approximately 38 percent of California's GHG emissions in 2004, followed by electricity generation (both in-state and out-of-state) at 23 percent, and industrial sources at 20 percent. The remaining sources of GHG emissions are residential and commercial activities at 9 percent, agriculture at 6 percent, high global warming potential (GWP) gases accounting for 3 percent, and recycling and waste at 1 percent.

Regulatory Setting

Global Warming Solutions (AB 32)

The Global Warming Solutions Act of 2006 (AB 32) codifies California's goal of reducing statewide emissions of GHGs to 1990 levels by 2020. This reduction will be accomplished through an enforceable statewide cap on GHG emissions that will be phased-in starting in 2012 to achieve maximum technologic ally feasible and cost-effective GHG reductions. In order to effectively implement the cap, AB 32 directs CARB to develop appropriate regulations and establish a mandatory reporting system to track and monitor GHG emissions.

Executive Order S-3-05

On June 1, 2005 Governor Arnold Schwarzenegger signed S-3-05 (Order) which established GHG emission reduction targets as follows: by 2010, reduce GHG emissions to 2000 levels; by 2020, reduce GHG emissions to 1990 levels; and by 2050, reduce GHG emissions to 80 percent below 1990 levels.

Senate Bill 97

As directed by Senate Bill 97 (SB 97), the Natural Resources Agency adopted Amendments to the CEQA Guidelines for greenhouse gas emissions on December 30, 2009. On February 16, 2010, the Office of Administrative Law approved the Amendments, and filed them with the Secretary of State for inclusion in the California Code of Regulations. The Amendments became effective on March 18, 2010.

Senate Bill 375

California Senate Bill 375 (SB 375) aims to reduce GHG emissions by curbing sprawl because the largest sources of GHG emissions in California are passenger vehicles and light trucks. SB 375 provides emission reduction goals for which regions can plan, integrates disjointed planning activities, and provides incentives for local governments and developers to follow new conscientiously-planned growth patterns.

Senate Bill 1368

California Senate Bill 1368 (SB 1368) adds sections 8340 and 8341 to the Public Utilities Code (effective January 1, 2007) with the intent “to prevent long-term investments in power plants with GHG in excess of those produced by a combined-cycle natural gas power plant with the aim of “reducing emissions of greenhouse gases from the state’s electricity consumption, not just the state’s electricity production.” The bill provides a mechanism for reducing the greenhouse gas emissions of electricity providers, both in-state and out-of-state, thereby assisting CARB in meeting its mandate under AB 32, the Global Warming Solutions Act of 2006.

Significance Criteria

CARB has proposed that different GHG thresholds of significance may apply to projects in different sectors, e.g., industrial, commercial, residential. Two primary reasons that sector-specific thresholds are appropriate are: 1) some sectors contribute more substantially to the problem, and therefore should have a greater obligation for emissions reductions, and, 2) there are differing levels of emissions reductions expected from different sectors in order to meet California’s objectives under AB 32. Different types of thresholds – quantitative, qualitative, and performance-based – can apply to different sectors under the premise that the sectors can and must be treated separately given the state of the science and data. The sector-specific approach is consistent with CARB’s Proposed Scoping Plan.

Working with CARB in 2008, the Office of Planning and Research (OPR) drafted amendments to the CEQA Guidelines for GHG emissions as required by SB 97. In January 2009, OPR held workshops in Los Angeles and Sacramento to present the preliminary draft amendments and obtain input from the public. The workshops included a presentation by OPR and the Resources Agency staff, an overview of the preliminary draft CEQA Guideline amendments, and the process for adopting the regulations by 2010. On April 13, 2009, OPR submitted to the Secretary for Natural Resources its proposed amendments to the state CEQA Guidelines. As directed by SB 97, the Natural Resources Agency adopted Amendments to the CEQA Guidelines for greenhouse gas emissions on December 30, 2009. On February 16, 2010, the Office of Administrative Law approved the Amendments, and filed them with the Secretary of State for inclusion in the California Code of Regulations. The Amendments became effective on March 18, 2010.

CEQA requires lead agencies to identify project GHG emissions impacts and their “significance,” but is not clear what constitutes a “significant” impact. GHG impacts are inherently cumulative, and since no single project could cause global climate change, the CEQA test is if impacts are “cumulatively considerable.” Not all projects emitting GHG contribute significantly to climate change. CEQA authorizes reliance on previously approved plans (i.e., a Climate Action Plan (CAP), etc.) and mitigation programs adequately analyzing and mitigating GHG emissions to a less than significant level. “Tiering” from such a programmatic-level document is the preferred method to address GHG emissions. County does not have an adopted CAP or similar program-level document; therefore, the Project’s GHG emissions must be addressed at the project-level.

The El Dorado County Air Quality Management District (EDCAQMD) has established thresholds of significance for criteria air pollutants (Guide to Air Quality Assessment (February 2002) (“CEQA Guide”))¹. However, the EDCAQMD has not yet adopted GHG emissions thresholds for land use development projects. In the absence of County

¹ EDCAQMD CEQA Guide: http://edcgov.us/Government/AirQualityManagement/Guide_to_Air_Quality_Assessment.aspx

adopted thresholds, EDCAQMD recommends using the thresholds adopted by other Counties that were found consistent with the goals of AB 32. Until the County adopts a CAP consistent with CEQA Guidelines Section 15183.5, and/or establishes GHG thresholds, the County will follow an interim approach to evaluate GHG emissions utilizing significance criteria adopted by the San Luis Obispo Air Pollution Control District (SLOAPCD) to determine the significance of GHG emissions. TE believes that since climate change is a global problem and the location of the individual sources of GHG emissions is somewhat irrelevant, it's appropriate to use thresholds established by other jurisdictions as a basis for impact significance determinations. Projects exceeding these thresholds would have a potentially significant impact and be required to mitigate those impacts to a less than significant level.

TE chose SLOAPCD's thresholds because they are comprehensive and have not been challenged. SLOAPCD's thresholds are very similar to the Bay Area Air Quality Management District (BAAQMD) thresholds. However, BAAQMD's GHG thresholds are under legal challenge because BAAQMD failed to comply with CEQA when adopting the thresholds. Additionally, SLOAPCD developed a screening table using CalEEMod which allows quick assessment of projects to "screen out" those below the thresholds as their impacts would be less than significant.

The thresholds are summarized below:

Significance Determination Thresholds	
GHG Emission Source Category	Operational Emissions
Non-stationary Sources	1,150 MTCO ₂ e/yr OR 4.9 MT CO ₂ e/SP/yr
Stationary Sources	10,000 MTCO ₂ e/yr

SP = service population, which is resident population plus employee population of the project

Impacts

Construction Emissions

Project construction would generate temporary and one-time GHG emissions mainly from diesel-powered construction equipment and on-road trucks, with a small amount from workers' personal vehicles during the construction of the Project. Greenhouse gases emitted during the combustion of diesel fuel in off-road construction equipment and on-road vehicles would consist mainly of carbon dioxide, along with small amounts of methane and nitrous oxide during the construction period. Construction emissions would be intermittent, and short-term, during one summer construction season. Construction emissions would permanently cease at the end of the Project. Over the long-term, these temporary emissions would be partially offset or mitigated by the establishment of native vegetation at designated areas. The revegetation work, including shrubs, forbs and grasses would be maintained over the life of the Project, up-taking carbon dioxide for decades.

There currently is only limited federal, state, or local regulatory guidance for determining whether a project advances or hinders California's GHG reduction goals and no promulgated thresholds of significance for GHG impacts have been established. For purposes of this analysis, per the amendments to the CEQA Guidelines, an impact could be considered significant if the project would:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?
- Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?

During construction, the Project would temporarily cause direct GHG emissions from the combustion of fossil fuels used to run construction equipment and vehicles, both onsite and offsite. These GHG emissions would be temporary and one-time emissions during the construction of the Project only. Over its lifetime, the Project would directly and indirectly cause negligible GHG emissions from occasional maintenance and personal vehicle use. Therefore, this analysis focuses on construction impacts estimated using TE's past project implementation database and the U.S. Environmental Protection Agency (USEPA) GHG emission factors for diesel fuel and gasoline combustion in construction equipment. TE has reviewed past construction project logs for projects

equivalent in size and scope to the Project to determine the typical number and type of vehicles that are actively working to construct the Project each day. Based on this analysis, TE has formulated the following assumptions:

- Fifteen workers per day, driving five vehicles to work an average of 40 miles round-trip per day
- Vehicles average 20 miles per gallon
- Twelve pieces of construction machinery per day
- Two trucks per day for hauling equipment or material averaging 3 hours per day
- Crews work eight hours per day with machinery running half that time (4 hours)
- Machinery burns an average of two gallons of diesel fuel per hour
- Hauling and dump trucks burn an average of six gallons of diesel fuel per hour
- Diesel fuel contributes approximately 22.5 lbs CO₂/gallon
- Gasoline contributes approximately 20 lbs CO₂/gallon
- The Project will be completed in 40 working days

Based on these assumptions, the proposed Project would emit approximately 58 metric tons of CO₂ equivalents.

This estimated amount is negligible in comparison to the statewide inventory of 480,000,000 metric tons discussed above (0.00000012 percent). The estimated amount is also significantly less than the SLOAPCD's significance threshold of 1,150 metric tons of CO₂ equivalents. Because of this and the fact that direct onsite and offsite GHG emissions would terminate following completion construction work, the Project will have a less than significant impact on GHG emissions.

4.0 PUBLIC INPUT AND PDT COORDINATION

The public involvement process for the Project included one public meeting, which was held on November 7, 2013. At the meeting, TE provided the public with information on the existing conditions, existing problem areas and the three proposed draft conceptual alternatives. TE also asked the public to express their questions and concerns related to the Project and its potential environmental impacts. Public notices for the meeting were mailed to all property owners within a 300 foot radius of the Project boundary. TE received feedback from the public on the Project alternatives that were presented, which helped select the Preferred Project Alternative.

TE met and corresponded with the PDT during the Project development process to identify problems and to develop and refine Project alternatives. The PDT consists of resource agency representatives in the Lake Tahoe Basin, including, but not limited to, the Tahoe Regional Planning Agency, USFS-Lake Tahoe Basin Management Unit, California Tahoe Conservancy, Tahoe Resource Conservation District, and Lahontan Regional Water Quality Control Board (RWQCB). The PDT meeting on the Project was held in October 2013. At this meeting the PDT discussed the existing conditions in the Project area as well as the draft alternatives for the Project as outlined in the Draft Project Feasibility Report. The PDT supplied written and verbal comments on the Draft Project Feasibility Report. In December 2013 TE produced the Final Project Feasibility Report based on comments received from the PDT and public. These documents were provided to the PDT in December 2013 along with the Preferred Alternative Memorandum (PAM) which outlines the preferred Project.

5.0 RIGHT OF WAY REQUIREMENTS

TE made every effort to locate proposed improvements within the County ROW, however in order to satisfy the goals and objectives of the Project, some public easements are required. These include the following Assessor Parcel Numbers (APNs):

California Tahoe Conservancy APNs:

- 016-562-09
- 016-062-06

United States Forest Service APNs:

- 016-321-17
- 016-321-18

6.0 COVERAGE AND PERMIT ISSUES

Clean Water Act Section 404

The fieldwork was conducted for the delineation of Waters of the U.S., including wetlands, as defined by Section 404 of the Clean Water Act. That fieldwork determined that no jurisdictional wetland or Waters of the U.S. are present within the Project area.

Clean Water Act Section 401

If the Project involves discharge to surface waters, which includes Waters of the U.S., Waters of the State, and all other surface waters, a 401 Water Quality Certification will be required from the RWQCB. However, no wetlands or Waters of the U.S. are present therefore no certification is required.

Lahontan RWQCB NPDES Permit and Basin Plan

Any disturbance to a Stream Environment Zone (SEZ) requires approval from the Lahontan RWQCB. If one acre or more of overall disturbance is slated to occur during construction, which is not currently anticipated, compliance with the NPDES General Construction Permit will be required. Note that no SEZ disturbance is planned as part of this Project.

Tahoe Regional Planning Agency General Permit and Stream Environment Zones (SEZ)

A TRPA General Permit will be obtained prior to construction. A Land Capability Verification has been completed by the TRPA. The Project requires no disturbance within sensitive Land Capability District 1b lands (SEZ).

United States Forest Service - Lake Tahoe Basin Management Unit Special Use Permit

Due to the proposed Project incorporating an infiltration basin for treatment on two USFS-LTBMU parcels, a Special Use Permit will need to be obtained prior to construction of the Project.

7.0 MITIGATION AND MONITORING

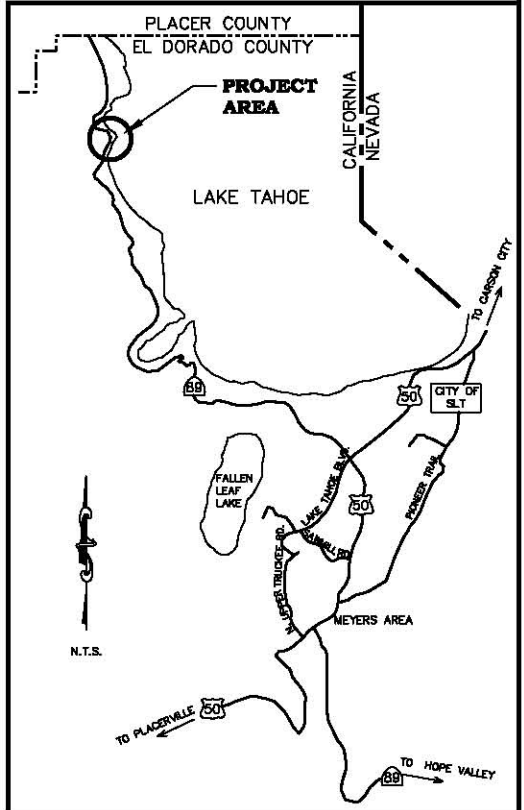
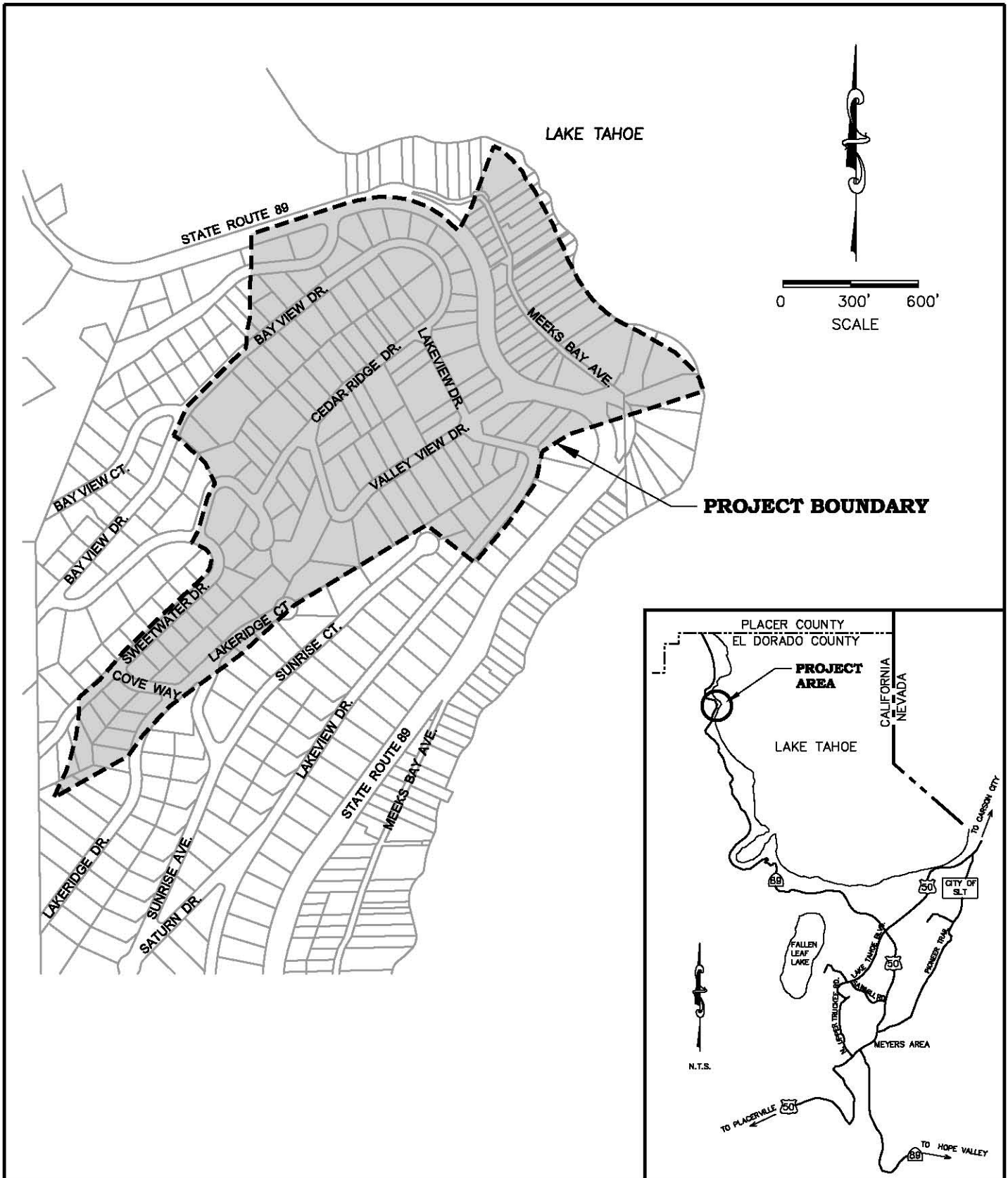
Mitigation measures are described in the attached Mitigation Monitoring and Reporting Program (Appendix B). TE staff and/or their contractor will conduct on-site monitoring to ensure that mitigation measures are implemented as proposed. A full time construction inspector provided by TE and/or contractor will monitor proposed mitigation measures for potential temporary impacts associated with construction. The inspector will ensure that the contractor strictly adheres to all temporary erosion control requirements and other environmental protection requirements. In addition to TE inspections, regulatory agencies will review Project plans and specifications to ensure compliance with local, state, and federal requirements. Any additional mitigation measures required by regulatory agencies will be monitored in the same manner. Throughout the construction of the Project, the agencies will be invited to weekly "tailgate" meetings and will conduct periodic visits to the Project site to enforce the BMPs and ensure compliance with all other mitigation measures.

The maintenance and monitoring of the Project improvements will continue for 20 years after construction completion. Revegetation monitoring will continue for a minimum of two years following construction. Plant establishment will include irrigation and replanting, if necessary. TE will inspect all Project improvements during the spring and fall of each year during the twenty-year maintenance period. TE staff will direct maintenance based on results of the inspections. Photographs will be taken before and after construction for a period of two years, and following significant storm events to monitor Project improvement performance.

8.0 REFERENCES

- County of El Dorado, Transportation Division (County). 2013. Tahoe Hills Erosion Control Draft Project Feasibility Report.
- County. 2013. Tahoe Hills Erosion Control Project Final Feasibility Report.
- County. 2013. Tahoe Hills Erosion Control Project Preferred Alternative Memorandum.
- Natural Resources Conservation Service (NRCS). 1974. Soil Survey, Tahoe Basin Area, California and Nevada. U.S. Department of Agriculture, Soil Conservation Service and U.S. Forest Service in cooperation with UC Agricultural Experiment Station and NV Agricultural Experiment Station.
- Nichols Consulting Engineers, Inc. (NCE) 2012. Tahoe Hills Erosion Control Project Botanical Baseline Assessment.
- NCE. 2012. Tahoe Hills Erosion Control Project Fish and Wildlife Baseline Assessment.
- NCE. 2012. Tahoe Hills Erosion Control Project Noxious Weed Risk Assessment.
- NCE. 2012. Tahoe Hills Erosion Control Project Delineation of Waters of the United States.
- State of California. 2012. California Environmental Quality Act (CEQA) Statute and Guidelines.
- State Water Resources Control Board (SWRCB). 1994. State Water Resources Control Board, Stream Environment Zones.
- Storm Water Quality Improvement Committee. 2004. Collaborative Storm Water Quality Project Delivery for the Lake Tahoe Basin.
- Tahoe Regional Planning Agency (TRPA). 2002. Plan Area Statements (PAS).
- TRPA. 2012. Code of Ordinances.
- TRPA. 1987. 208 Water Quality Management Plan.
- TRPA. 1997. Environmental Improvement Program.
- Tahoe Resource Conservation District (TRCD). (October 2007). Soil Characteristics Survey.
- Zeier & Associates, LLC. 2012. Tahoe Hills Erosion Control Project Cultural Resource Inventory.

FIGURES



COUNTY OF EL DORADO
 TRANSPORTATION DIVISION
 SOUTH LAKE TAHOE OFFICE



















TAHOE HILLS
 EROSION CONTROL PROJECT
 LOCATION MAP

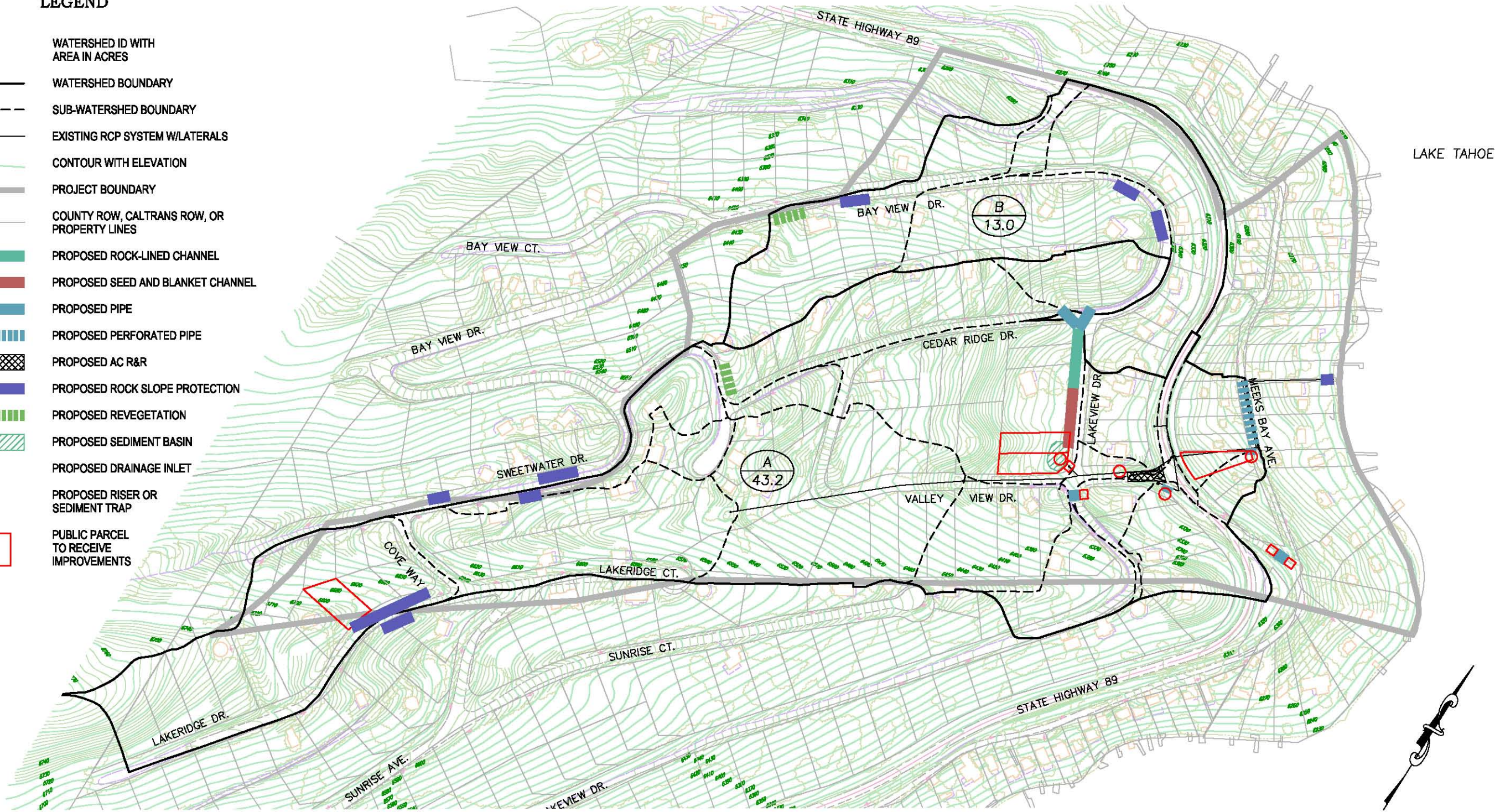
FIGURE
 1

DATE: 03/2014	PROJECT NO.: 95171	BY: ALD
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I:\CDAD\6650TD-BLT-Engineering\CIVIL_3D\PROJECTS\95171\ES\initial\ICEQA-NEPATH\FIG 1 LOCATION.dwg

LEGEND

-  WATERSHED ID WITH AREA IN ACRES
-  WATERSHED BOUNDARY
-  SUB-WATERSHED BOUNDARY
-  EXISTING RCP SYSTEM W/LATERALS
-  CONTOUR WITH ELEVATION
-  PROJECT BOUNDARY
-  COUNTY ROW, CALTRANS ROW, OR PROPERTY LINES
-  PROPOSED ROCK-LINED CHANNEL
-  PROPOSED SEED AND BLANKET CHANNEL
-  PROPOSED PIPE
-  PROPOSED PERFORATED PIPE
-  PROPOSED AC R&R
-  PROPOSED ROCK SLOPE PROTECTION
-  PROPOSED REVEGETATION
-  PROPOSED SEDIMENT BASIN
-  PROPOSED DRAINAGE INLET
-  PROPOSED RISER OR SEDIMENT TRAP
-  PUBLIC PARCEL TO RECEIVE IMPROVEMENTS



NOTE:
THIS DRAWING WAS ORIGINALLY CREATED AS FIGURE 16 IN THE
TAHOE HILLS ECP FEASIBILITY REPORT, DATED DECEMBER 2013.

**COUNTY OF EL DORADO
TRANSPORTATION DIVISION**
SOUTH LAKE TAHOE OFFICE











**TAHOE HILLS
EROSION CONTROL PROJECT
ALTERNATIVE 1**

FIGURE

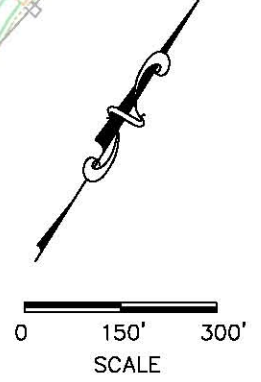
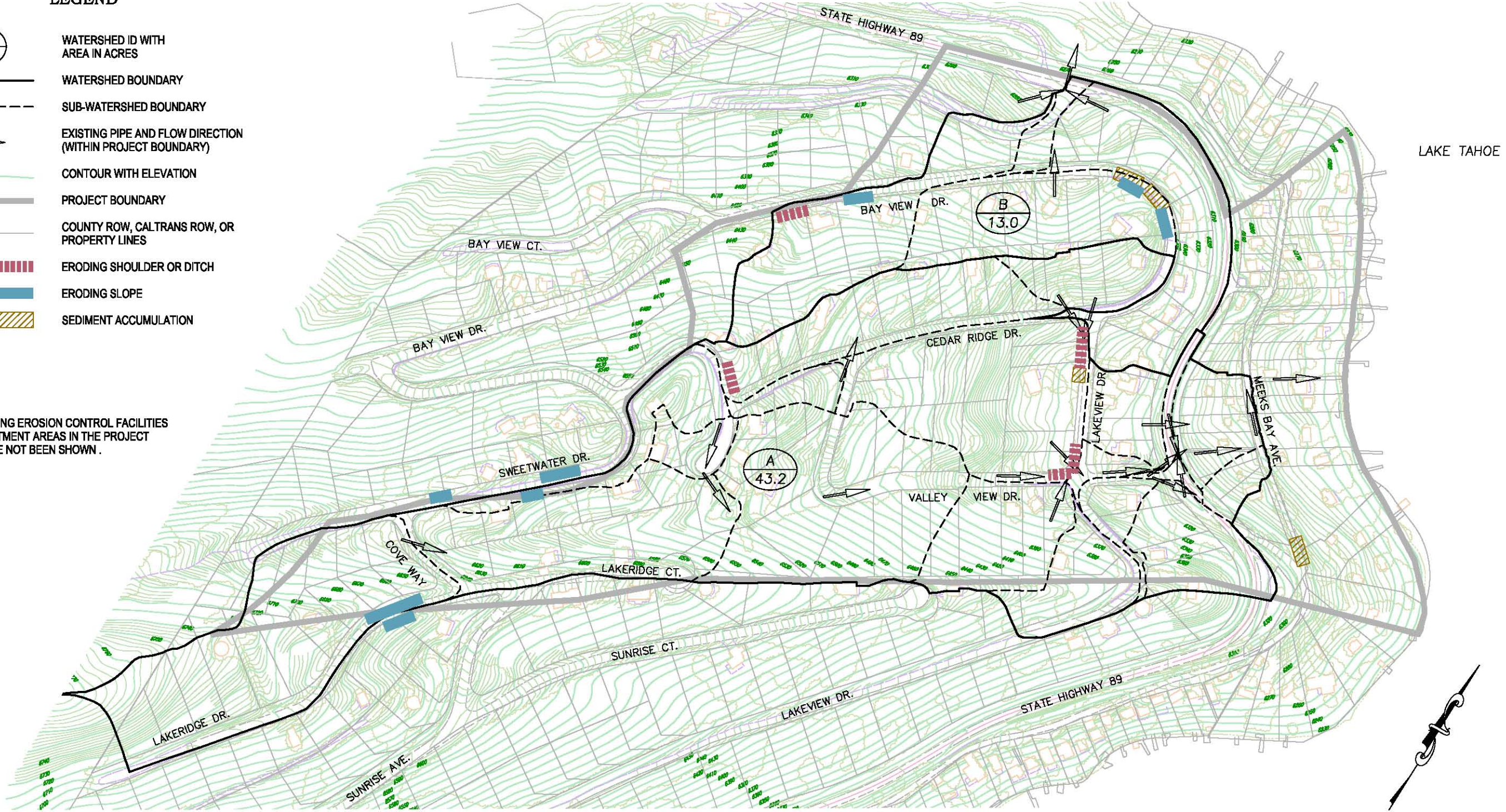
2

DATE: 12/2013 PROJECT NO.: 95171 BY: ALD

LEGEND


















-  WATERSHED ID WITH AREA IN ACRES
-  WATERSHED BOUNDARY
-  SUB-WATERSHED BOUNDARY
-  EXISTING PIPE AND FLOW DIRECTION (WITHIN PROJECT BOUNDARY)
-  CONTOUR WITH ELEVATION
-  PROJECT BOUNDARY
-  COUNTY ROW, CALTRANS ROW, OR PROPERTY LINES
-  ERODING SHOULDER OR DITCH
-  ERODING SLOPE
-  SEDIMENT ACCUMULATION

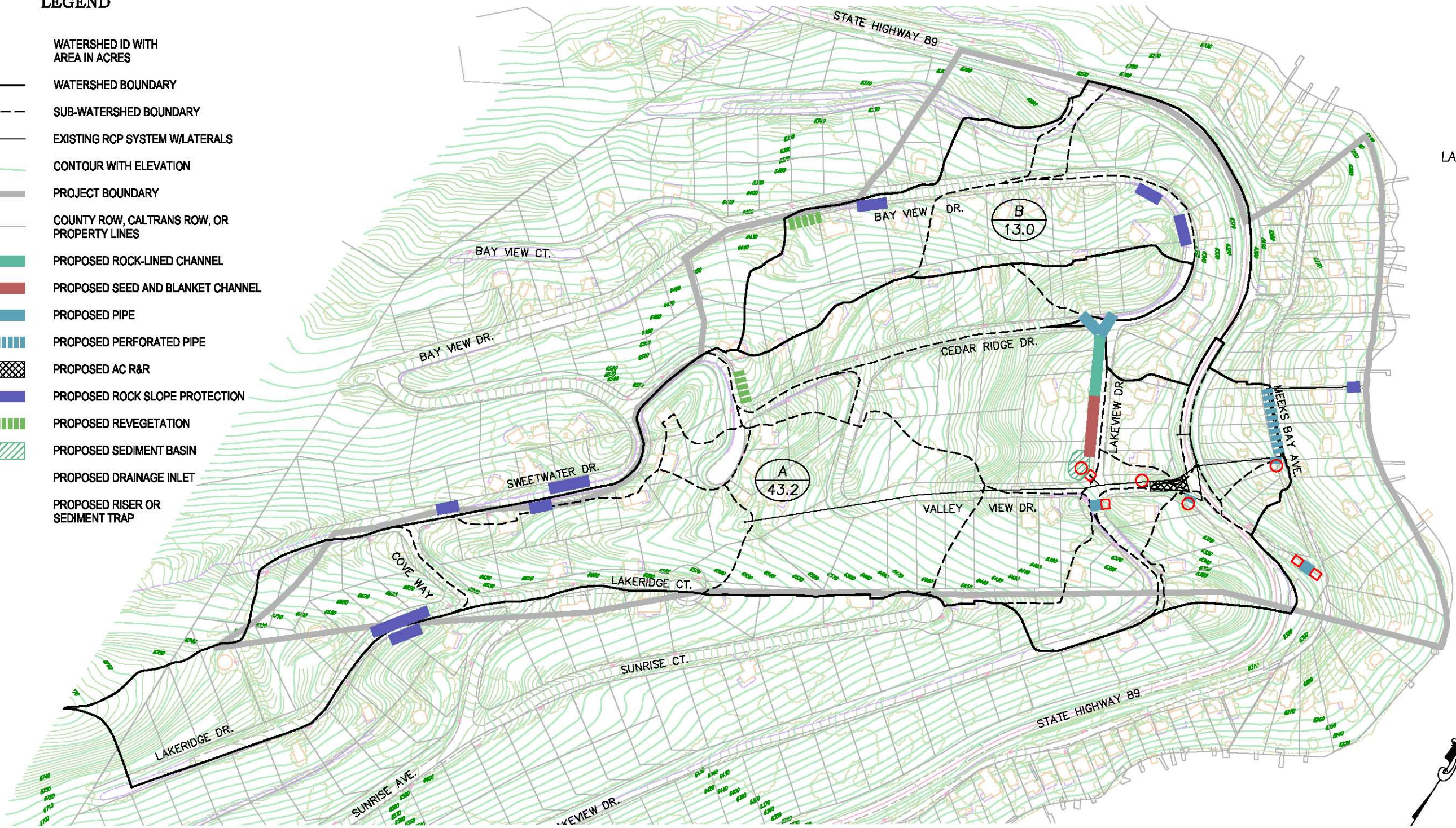
NOTE:
THE EXISTING EROSION CONTROL FACILITIES AND TREATMENT AREAS IN THE PROJECT AREA HAVE NOT BEEN SHOWN.



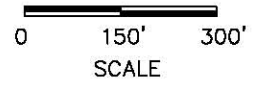
<p>COUNTY OF EL DORADO TRANSPORTATION DIVISION SOUTH LAKE TAHOE OFFICE</p>		<p>TAHOE HILLS EROSION CONTROL PROJECT PROBLEM AREA MAP</p>		<p>FIGURE 15</p>
DATE: 12/2013	PROJECT NO.: 95171	BY: ALD		

LEGEND

-  WATERSHED ID WITH AREA IN ACRES
-  WATERSHED BOUNDARY
-  SUB-WATERSHED BOUNDARY
-  EXISTING RCP SYSTEM W/LATERALS
-  CONTOUR WITH ELEVATION
-  PROJECT BOUNDARY
-  COUNTY ROW, CALTRANS ROW, OR PROPERTY LINES
-  PROPOSED ROCK-LINED CHANNEL
-  PROPOSED SEED AND BLANKET CHANNEL
-  PROPOSED PIPE
-  PROPOSED PERFORATED PIPE
-  PROPOSED AC R&R
-  PROPOSED ROCK SLOPE PROTECTION
-  PROPOSED REVEGETATION
-  PROPOSED SEDIMENT BASIN
-  PROPOSED DRAINAGE INLET
-  PROPOSED RISER OR SEDIMENT TRAP



LAKE TAHOE



















**COUNTY OF EL DORADO
TRANSPORTATION DIVISION**
SOUTH LAKE TAHOE OFFICE

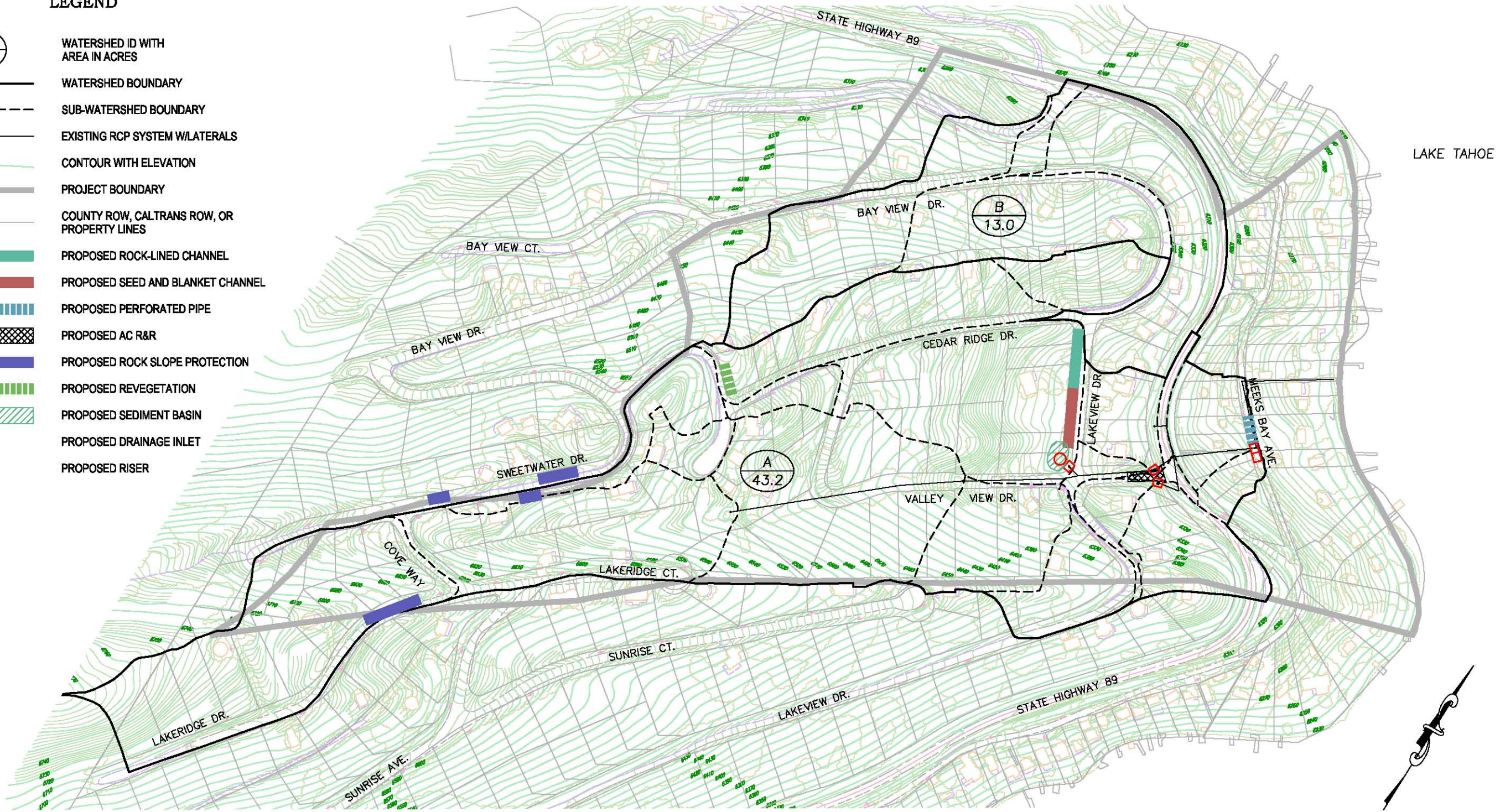
**TAHOE HILLS
EROSION CONTROL PROJECT
ALTERNATIVE 1**

FIGURE
16

DATE: 12/2013 PROJECT NO.: 95171 BY: ALD

LEGEND

-  WATERSHED ID WITH AREA IN ACRES
-  WATERSHED BOUNDARY
-  SUB-WATERSHED BOUNDARY
-  EXISTING RCP SYSTEM W/LATERALS
-  CONTOUR WITH ELEVATION
-  PROJECT BOUNDARY
-  COUNTY ROW, CALTRANS ROW, OR PROPERTY LINES
-  PROPOSED ROCK-LINED CHANNEL
-  PROPOSED SEED AND BLANKET CHANNEL
-  PROPOSED PERFORATED PIPE
-  PROPOSED AC R&R
-  PROPOSED ROCK SLOPE PROTECTION
-  PROPOSED REVEGETATION
-  PROPOSED SEDIMENT BASIN
-  PROPOSED DRAINAGE INLET
-  PROPOSED RISER



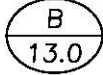












**COUNTY OF EL DORADO
TRANSPORTATION DIVISION**
SOUTH LAKE TAHOE OFFICE

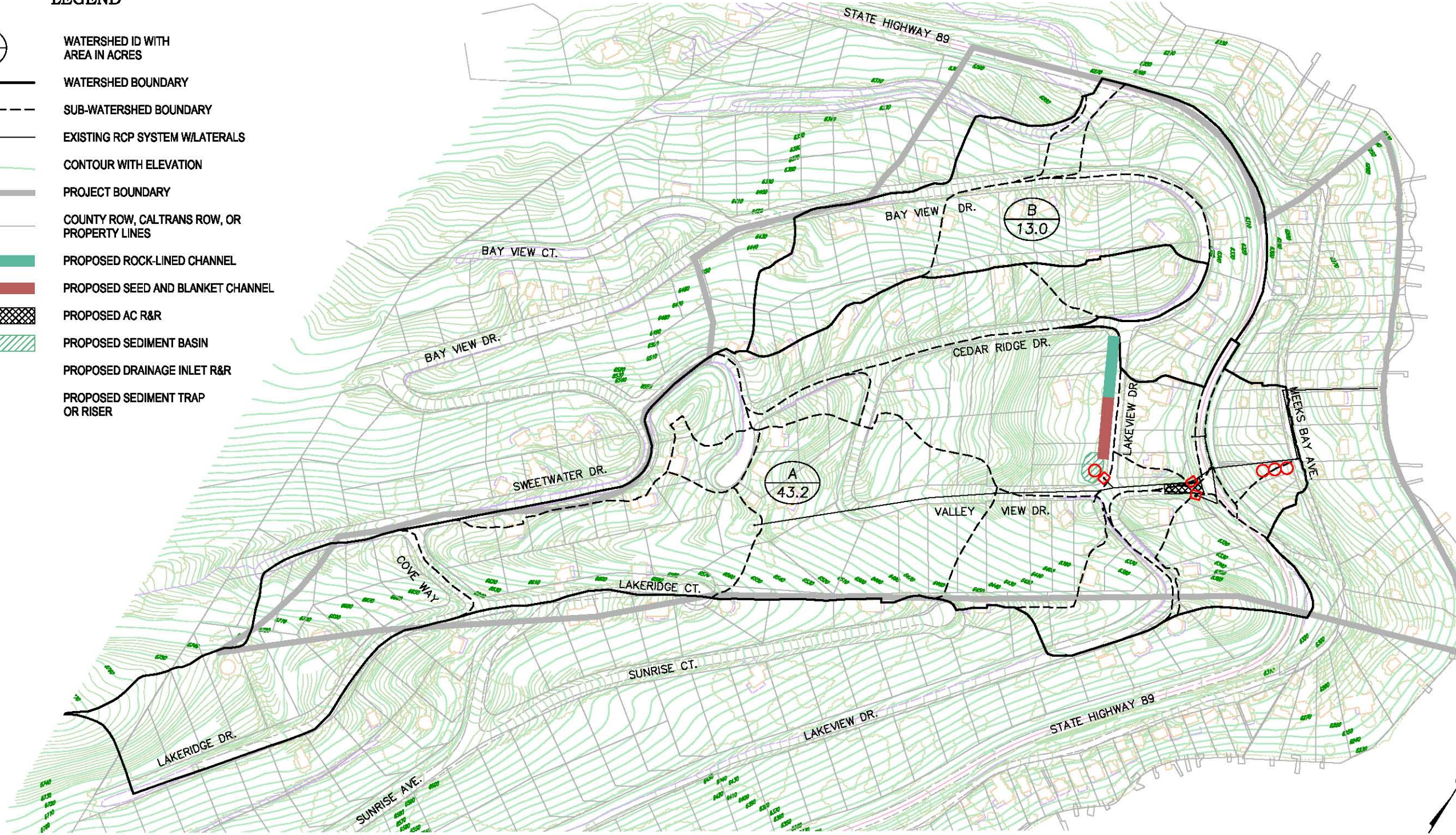
**TAHOE HILLS
EROSION CONTROL PROJECT
ALTERNATIVE 2**

FIGURE
17

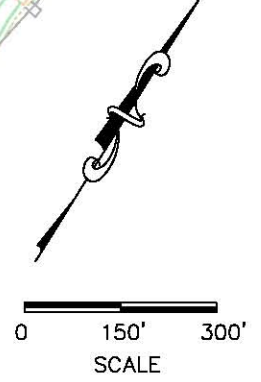
DATE: 12/2013 PROJECT NO.: 95171 BY: ALD

LEGEND

-  WATERSHED ID WITH AREA IN ACRES
-  WATERSHED BOUNDARY
-  SUB-WATERSHED BOUNDARY
-  EXISTING RCP SYSTEM W/LATERALS
-  CONTOUR WITH ELEVATION
-  PROJECT BOUNDARY
-  COUNTY ROW, CALTRANS ROW, OR PROPERTY LINES
-  PROPOSED ROCK-LINED CHANNEL
-  PROPOSED SEED AND BLANKET CHANNEL
-  PROPOSED AC R&R
-  PROPOSED SEDIMENT BASIN
-  PROPOSED DRAINAGE INLET R&R
-  PROPOSED SEDIMENT TRAP OR RISER



LAKE TAHOE



<p>COUNTY OF EL DORADO TRANSPORTATION DIVISION SOUTH LAKE TAHOE OFFICE</p>		<p>TAHOE HILLS EROSION CONTROL PROJECT ALTERNATIVE 3</p>		<p>FIGURE 18</p>
DATE: 12/2013	PROJECT NO.: 95171	BY: ALD		

**APPENDIX A:
CEQA CHECKLIST**

CEQA Checklist

Title: Tahoe Hills Erosion Control Project (JN 95171)	
Description: Construction of erosion control and water quality improvement facilities	
Location: The Project area is located in eastern El Dorado County, in the Lake Tahoe Basin. The Project is bounded by State Route 89 to the north, Lake Tahoe to the east, and Lakeview Drive to the South (Figure 1).	
Owner/Applicant: County of El Dorado, Community Development Agency, Transportation Division, Tahoe Engineering	
Lead Agency: County of El Dorado, Community Development Agency, Transportation Division, Tahoe Engineering	
County Contact: Daniel Kikkert, Senior Civil Engineer	Phone: 530-573-7900
Address: 924 B Emerald Bay Road, South Lake Tahoe, CA 96150	

The CEQA Checklist recommended by the California Environmental Quality Act (CEQA) Guidelines is used to determine potential impacts of the proposed Project on the physical environment. The Checklist provides a list of questions concerning a comprehensive array of environmental issues potentially affected by the Project. An evaluation of impacts for each resource follows:

- a) A brief explanation is required for all answers except 'No Impact' answers that are adequately supported by the information a lead agency following each question. A 'No Impact' answer is adequately supported if the referenced information shows 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).
- b) All answers must account for the whole action involved, including off-site and on-site impacts. The answer must also consider cumulative and project-level impacts, indirect and direct impacts and construction and operational impacts.
- c) Once the lead agency has determined that a particular physical impact may occur, the Checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. A potentially significant impact is appropriate if there is substantial evidence that an effect may be significant. If there are one or more potentially significant impacts when the determination is made, an EIR is required.
- d) **Mitigated Negative Declaration - Less than Significant with Mitigation:** This applies when mitigation measures have been incorporated into a project, which reduced an effect from a 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 and earlier analyses may be cross-referenced).
- e) Earlier analyses may be used where, pursuant to the tiering, programmatic 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:
 - i. **Earlier Analysis Used.** Identify and state where they are available for review.
 - ii. **Impacts Adequately Addressed.** Identify which effects from the Checklist were within the scope of an earlier document pursuant to applicable legal standards, and state whether such effects were adequately analyzed and addressed by mitigation measures.
 - iii. **Mitigation Measures.** For effects that are less than significant with mitigation measures, describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they addressed site-specific conditions for the project.

-
- f) Lead agencies are encouraged to incorporate references into the checklist to provide 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.
 - g) Supporting Information Sources: A source list should be attached. Individuals who were contacted should be cited in the discussion.
 - h) 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.
 - i) The explanation of each issue should identify:
 - i. The significance criteria or threshold, if any, used to evaluate each question.
 - ii. The mitigation measure identified, if any, to reduce the impact to less than significant.

I. AESTHETICS – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Item I-A Discussion: A limited part of the Project area is visible from State Route 89, which is a designated Scenic Highway. The intent of the Project is to improve the quality of the area by stabilizing bare soil areas with native vegetation, by enhancing drainage features and by installing infiltration systems that will benefit the environment. While there will be temporary aesthetic impacts due to construction, there will be no long term degradation of aesthetic quality in the Project area and therefore the Project has a less than significant impact.

Item I-B Discussion: The Project will remove a small number of trees; however the removal will not occur along a scenic highway. No rock outcroppings or historic buildings will be damaged during construction of the proposed Project; therefore, the Project will have a less than significant impact.

Item I-C Discussion: The proposed Project will implement new erosion control and water quality protection measures in the subdivision. Care will be taken in the design and construction of the improvements to integrate them into the natural surroundings. The proposed Project will restore degraded channels and bare soil areas within the County of El Dorado (County) right-of-way and specified parcels. These erosion control and water quality improvement measures will increase the visual character and quality of the site. While construction activities may affect the scenic resources during construction, these impacts will be temporary. The proposed Project will not substantially degrade the existing visual character or quality of the site or its surroundings; therefore, the Project will have a less than significant impact.

II. AGRICULTURE AND FOREST 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:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Category II Discussion: The Project area does not contain any lands used for agriculture, nor do the plan area statements that encompass the Project area allow for agriculture. Additionally, the Project will only remove a small number of trees which will not degrade the surrounding forest land due to the significant number of trees within the Project area. Therefore, the proposed Project will have no impact on agriculture or forest resources.

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:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Item III-B Discussion: The proposed Project will involve excavation and grading. The El Dorado County Air Quality Management District (EDCAQMD) Rule 223 Fugitive Dust General Requirements states that “visible emissions shall not exceed 20% opacity at point-of-origin and shall not extend more than 50 feet from point-of-origin, or cross the Project boundary line, whichever is less.” The contractor will comply with the Air Quality Plan and EDCAQMD regulations by implementing air quality Best Management Practices (BMPs) from the TRPA Handbook of Best Management Practices and practices outlined in the EDCAQMD Rule 223 to address fugitive dust. Compliance with the TRPA Air Quality Plan will attain TRPA threshold standards and, therefore, federal and state air quality standards.

The Project will have no long term impacts to air quality. Compliance with EDCAQMD and TRPA regulations through the permitting process will ensure that the Project will not conflict with or obstruct implementation of the Tahoe Hills Erosion Control Project

air quality plans. Additionally, the Project will not violate any air quality standard or contribute substantially to an existing or projected air quality violation. Finally, the Project will not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is in non-attainment. With the implementation of the mitigation measures outlined below in *Item III-B Mitigation Measures*, the proposed Project will not violate any air quality standard or contribute substantially to an existing or projected air quality violation; therefore, the Project will have a less than significant impact.

Item III-B Mitigation Measures:

Mitigation Measure AQ-1: The construction contractor shall implement air quality Best Management Practices from the TRPA Code of Ordinances and Handbook of Best Management Practices.

Mitigation Measures AQ-2: The construction contractor shall water exposed soil twice daily, or as needed, to control wind borne dust. All haul/dump truckloads shall be covered securely.

Mitigation Measure AQ-3: The contractor shall sweep the Project site a minimum of once daily to remove all dirt and mud that has been generated from or deposited on roadways by construction equipment going to and from the construction site.

Mitigation Measure AQ-4: On-site vehicle speed shall be limited to 15 miles per hour on unpaved surfaces.

Mitigation Measure AQ-5: Construction activities shall comply with EDCAQMD Rule 223 - Fugitive Dust, so that emissions do not exceed hourly levels. The contractor will use approved BMPs as outlined in the TRPA Handbook of Best Management Practices and the EDCAQMD Rule 223 to address fugitive dust. Dust mitigation measures and dust control BMPs will include, but are not limited to, stabilizing unpaved areas subject to vehicular traffic, stabilizing storage piles and disturbed areas, suppressing dust by watering disturbed areas, cleaning all construction vehicles leaving the site, mulching bare soil areas, and ceasing grading and earth moving activities when wind speeds are high enough to result in dust emissions crossing the Project boundary.

Mitigation Measure AQ-6: Construction equipment idling shall be restricted to 5 minutes when not in use.

Mitigation Measure AQ-7: The construction contractor shall post a publicly visible sign on the Project site during construction operations that specifies the telephone number and person/agency to contact for complaints and/or inquiries on dust generation and other air quality problems resulting from Project construction.

Item III-C Discussion: Construction activities may impact air quality, but the impacts will be well below established significance levels identified in the El Dorado County Air Pollution Control District Guide to Air Quality Assessment since the activity is temporary and there will not be any long-term impacts. Based on the assumptions used in section VII "Green House Gas Emissions", the project is estimated to have a combined construction equipment fuel use level under the limit of 402 gallons per day as well as being under the 37,000 gallons limit for diesel fuel consumed during the construction phase. The proposed Project will not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is in non-attainment; therefore, the Project will have a less than significant impact.

Item III-D Discussion: Construction activities may impact air quality, but the impacts will be well below established significance levels identified in the El Dorado County Air Pollution Control District Guide to Air Quality Assessment since the activity is temporary and there will not be any long-term impacts. The proposed Project will not expose sensitive receptors to substantial pollutant concentrations; therefore, the Project will have a less than significant impact.

Item III-E Discussion: Construction activities may impact air quality, but the impacts will be well below established significance levels identified in the El Dorado County Air Pollution Control District Guide to Air Quality Assessment since the activity is temporary and there will not be any long-term impacts. The proposed Project will not create objectionable odors affecting a substantial number of people; therefore, the Project will have a less than significant impact.

IV. BIOLOGICAL RESOURCES – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	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 Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Item IV-A Discussion: A *Wildlife Biological Assessment and Biological Evaluation (BABE)* was performed for the proposed Project. The biological assessment surveys observed no federal or state-listed candidate, or proposed wildlife species in the Project study area. However, there are recorded occurrences of special status species immediately adjacent to the Project area. Suitable habitat conditions do exist within 0.5 miles of the Project area for American marten, American peregrine falcon, bald eagle, California spotted owl, great gray owl, mule deer, osprey, Sierra Nevada mountain beaver, Sierra Nevada yellow legged frog, Sierra Nevada snowshoe hare, waterfowl, and willow flycatcher. This determination was based on a thorough data review and a survey of the Project area. The primary purpose of the field survey was to identify and determine the occurrence of, or the suitability of, habitat for special status wildlife species within the Project site.

A *Botanical Biological Assessment and Biological Evaluation (BABE)* was also performed for the proposed Project. The biological assessment surveys observed no federal or state-listed candidate, or proposed botanical species in the Project study area. However, there are recorded occurrences of special status species immediately adjacent to the Project area. Suitable habitat conditions do exist within 0.5 miles of the Project area for marsh skullcap and Tahoe yellow cress.

A *Noxious Weed Risk Assessment (NWRA)* was performed for the proposed Project. The surveys indicated that a noxious weed species was known to exist within the Project area. This species includes cheatgrass (*Bromus tectorum*). The locations of the noxious weeds are documented in the NWRA.

With the implementation of the mitigation measures outlined below in *Item IV-A Mitigation Measures*, the proposed Project will not 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 & Game (CDFG) or U.S. Fish & Wildlife Service (USFWS); therefore, the proposed Project will have a less than significant impact.

Item IV-A Mitigation Measures:

Mitigation Measure B-1: Prior to construction, TE will confirm if any new special status species have been identified by the United States Forest Service – Lake Tahoe Basin Management Unit (USFS-LTBMU) or the CA Fish & Wildlife Service (via the California Natural Diversity Database - *CNDDB*) within, or immediately adjacent to, the Project area. If new activity or occurrences have been identified, appropriate limited operating periods (LOP) will be observed.

Mitigation Measure B-2: If special status plant species are found prior to or during construction, these populations will be identified and protected with appropriate measures per TRPA and the USFS-LTBMU.

Mitigation Measure B-3: TE will implement and require the contractor to adhere to a Noxious Weed Mitigation Plan (Plan) to decrease habitat vulnerability to or below pre-construction levels. The Plan includes pre-construction elements such as treatment methodologies for existing noxious weed populations identified in the Project area, as well as operating procedures for both during and post-construction. Recommended BMPs will include, but are not limited to: hand removal of existing weeds prior to going to seed, equipment cleaning prior to use, area of disturbance minimization, disturbed ground stabilization upon completion of construction with mulch or other means, certified weed-free mulch and other materials, and disturbed areas revegetation with native plants.

Item IV-B Discussion: A Land Capability Verification, which delineated sensitive Class 1B (stream environment zone (SEZ)) lands within the Project area, was completed and certified by the TRPA. The Project has been designed to avoid SEZs in all possible instances, and as such, no SEZs will be disturbed as part of this Project.

Item IV-B Mitigation Measures:

Mitigation Measure B-4: Groundwater is not expected to be encountered during construction, if groundwater is encountered and the excavated area requires dewatering to complete the work, TRPA and the Lahontan Regional Water Quality Control Board shall be notified immediately to determine the appropriate course of action. The Storm Water Pollution Prevention Plan (SWPPP) for the proposed Project will include a Dewatering Contingency Plan (Item VI-B Mitigation Measures) that the contractor shall follow.

Mitigation Measure B-5: The proposed Project was designed around the findings of the wetland delineation report to avoid or minimize impacts to wetlands and/or other Waters of the United States (WOUS). No wetlands or jurisdictional WOUS were found within the Project area. Therefore, TE does not anticipate the need to obtain a 404 Permit and a 401 Water Quality Certification. TE will, however, obtain a TRPA EIP Project Permit and will implement the required mitigation measures.

Item IV-C Discussion: A Land Capability Verification, which delineated sensitive Class 1B (stream environment zone (SEZ)) lands within the Project area, was completed and certified by the TRPA. The Project has been designed to avoid SEZs in all possible instances, and as such, no SEZs will be disturbed as part of this Project.

Item IV-D Discussion: With the implementation of Mitigation Measures B-1 - B-3 found in Section IV-A above, the proposed Project will not 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; therefore, the Project will have a less than significant impact.

V. CULTURAL RESOURCES – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique Paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Category V Discussion: A cultural resources study, which included a literature search and an archaeological survey/inventory of the Project survey area, was completed. Twenty five previous cultural resources studies have been conducted in the vicinity of the Project area, which included portions of the Area of Potential Effects (APE). No cultural resources have been previously recorded within the APE and none were identified within the APE during the pedestrian survey. The APE is considered to have a low sensitivity for the discovery of prehistoric, ethno historic, or historic cultural material or subsurface deposits. Because of this, no additional cultural resources work for this Project is recommended. However, in the event that cultural resources are discovered during Project implementation, Project personnel shall halt all activities in the immediate area and notify a qualified archaeologist to determine the appropriate course of action. Therefore, the Project will have no impact on cultural resources.

VI. GEOLOGY & SOILS – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	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: <ul style="list-style-type: none"> 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. 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Item VI-B Discussion: The intent of the proposed Project is to implement erosion control and water quality improvements within the Project area that will stabilize bare soils and improve storm water quality. During construction, portions of the site will have exposed soil areas that may, during a rain storm, high wind event or utility line breach, erode and pose a threat to water quality. Once Project construction is complete, there will be an overall decrease of erosion in the Project area. With the implementation of the mitigation measures outlined below in *Item VI-B Mitigation Measures*, the proposed Project will not result in any significant increase in wind or water erosion of soils, either on or off the site; therefore, the Project will have a less than significant impact.

Item VI-B Mitigation Measures:

Mitigation Measure G-1: The contractor shall prepare, submit and adhere to a Storm Water Pollution Prevention Plan (SWPPP) to the TE, Lahontan Regional Water Quality Control Board (Lahontan), and TRPA prior to construction. The SWPPP shall be in accordance with TRPA and Lahontan requirements for storm water pollution prevention in the Tahoe Basin. As part of the SWPPP, the contractor will be required to prepare and adhere to a Temporary BMP Plan, a Spill Contingency Plan and a Dewatering Plan.

The Temporary BMP Plan will include design and specifications that detail the required construction BMPs that shall be installed prior to and during construction to prevent any erosion that may occur during a rain or wind event. All temporary BMPs shall be installed and maintained per TRPA's Handbook of Best Management Practices. Temporary BMPs will include, but are not limited to: gravel bags, silt fencing, tree protection fencing, construction limit fencing, coir logs, visqueen, and construction access gravel. Prior to construction, all storage, access, and staging areas shall be secured by the contractor and approved by the TE, Lahontan, and TRPA. No staging or storage will occur in Stream Environment Zones (SEZs). The contractor shall be responsible for maintenance of mobilization sites, including placement and maintenance of BMPs. All equipment, vehicles, and materials shall be stored on paved or previously disturbed surfaces only; in locations approved by the TE, Lahontan, and TRPA.

The contractor shall limit the areas to be disturbed to the area within the boundary of the construction limit fencing, which shall be designed and installed prior to commencement of construction. The boundary of the construction limit fencing shall be displayed on the EC Sheets of the construction plans and shall be set to the minimum size required to construct proposed improvements, per the Projects plans and specifications. All disturbed areas shall be restored to a better than pre-construction condition. The contractor shall meet the permit requirements for BMPs, staging areas, revegetation, grading season restrictions, and all other permitting agency approval conditions. Construction will take place within the Lake Tahoe construction season (between May 1st and October 15th).

The Spill Contingency Plan, which the contractor shall adhere to, shall outline how to properly handle accidental construction related spills and must include the requirement for spill prevention kits to be available on site to contain and properly clean any accidental spills. The Spill Contingency Plan will help the contractor to minimize the potential for and effects from spills of hazardous, toxic, or petroleum based substances during construction activities. The Spill Prevention Kit will contain, but is not limited to, absorbent pads, plastic bags, containment devices, drain seals and drip pans. This plan will also outline who to call if utility lines are damaged during construction.

The Dewatering Plan, which the contractor shall adhere to, will outline the process that will be required of the contractor if groundwater is intercepted during construction. The Dewatering Plan shall be prepared and submitted for approval by the TE, Lahontan, and TRPA prior to commencement of construction. Construction

sequencing shall be designed to avoid and minimize the potential of encountering groundwater during construction. However, if groundwater is encountered and the excavated area requires dewatering to complete the work, construction shall immediately cease and TRPA, Lahontan, and TE shall be notified immediately. The agencies will then observe the construction work to ensure that the approved dewatering plan is being adhered to and that dewatering effluent is properly contained and disposed of. Based on the results of the Soils/Hydrology Analysis, which is performed by TRPA prior to construction, dewatering areas will be better identified to avoid and reduce the potential of groundwater interception.

Mitigation Measure G-2: The contractor shall attend the TRPA pre-grade onsite inspection meeting to ensure that proper BMPs are in place per the SWPPP and that all permit conditions have been met prior to commencement of construction.

Mitigation Measure G-3: TE shall conduct daily inspections of BMPs to ensure they are properly placed and maintained for maximum water quality benefit. As part of this process, TE and/or the contractor will complete inspection forms for submittal to regulatory agencies to demonstrate deficiencies and that corrective action has been immediately taken.

VII. GREENHOUSE GAS EMISSIONS – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Item VII-A Discussion: Project construction would generate temporary and one-time greenhouse gas (GHG) emissions mainly from diesel-powered construction equipment and on-road trucks, with a small amount from workers' personal vehicles during construction of the Project. Greenhouse gases emitted during the combustion of diesel fuel in off-road construction equipment and on-road vehicles would consist mainly of carbon dioxide, along with small amounts of methane and nitrous oxide. Construction emissions would be intermittent, and short-term, during one summer construction season. Construction emissions would permanently cease at the end of the Project. Over the long-term, these temporary emissions would be offset or mitigated by the growth of native vegetation at designated restoration areas. The revegetation work, including trees, grasses, and shrubs would be maintained over the life of the Project to sequester carbon dioxide.

There currently is no federal, state, or local regulatory guidance for determining whether a project advances or hinders California's GHG reduction goals and no promulgated thresholds of significance for GHG impacts have been established. Therefore, this analysis focuses on construction impacts estimated using the TE's past project implementation database and the U.S. Environmental Protection Agency (USEPA) GHG emission factors for diesel fuel and gasoline combustion in construction equipment. TE has reviewed past construction logs for projects equivalent in size and scope to the proposed Project, to determine the typical number and type of vehicles that are actively working to construct the Project each day. Based on this analysis, TE has formulated the following assumptions:

- Fifteen workers per day, driving five vehicles to work an average of 40 miles round-trip per day
- Vehicles average 20 miles per gallon
- Twelve pieces of construction machinery per day
- Two trucks per day for hauling equipment or material averaging 3 hours per day
- Crews work eight hours per day with machinery running half that time (4 hours)
- Machinery burns an average of two gallons of diesel fuel per hour
- Hauling and dump trucks burn an average of six gallons of diesel fuel per hour

- Diesel fuel contributes approximately 22.5 lbs CO₂/gallon
- Gasoline contributes approximately 20 lbs CO₂/gallon
- The Project will be completed in 40 working days

Based on these assumptions, the proposed Project would emit approximately 58 metric tons of CO₂ equivalents.

This estimated amount is negligible in comparison to the statewide inventory of 480,000,000 metric tons discussed above (0.00000012 percent). The estimated amount is also significantly less than the San Luis Obispo Air Pollution Control District's (SLOAPCD) significance threshold of 1,150 metric tons of CO₂ equivalents. GHG emissions would terminate following completion of construction work. Therefore, due to the intent of the Project and with the implementation of Mitigation Measures AQ-1 - AQ-7 found in Section III above, the proposed Project will not create a substantial amount of greenhouse gas emissions; therefore, the Project will have a less than significant impact.

VIII. HAZARDS & HAZARDOUS MATERIALS – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wild land fires, including where wild lands are adjacent to urbanized areas or where residences are intermixed with wild lands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Item VIII-A Discussion: During Project construction, there exists a risk of accidental fuel spills from construction equipment. With the implementation of Mitigation Measures G-1, G-2 and G-3 found in Section VI above, the proposed Project will not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials; therefore, the Project will have a less than significant impact.

Item VIII-B Discussion: During Project construction, there exists a risk of accidental fuel spills from construction equipment. With the implementation of Mitigation Measures G-1, G-2 and G-3 found in Section VI above, the proposed Project will not 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; therefore, the Project will have a less than significant impact.

IX. HYDROLOGY & WATER QUALITY – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures, which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Item IX-A Discussion: During construction, grading and excavation will take place that may have the potential to cause erosion. During Project construction, there exists a risk of accidental fuel spills from construction equipment. Once construction is complete and the erosion control and water quality improvement measures are in place, water quality in the area will be improved. With the implementation of Mitigation Measures G-1, G-2 and G-3 found in Section VI above, the proposed Project will not violate any water quality standards; therefore, the proposed Project will have a less than significant impact.

Item IX-C Discussion: One of the goals of the proposed Project is to reduce peak flows and volumes while providing treatment for the pollutants of primary concern. The Project will slightly affect drainage patterns in order to improve hydraulic and hydrologic connectivity of the site and move storm water to where it can be infiltrated. As a result, flow rates and volumes at the Project outflow locations will likely be decreased due to the infiltration components of this Project. The proposed Project will not substantially alter the existing drainage pattern of the site or area in a manner which would result in substantial erosion or siltation on- or off-site; therefore, the proposed Project will have a less than significant impact.

Item IX-D Discussion: One of the goals of the proposed Project is to reduce peak flows and volumes while providing treatment for the pollutants of primary concern. The Project will affect drainage patterns in order to improve hydraulic and hydrologic connectivity of the site and move storm water to where it can be infiltrated. As a result, flow rates and volumes at the Project outflow locations will likely be decreased due to the infiltration components of this Project. The proposed Project will not 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; therefore, the proposed Project will have a less than significant impact.

Item IX-E Discussion: During construction of the proposed Project, grading and excavation will take place that may have a potential to cause increased surface runoff. Once construction is complete and the erosion control and water quality improvement measures are in place, surface flows and volumes will likely be reduced from their existing condition and an improved storm water system will be in place. With the implementation of Mitigation Measures G-1, G-2 and G-3 found in Section VI above, the proposed Project will not create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff; therefore, the Project will have a less than significant impact.

Item IX-F Discussion: During construction of the proposed Project, grading and excavation will take place that may have a potential to cause increased surface runoff and minor erosion. Once construction is complete and the erosion control and water quality improvement measures are in place, surface runoff and erosion will be reduced and water quality will be improved. With the implementation of Mitigation Measures G-1, G-2 and G-3 found in Section VI above, the proposed Project will not otherwise substantially degrade water quality; therefore, the Project will have a less than significant impact.

X. LAND USE & PLANNING – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Category X Discussion: The proposed Project will not physically divide an established community; conflict with any applicable land use plan, policy, or regulation; or conflict with any applicable habitat conservation plan or natural community conservation plan. The Project area is located in an unincorporated area of El Dorado County within the Tahoe Basin. Land use policies for the Project area are discussed in the El Dorado County General Plan, the TRPA Regional Plan, and the TRPA Plan Area Statements (PAS). The majority of the Project lies within PAS 149, which has a land use classification of "Residential", with a maximum density of one single family dwelling per parcel. The proposed Project will not impact the land use of the area and is consistent with the existing allowed uses; therefore, the proposed Project will have no impact on land use or planning.

XI. MINERAL RESOURCES – Would the project result in:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Category XI Discussion: There are no known mineral resources that would be of value to the region or the state in the Project area. Therefore, the proposed Project will have no impact on mineral resources.

XII. NOISE – Would the project result in:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Item XII-A Discussion: Standard construction equipment shall be used to construct the improvements associated with the proposed Project. The equipment will increase noise levels over that of regular levels in the neighborhood, but the noise levels will be within allowable noise decibel standards imposed by TE and the TRPA. The TRPA Code of Ordinances states that TRPA-approved construction projects are exempt from the quantitative limits contained in the Noise Ordinance and Community Plan if construction activities take place between the hours of 8:00 a.m. and 6:30 p.m. With the implementation of the mitigation measures outlined below in *Item XII-A Mitigation Measures*, the proposed Project may result in a temporary or periodic exposure to or generation of noise levels in excess of standards established in the local General Plan, Community Plan, or Noise Ordinance, but it will be temporary and is allowable under local ordinances. Therefore, the Project will have a less than significant impact.

Item XII-A Mitigation Measures:

Mitigation Measure N-1: In order to mitigate the impacts of temporarily increased ambient noise levels, construction noise emanating from all construction activities shall only occur between the hours of 8:00 a.m. and 6:30 p.m. per TRPA Code and the County's General Plan, unless other hours are approved by TRPA.

Mitigation Measure N-2: All construction equipment and vehicles used for Project construction shall be fitted with factory installed muffling devices and will be maintained in good working order. TE will advise potentially affected residents of the proposed construction activities including duration, schedule of activities, and contacts for filing noise complaints. TE staff and/or the contractor shall respond to all noise complaints received within one working day and resolve the issue within two working days.

Item XII-B Discussion: Standard construction equipment will be used to construct the proposed improvements. The equipment will create groundborne vibrations and noise levels over that of regular levels in the neighborhood, but the groundborne vibrations and noise levels will be within acceptable noise decibel standards imposed by the County and the TRPA. The proposed Project will not result in exposure of persons to or generation of groundborne vibration or noise levels in excess of standards established in the local General Plan, Community Plan, or Noise Ordinance, or applicable standards of other agencies; therefore, the Project will have a less than significant impact.

Item XII-D Discussion: Refer to the information stated in the *Item XII-A Discussion*. With the implementation of Mitigation Measures N-1 and N-2 found in Section XII above, the proposed Project may result in a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project, but it will be temporary and is allowable under local ordinances. Therefore, the Project will have a less than significant impact.

XIII. POPULATION & HOUSING – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Category XIII Discussion: The proposed Project will not directly or indirectly induce or displace existing or future housing. Therefore, the proposed Project will have no impact on population and housing.

XIV. PUBLIC SERVICES – Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental services and/or 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, including:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
a) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Category XIV Discussion: The proposed Project will have no impact on fire protection, police protection, schools, parks, or other public facilities. Improvements are designed and located to ensure that regular access and maintenance can take place. The proposed Project will not result in substantial adverse physical impacts associated with the new or altered facilities; therefore, the Project will have no impact on public services.

XV. RECREATION – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Item XV-A Discussion: The proposed Project will not affect the recreational components of the Project area; therefore the Project will have no impact.

XVI. TRANSPORTATION & TRAFFIC – Would the project result in:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures 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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

freeways, pedestrian and bicycle paths, and mass transit?				
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 the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Item XVI-E Discussion: At some locations, temporary lane closures may be necessary to facilitate Project construction; however, at no time would access for local residents, school buses, or emergency vehicles be prohibited. Traffic controls will only be implemented during work hours and when it is necessary to perform work. With the implementation of the mitigation measures outlined below in *Item XVI-E Mitigation Measures*, the proposed Project will not result in inadequate emergency access; therefore, the Project will have a less than significant impact.

Item XVI-E Mitigation Measures:

Mitigation Measure T-1: The contractor will be required to prepare and adhere to a Traffic Control Plan for TRPA and TE review and approval. Elements of the plan will include appropriate use of signage, flaggers, traffic calming, and alternative routes to accommodate local and through traffic. In addition, TE will advise local residents regarding schedules for construction traffic detours through signage, press releases, and distribution of flyers in area neighborhoods well in advance of construction initiation. Access will not be prohibited, at any time, for local residents, school buses or emergency vehicles.

XVII. UTILITIES & SERVICE SYSTEMS – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Item XVII-C Discussion: The proposed Project will implement erosion control and water quality improvement measures that will reduce the discharge of sediment and pollutants to Lake Tahoe from the County rights-of-way. The proposed Project will install new storm water drainage and treatment facilities to supplement and improve the existing storm water infrastructure. All newly proposed storm water facilities will be installed within existing drainage areas. This Project is identified in the Lake Tahoe Environmental Improvement Program and is intended to improve the environment by addressing storm water deficiencies, erosion, and water quality problems. The proposed Project will require or result in the construction of new storm water drainage facilities or expansion of existing facilities, however with the implementation of Mitigation Measures G-1, G-2 and G-3 found in Section VI above, the construction will not cause significant environmental effects; therefore, the Project will have a less than significant impact.

MANDATORY FINDINGS OF SIGNIFICANCE

Environmental Issue	Yes	No
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

OTHER RESPONSIBLE AND TRUSTEE AGENCIES (whose approval is required)

<input checked="" type="checkbox"/> California Department of Fish and Game	<input type="checkbox"/> Local Agency Formation Commission (LAFCO)
<input type="checkbox"/> California Department of Forestry	<input type="checkbox"/> National Marine Fisheries Service
<input type="checkbox"/> California Department of Health Services	<input checked="" type="checkbox"/> Tahoe Regional Planning Agency
<input type="checkbox"/> California Department of Toxic Substances	<input checked="" type="checkbox"/> U.S. Army Corps of Engineers
<input checked="" type="checkbox"/> California Department of Transportation (Caltrans)	<input checked="" type="checkbox"/> U.S. Fish and Wildlife Service
<input type="checkbox"/> California Integrated Waste Management Board	<input checked="" type="checkbox"/> USFS - LTBMU
<input checked="" type="checkbox"/> California Regional Water Quality Control Board	<input checked="" type="checkbox"/> California Tahoe Conservancy

LIST OF PREPARERS**Principal Authors**

Daniel Kikkert, Senior Civil Engineer, El Dorado County

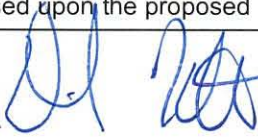
Contributors

Nichols Consulting Engineers, Inc.

Charles Zeier

DETERMINATION – The Environmental Review Committee finds that (choose one):

<input type="checkbox"/>	I find that the proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
<input checked="" type="checkbox"/>	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.
<input type="checkbox"/>	I find that the proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
<input type="checkbox"/>	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.
<input type="checkbox"/>	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 31 July, 2014
 Daniel Kikkert, County of El Dorado

APPENDIX B:
MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MONITORING AND REPORTING PROGRAM

PROJECT NAME: TAHOE HILLS EROSION CONTROL PROJECT

MITIGATED NEGATIVE DECLARATION #: 2014062044

REGULATORY BACKGROUND

This Mitigation Monitoring and Reporting Plan (MMRP) was prepared to comply with Section 21081.6 of the Public Resources Code, which requires the following:

“The public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation.”

This MMRP is intended to ensure the effective implementation of mitigation measures that are within the authority of the County of El Dorado (County). The mitigation measures will be implemented (including monitoring where identified) throughout all phases of the development and operation of the Tahoe Hills Erosion Control Project (Project). Monitoring of such mitigation measures may extend through Project permitting, construction, and Project operations, as necessary.

The required monitoring and reporting shall be accomplished through the County’s Standard Mitigation Monitoring Program and/or the Project Specific Mitigation Monitoring and Reporting Program as defined in the County Code.

PROGRAM IMPLEMENTATION

The MMRP Checklist (Table B-1) lists all mitigation measures identified in the *CEQA Checklist* for the Proposed Project. In general, monitoring becomes effective at the time the action is taken on the Project. Timing of monitoring is organized as follows:

- Prior to Construction: The monitoring activity consists of ensuring that a particular mitigation action has taken place prior to the beginning of any construction or grading activities.
- During Construction: The monitoring activity consists of active monitoring while grading or construction is occurring on the Project site.
- Prior to Operation: The monitoring activity consists of active monitoring after initial site grading and facility construction has occurred, but prior to the initiation of Project operations.
- Ongoing: The monitoring activity consists of monitoring after the grading and construction phase of the Project has been completed, and relates to ongoing operation of the Project.

The mitigation measures listed in Table B-1 are numbered as they are described in the *CEQA Checklist*. County of El Dorado staff will be responsible for implementing and/or ensuring that the mitigation measures listed in the MMRP are undertaken for this Project, to the extent such mitigation measures apply to the Project within the County. Implementation includes ensuring that any required actions are included in bid documents and contracts as part of the design/build process for the Project, and ensuring that the contractor includes specified mitigation activities in plans and specifications for construction. County staff shall designate mitigation measure responsibility and oversee the contractor and consultants.

TABLE B-1. MITIGATION MONITORING AND REPORTING PROGRAM FOR THE TAHOE HILLS EROSION CONTROL PROJECT

MITIGATION MEASURE	IMPLEMENTING RESPONSIBILITY ^{1,3}	MONITORING RESPONSIBILITY ^{2,3}	TIMING AND FREQUENCY	VERIFICATION OF COMPLIANCE (INITIALS/DATE)
AESTHETICS				
<i>No mitigation measures required.</i>				
AGRICULTURAL RESOURCES				
<i>No mitigation measures required.</i>				
AIR QUALITY- Item III-B				
Mitigation Measure AQ-1: The construction contractor shall implement air quality Best Management Practices from the TRPA Code of Ordinances and Handbook of Best Management Practices.	TE or its Contractor	TE	Prior to and During Construction	
Mitigation Measures AQ-2: The construction contractor shall water exposed soil twice daily, or as needed, to control wind borne dust. All haul/dump truckloads shall be covered securely.	TE or its Contractor	TE	Prior to and During Construction	
Mitigation Measure AQ-3: The contractor shall sweep the Project site a minimum of once daily to remove all dirt and mud which has been generated from or deposited on roadways by construction equipment going to and from the construction site.	TE or its Contractor	TE	Prior to and During Construction	
Mitigation Measure AQ-4: On-site vehicle speed shall be limited to 15 miles per hour on unpaved surfaces.	TE or its Contractor	TE	Prior to and During Construction	
Mitigation Measure AQ-5: Construction activities shall comply with EDCAQMD Rule 223-Fugitive Dust, so that emissions do not exceed hourly levels. The contractor will use approved BMP practices as outlined in the TRPA Handbook of Best Management Practices and the EDCAQMD Rule 223 to address fugitive dust. Dust mitigation measures and dust control BMPs will include, but are not limited to, stabilization of unpaved areas subject to vehicular traffic, stabilization of storage piles and disturbed areas, dust suppression through watering of areas to be disturbed, cleaning of all construction vehicles leaving the site, mulching of bare soil areas, and suspension of grading and earth moving activities when wind speeds are high enough to result in dust emissions crossing the Project boundary.	TE or its Contractor	TE	Prior to and During Construction	

MITIGATION MEASURE	IMPLEMENTING RESPONSIBILITY ^{1,3}	MONITORING RESPONSIBILITY ^{2,3}	TIMING AND FREQUENCY	VERIFICATION OF COMPLIANCE (INITIALS/DATE)
Mitigation Measure AQ-6: Construction equipment idling shall be restricted to 5 minutes when not in use.	TE or its Contractor	TE	Prior to and During Construction	
Mitigation Measure AQ-7: The construction contractor shall post a publicly visible sign on the Project site during construction operations that specify the telephone number and person/agency to contact for complaints and/or inquiries on dust generation and other air quality problems resulting from Project construction.	TE or its Contractor	TE	Prior to and During Construction	
BIOLOGICAL RESOURCES- Item IV-A				
Mitigation Measure B-1: Prior to construction, TE will confirm if any new special status species have been identified by the USFS-LTBMU or the CA Fish & Wildlife Service (via the California Natural Diversity Database - <i>CNDDDB</i>) within, or immediately adjacent to, the Project area. If new activity or occurrences have been identified, appropriate limited operating periods (LOP) will be observed.	TE or its Consultant	TE	Prior to Construction	
Mitigation Measure B-2: If special status plant species are found prior to or during construction, these populations will be identified and protected with appropriate measures per TRPA and the USFS-LTBMU.	TE or its Consultant	TE	Prior to Construction	
Mitigation Measure B-3: TE will implement and require the contractor to adhere to a Noxious Weed Mitigation Plan (Plan) to decrease habitat vulnerability to or below pre-construction levels. The Plan includes pre-construction elements such as treatment methodologies for existing noxious weed populations identified in the Project area, as well as operating procedures for both during and post-construction. Recommended BMPs will include, but are not limited to: hand removal of existing weeds prior to going to seed, equipment cleaning prior to use, area of disturbance minimization, disturbed ground stabilization upon completion of construction with mulch or other means, certified weed-free mulch and other materials, and disturbed areas revegetation with native plants.	TE or its Consultant	TE	Prior to Construction	

BIOLOGICAL RESOURCES - ITEM IV-B			
<p>Mitigation Measure B-4: Groundwater is not expected to be encountered during construction, if groundwater is encountered and the excavated area requires dewatering to complete the work, TRPA and the Lahontan Regional Water Quality Control Board (Lahontan) shall be notified immediately to determine the appropriate course of action. The Storm Water Pollution Prevention Plan (SWPPP) for the proposed Project will include a Dewatering Contingency Plan (Item VI-B Mitigation Measures) that the contractor shall follow.</p>	<p>TE or its Consultant</p>	<p>TE</p>	<p>Prior to and During Construction</p>
<p>Mitigation Measure B-4: The proposed Project was designed around the findings of the wetland delineation report to avoid or minimize impacts to wetlands and/or other WOUS. No wetlands or jurisdictional WOUS were found within the Project area. Therefore, TE does not anticipate the need to obtain a 404 Permit and a 401 Water Quality Certification. TE will, however, obtain a TRPA EIP Project Permit and will implement the required mitigation measures.</p>	<p>TE or its Consultant</p>	<p>TE</p>	<p>Prior to and During Construction</p>
CULTURAL RESOURCES			
<p><i>No mitigation measures required.</i></p>			

GEOLOGY AND SOILS - Item VI-B				
<p>Mitigation Measure G-1: The contractor shall prepare, submit and adhere to a Storm Water Pollution Prevention Plan (SWPPP) to TE, Lahontan Regional Water Quality Control Board (Lahontan), and TRPA prior to construction. The SWPPP shall be in accordance with the TRPA and Lahontan requirements for storm water pollution prevention in the Tahoe Basin. As part of the SWPPP, the contractor will be required to prepare and adhere to a Temporary BMP Plan, a Spill Contingency Plan, and a Dewatering Plan.</p> <p>The Temporary BMP Plan will include design and specifications that detail the required construction BMPs that shall be installed prior to and during construction to prevent any erosion that may occur during a rain or wind event. All temporary BMPs shall be installed and maintained per TRPA's Handbook of Best Management Practices. Temporary BMPs will include, but are not limited to: gravel bags, silt fencing, tree protection fencing, construction limit fencing, coir logs, visqueen and gravel construction access. Prior to construction, all storage, access, and staging areas shall be secured by the contractor and approved by TE, Lahontan and TRPA. No staging or storage will occur in Stream Environment Zones (SEZs). The contractor shall be responsible for maintenance of mobilization sites, including placement and maintenance of BMPs. All equipment, vehicles, and materials shall be stored on paved or previously disturbed surfaces only; in locations approved by TE, Lahontan and TRPA.</p> <p>The contractor shall limit the areas to be disturbed to the area within the boundary of the construction limit fencing, which shall be designed and installed prior to commencement of construction. The boundary of the construction limit fencing shall be displayed on the EC Sheets of the construction plans and shall be set to the minimum size required to construct proposed improvements, per the Projects plans and specifications. All temporary BMPs shall be maintained during construction and shall be monitored daily by the construction site inspector. All disturbed areas shall be restored to a better than pre-construction condition.</p>	<p>TE and its Contractor</p>	<p>TE</p>	<p>Prior to and During Construction</p>	

<p>Mitigation Measure G-1 (Continued): The contractor shall meet the permit requirements for BMPs, staging areas, revegetation, grading season restrictions, and all other permitting agency approval conditions. Construction will take place within the Lake Tahoe construction season (between May 1st and October 15th).</p> <p>The Spill Contingency Plan, which the contractor shall adhere to, shall outline how to properly handle accidental construction related spills and must include the requirement for spill prevention kits to be available on site to contain and properly clean any accidental spills. The Spill Contingency Plan will help the contractor to minimize the potential for and effects from spills of hazardous, toxic, or petroleum based substances during construction activities. The Spill Prevention Kit will contain, but is not limited to, sorbent pads, plastic bags, containment devices, drain seals, and drip pans. This plan will also outline who to call if utility lines are damaged during construction.</p> <p>The Dewatering Plan, which the contractor shall adhere to, will outline the process that will be required of the contractor if groundwater is intercepted during construction. The Dewatering Plan shall be prepared and submitted for approval by TE, Lahontan and TRPA prior to commencement of construction. Construction sequencing shall be designed to avoid and minimize the potential of encountering groundwater during construction, however if groundwater is encountered and the excavated area requires dewatering to complete the work, construction shall immediately cease and TRPA, Lahontan and TE shall be notified immediately to observe the construction work to ensure that the approved dewatering plan is being adhere to and that dewatering effluent is properly contained and disposed of. Based on the results of the Soils/Hydrology Analysis, which is performed by TRPA prior to construction, dewatering areas will be better identified to avoid and reduce the potential of groundwater interception.</p>	<p>TE and its Contractor</p>	<p>TE</p>	<p>Prior to And During Construction</p>	
<p>Mitigation Measure G-2: The contractor shall attend the TRPA pre-grade onsite inspection meeting to ensure that proper BMPs are in place per the SWPPP and that all permit conditions have been met prior to commencement of construction.</p>	<p>TE and its Contractor</p>	<p>TE</p>	<p>Prior to and During Construction</p>	

<p>Mitigation Measure G-3: TE shall conduct daily inspections of BMP measures to ensure they are properly placed and maintained for maximum water quality benefit. As part of this process, TE and/or the contractor will complete formal inspection forms for submittal to regulatory agencies to demonstrate deficiencies and that corrective action has been immediately taken.</p>	<p>TE and its Contractor</p>	<p>TE</p>	<p>Prior to and During Construction</p>	
<p>GREENHOUSE GAS EMISSIONS - Item VII-A</p>				
<p>Mitigation Measure: Implement Mitigation Measures identified under Item III-B Mitigation Measures.</p>	<p>TE or its Contractor</p>	<p>TE</p>	<p>Prior to and During Construction</p>	
<p>HAZARDS AND HAZARDOUS MATERIALS - Item VIII-A and Item VIII-B</p>				
<p>Mitigation Measure: Implement Mitigation Measures identified under Item VI-B Mitigation Measures.</p>	<p>TE or its Contractor</p>	<p>TE</p>	<p>Prior to and During Construction</p>	
<p>HYDROLOGY AND WATER QUALITY - Item IX-A, Item IX-E and Item IX-F</p>				
<p>Mitigation Measure: Implement Mitigation Measures identified under Item VI-B Mitigation Measures.</p>	<p>TE or its Contractor</p>	<p>TE</p>	<p>Prior to and During Construction</p>	
<p>LAND USE AND PLANNING</p>				
<p><i>No mitigation measures required.</i></p>				
<p>MINERAL RESOURCES</p>				
<p><i>No mitigation measures required.</i></p>				
<p>NOISE - Item XII-A and Item XII-D</p>				
<p>Mitigation Measure N-1: In order to mitigate the impacts of temporarily increased ambient noise levels, construction noise emanating from all construction activities shall only occur between the hours of 8:00 a.m. and 6:30 p.m. per TRPA Code and the County's General Plan, unless other hours are approved by TRPA.</p>	<p>TE or its Contractor</p>	<p>TE</p>	<p>During Construction</p>	

<p>Mitigation Measure N-2: All construction equipment and vehicles used for Project construction shall be fitted with the factory installed muffling devices and will be maintained in good working order. TE will advise potentially affected residents of the proposed construction activities including duration, schedule of activities, and contacts for filing noise complaints. TE staff and/or contractor shall respond to all noise complaints received within one working day and resolve the issue within two working days.</p>	<p>TE or its Contractor</p>	<p>TE</p>	<p>Prior to and During Construction</p>	
<p>POPULATION AND HOUSING</p>				
<p><i>No mitigation measures required.</i></p>				
<p>PUBLIC SERVICES</p>				
<p><i>No mitigation measures required.</i></p>				
<p>RECREATION</p>				
<p><i>No mitigation measures required.</i></p>				
<p>TRANSPORTATION AND TRAFFIC - Item XVI-E</p>				
<p>Mitigation Measure T-1: The contractor will be required to prepare and adhere to a Traffic Control Plan for TRPA and TE review and approval. Elements of the plan will include appropriate use of signage, flaggers, traffic calming, and alternative routes to accommodate local and through traffic. In addition, TE will advise local residents regarding schedules for construction traffic detours through signage, press releases, and distribution of flyers in area neighborhoods well in advance of construction initiation. Access will not be prohibited, at any time, for local residents, school buses or emergency vehicles.</p>	<p>TE</p>	<p>TE</p>	<p>Prior to and During Construction</p>	
<p>UTILITIES AND SERVICE SYSTEMS - Item XVI-C</p>				
<p>Mitigation Measure: Implement Mitigation Measures identified under Item VI-B Mitigation Measures.</p>	<p>TE or its Contractor</p>	<p>TE</p>	<p>Prior to and During Construction</p>	

¹ The department listed in the Implementing Responsibility column is the department responsible for conducting the mitigation measure.

² The department listed in the Monitoring Responsibility column is responsible for verifying that compliance with the mitigation measure occurs and that all monitoring and reporting is completed.

³ Responsible Entity: TE : El Dorado County, Community Development Agency, Transportation Division, Tahoe Engineering

APPENDIX C:
PLANT, NOXIOUS WEED, AND WILDLIFE TABLES

Table C-1.1. Tahoe Hills Erosion Control Project - Special Status Plant Species List and Habitat Analysis

Species	Regulatory Status				Habitat Requirements	Identification Period	Potential for Occurrence in the Project Area and Results of Survey
	Federal	LTBMU	TRPA	CNPS/CA			
<i>Arabis rigidissima</i> var. <i>demota</i> Galena Creek rockcress		S	SI	1B.2	Broad-leaved upland forests, upper montane coniferous forests on rocky substrates. Known in CA from only two occurrences near Martis Peak and in NV from eleven occurrences in the Carson Range. Elevation range 7,398 to 8,398 feet.	August	Unlikely. Outside of elevation range and site lacks suitable habitat.
<i>Arabis rectissima</i> var. <i>simulans</i> Washoe Trail or Tall rockcress		LSI			Jeffrey pine-fir forest on gentle slopes, in gently disturbed areas, on sandy granitic or andesitic soil. The elevation range is from 7,021 to 10,020 feet.	June to July	Unlikely. Outside of elevation range.
<i>Arabis tiehmii</i> Tiehm's rockcress		S		1B.3	High elevation meta-volcanic or decomposed granite ridges and steep slopes. Elevation range 9,745 to 11,775 feet.	July to August	Unlikely. Outside of elevation range and site lacks suitable habitat.
<i>Boecheera tularensis</i> Tulare rockcress				1B.3	Perennial herb that prefers rocky slopes, subalpine coniferous forest, and upper montane coniferous forest. Elevation range is from 6,000 to 11,000 feet.	June to July	Potential. May occur. Not encountered.
<i>Bolandra californica</i> Sierra bolandra				4.3	Perennial herb that grows in mesic rocky habitat. It prefers lower and upper montane coniferous forest. Elevation range is from 3,200 to 8,000 feet.	June to July	Unlikely. Site lacks suitable habitat.
<i>Botrychium ascendens</i> Upswept moonwort		S		2.3	Wet or moist soils in lower montane coniferous forests, such as along the edges of lakes and streams. Elevation range 4,950 to 6,039 feet.	Fertile early July to early September	Unlikely. Site lacks suitable habitat.
<i>Botrychium crenulatum</i> Scalloped moonwort		S		2.2	Lower montane coniferous forests, meadows and seeps, marshes and swamps. Elevation range 4,950 to 10,800 feet.	Fronds mature June to September	Unlikely. Site lacks suitable habitat.
<i>Botrychium lineare</i> Slender moonwort		S		1B.3	Wet or moist soils in upper montane coniferous forests, such as along the edges of lakes and streams. Elevation range from sea level to 10,640 feet.	Fronds mature June to September	Unlikely. Site lacks suitable habitat.
<i>Botrychium lunaria</i> Common moonwort		S		2.3	Montane coniferous forests, meadows and seeps. Elevation range 7,524 to 11,220 feet.	Fertile in August	Unlikely. Outside of elevation range.
<i>Botrychium minganense</i> Mingan moonwort		S		2.2	Wet or moist soils in lower montane coniferous forests, such as along the edges of lakes and streams. Elevation range 4,950 to 6,039 feet.	Fronds mature June to September	Unlikely. Outside of elevation range.

Species	Regulatory Status				Habitat Requirements	Identification Period	Potential for Occurrence in the Project Area and Results of Survey
	Federal	LTBMU	TRPA	CNPS/CA			
<i>Botrychium montanum</i> Western goblin		S		2.1	Wet or moist soils in lower montane coniferous forests, such as along the edges of lakes and streams. Elevation range 4,950 to 6,039 feet.	Fronds mature July to August	Unlikely. Site lacks suitable habitat.
<i>Brasenia schreberi</i> Watershield				2.3	Perennial rhizomatous herb that prefers marshes and swamps or freshwater. Elevation range 100 to 7,200 feet.	June to September	Unlikely. Site lacks suitable habitat.
<i>Bruchia bolanderi</i> Bolander's bruchia		S		2.2	Meadows in mixed conifer and subalpine communities, streams and wet meadows, from 5,577 to 9,186 feet.	Moss	Unlikely. Site lacks suitable habitat.
<i>Chaenactis douglasii</i> <i>var. alpina</i> Alpine dusty maidens				2.3	Perennial herb that prefers alpine boulder and granitic rock fields. Elevation ranges from 9,800 to 11,150 feet.	July to September	Unlikely. Outside of elevation range.
<i>Carex davyi</i> Davy's sedge				1B.3	Perennial herb that prefers subalpine and upper montane coniferous forests between 5,000 to 10,500 feet.	May to August	Unlikely. Site lacks suitable habitat.
<i>Carex lasiocarpa</i> Wooly-fruited sedge				2.3	Perennial rhizomatous herb that can be found in bogs, fens, marshes, swamps in freshwater and along lake margins between 5,900 and 6,800 feet.	June to July	Unlikely. Site lacks suitable habitat.
<i>Carex limosa</i> Mud sedge				2.2	Perennial rhizomatous herb that prefers bogs, fens, meadows, seeps, marshes, swamps, and both lower and upper montane coniferous forests. Elevation range is between 3,900 and 8,900 feet.	June to August	Unlikely. Site lacks suitable habitat.
<i>Dendrocollybia racemosa</i> Branched collybia		S			Grows on decayed, blackened mushrooms or coniferous duff, usually within old growth stands.	Fall and Winter	Unlikely. Site lacks suitable habitat.
<i>Draba asterophora</i> <i>var. asterophora</i> Tahoe draba		S	SI	1B.2	Alpine boulder and rock fields in crevices, and open talus slopes of decomposed granite in subalpine coniferous forests. Elevation range 8,325 to 11,670 feet.	July to September	Unlikely. Outside of elevation range.
<i>Draba asterophora</i> <i>var. macrocarpa</i> Cup Lake draba		S	SI	1B.1	Alpine boulder and rock fields in shade of granitic rocks in subalpine coniferous forest. Elevation range 8,202 to 9,235 feet.	July to August	Unlikely. Outside of elevation range and site lacks suitable habitat.
<i>Epilobium howellii</i> Subalpine fireweed		S		4.3	Meadows and seeps in upper montane coniferous forests. Elevation range 6,600 to 8,910 feet.	July to August	Unlikely. Outside of elevation range and site lacks suitable habitat.

Species	Regulatory Status				Habitat Requirements	Identification Period	Potential for Occurrence in the Project Area and Results of Survey
	Federal	LTBMU	TRPA	CNPS/CA			
<i>Epilobium oregonum</i> Oregon fireweed				1B.2	Perennial herb that prefers mesic habitat including bogs and fens, but also lower and upper montane coniferous forests. Elevation is between 1,650 and 7,300 feet.	June to September	Unlikely. Site lacks suitable habitat.
<i>Erigeron miser</i> Starved daisy		S		1B.3	Rocky outcrops in upper montane coniferous forests. Elevation range 6,072 to 8,646 feet.	Blooms June to October	Unlikely. Site lacks undisturbed suitable habitat.
<i>Eriogonum umbellatum</i> var. <i>torreyanum</i> Torrey's buckwheat		S		1B.2	Meadows and seeps, upper montane coniferous forests; volcanic, rocky soils. Elevation range 6,121 to 8,646 feet.	July to September	Potential. May occur. No known occurrences in LTBMU. Not encountered.
<i>Glyceria grandis</i> American manna grass				2.3	Perennial rhizomatous herb that prefers bogs, fens, meadows, seeps, marshes, and swamps along stream banks, or lake margins. Elevation range is from 50 to 6,500 feet.	June to August	Unlikely. Site lacks suitable habitat.
<i>Helodium blandowii</i> Blandow's bog-moss		S		2.3	Bogs and fens that are not too rich in iron. Elevation range 6,562 to 8,859 feet.	Moss	Unlikely. Site lacks suitable habitat.
<i>Hulsea brevifolia</i> Short-leaved hulsea		S		1B.2	Lower and upper montane coniferous forests. Granitic or volcanic, sandy, or gravelly substrate. Elevation range 4,950 to 10,560 feet.	Blooms May to August	Potential. May occur. Not encountered.
<i>Lewisia kelloggii</i> ssp. <i>hutchisonii</i> Hutchison's lewisia		S		3.3	Ridge tops or flat open spaces with widely spaced trees and sandy granitic to erosive volcanic soil. Elevation range 5,000 to 7,000 feet.	June to July	Unlikely. Site lacks suitable habitat.
<i>Lewisia kelloggii</i> ssp. <i>kelloggii</i> Kellogg's lewisia		S			Ridge tops or flat open spaces with widely spaced trees and sandy granitic to erosive volcanic soil. Elevation range 5,000 to 7,000 feet.	June to July	Unlikely. Site lacks suitable habitat.
<i>Lewisia longipetala</i> Long-petaled lewisia		S	SI	1B.3	Alpine boulder and rock fields in subalpine coniferous forests. Elevation range 8,325 to 9,740 feet.	June to August	Unlikely. Site lacks suitable habitat.
<i>Meesia longiseta</i> Meesia moss		LSI			Bogs and fens, meadows and seeps in montane coniferous forests. Elevation range 4,290 to 8,250 feet.	Moss	Unlikely. Site lacks suitable habitat.
<i>Meesia triquetra</i> Three-ranked hump-moss		S		4.2	Bogs and fens, meadows and seeps in montane coniferous forests. Elevation range 4,290 to 8,250 feet.	Moss	Unlikely. Site lacks suitable habitat.

Species	Regulatory Status				Habitat Requirements	Identification Period	Potential for Occurrence in the Project Area and Results of Survey
	Federal	LTBMU	TRPA	CNPS/CA			
<i>Meesia uliginosa</i> Broad-nerved hump-moss		S		2.2	Bogs and fens, meadows and seeps in montane coniferous forests. Elevation range 4,290 to 8,250 feet.	Moss	Unlikely. Site lacks suitable habitat.
<i>Myurella julacea</i> Small mousetail moss		LSI		2.3	Shaded, damp cliffs and in crevices or on ledges, usually growing among other bryophytes or as small, pure patches on base-rich soil among rocks, or in crevices on mountains. Occurring from sea-level to subalpine areas.	Moss	Unlikely. Site lacks suitable habitat.
<i>Orthotrichum praemorsum</i> Orthotrichum moss		LSI			Shaded, moist habitats of Eastside Sierra Nevada. Rock outcrops up to 8,200 feet.	Moss	Unlikely. Site lacks suitable habitat.
<i>Orthotrichum shevockii</i> Shevrock's moss		LSI		1B.3	Dry granitic rock outcrops in Carson Range, Douglas, and Carson City counties.	Moss	Unlikely. Site lacks suitable habitat.
<i>Orthotrichum spjutii</i> Spjut's bristle-moss		LSI		1B.3	Continually misted, shaded granitic rock faces at high elevations.	Moss	Unlikely. Site lacks suitable habitat.
<i>Peltigera hydrothyria</i> Veined water lichen		S			Mixed coniferous forests, bogs, fens, wet meadows, seeps, and clear, cold streams. Elevation range 4,000 to 8,000 feet.	Lichen	Unlikely. Site lacks suitable habitat.
<i>Pohlia tundrae</i> Tundra thread moss		LSI		2.3	Gravelly, damp soils of alpine boulder and rock fields. Elevation range 8,860 feet to 9,840 feet.	Moss	Unlikely. Outside of elevation range.
<i>Polystichum lonchitis</i> Northern holly fern				3	This perennial rhizomatous herb prefers granitic or carbonate soils in subalpine or upper montane coniferous forests. Elevation range is from 5,900 to 8,500 feet.	June to September	Unlikely. Site lacks suitable habitat.
<i>Rorippa subumbellata</i> Tahoe yellow cress	FCE	S	SI	1B.1/SE	Shoreline supporting decomposed granitic soils; known only from the shoreline of Lake Tahoe. Elevation range 6,210 to 6,230 feet.	Blooms May to September	Unlikely. Site lacks suitable habitat.
<i>Scutellaria galericulata</i> Marsh skullcap				2.2	Perennial rhizomatous herb that prefers lower montane coniferous forests, meadows, seeps, marshes, and swamps. Elevation range from 0 to 6,800 feet.	June to September	Unlikely. Site lacks suitable habitat.
<i>Stuckenia filiformis</i> Slender-leaved pondweed				2.2	Perennial rhizomatous herb that prefers marshes, swamps, and a variety of shallow freshwater habitats. Elevation range from 980 to 7,000 feet.	May to July	Unlikely. Site lacks suitable habitat.

Species	Regulatory Status				Habitat Requirements	Identification Period	Potential for Occurrence in the Project Area and Results of Survey
	Federal	LTCMU	TRPA	CNPS/CA			
<i>Sphagnum species</i> Sphagnum species		LSI			Usually in fens and bogs, sometimes in very wet, non-acidic habitats that remains saturated.	Moss	Unlikely. Site lacks suitable habitat.

<p>Federally Listed Species (Federal): FE = Federally Endangered FT = Federally Threatened FD = Federally Delisted PT = Proposed Threatened FCE = Federally Endangered Candidate FPD = Proposed for Delisting</p>	<p>Tahoe Regional Planning Agency (TRPA): SI = TRPA Special Interest Species</p> <p>USFS – Lake Tahoe Basin Management Unit Species (LTBMU): S = USFS Sensitive Species LSI = USFS Species of Interest</p> <p>California State Listed Species (CA): SE = State Endangered ST = State Threatened SR = State Rare SC = State Candidate</p>	<p>California Native Plant Society (CNPS) List Categories: 1A = Plants presumed extinct in California 1B = Plants rare, threatened, or endangered in California and elsewhere 2 = Plants rare, threatened or endangered in California, but common elsewhere 3 = Plants about which we need more information 4 = Plants of limited distribution</p> <p>CNPS Threat Code Extensions: .1 = Seriously endangered in California (Over 80% of occurrences threatened) .2 = Fairly endangered in California (20-80% occurrences threatened) .3 = Not very endangered in California (<20% of occurrences threatened)</p>
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Sources: USFWS 2011, USDA 2007, CNDDDB 2003, CDFG 2012, CNPS 2011, TRPA 2011, and TRPA 1987

Notes:

- No special status species were found within the project area.
- The LTCMU does not currently support any plant species listed as threatened or endangered under the ESA.
- Federal Species of Concern no longer exists as a category.

Table C-1.2. Tahoe Hills Erosion Control Project – Invasive and Noxious Weed Plant Species List and Habitat Analysis

Common Name	Scientific Name	LTBWCG	CDFA	NDA	SNFPA	Cal-IPC	Species Present? Y or N	If Present, Gross Area of the Infestation (sq. ft.)
Tree of heaven	<i>Ailanthus altissima</i>	Group 1b	C			Moderate	N	
Cheatgrass	<i>Bromus tectorum</i>				P		Y	241
Hoary cress	<i>Cardaria draba</i>	Group 1b	B	C			N	
Globe-prodded hoary cress	<i>Cardaria pubescens</i>	Group 1b	B				N	
Plumeless thistle	<i>Carduus acanthoides</i>		A		NW	Limited	N	
Musk thistle	<i>Carduus nutans</i>	Group 1a	A	B	P	Moderate	N	
Purple starthistle	<i>Centaurea calcitrapa</i>	Group 1a	B	A	NW	Moderate	N	
Diffuse knapweed	<i>Centaurea diffusa</i>	Group 1b	A	B	P	Moderate	N	
Spotted knapweed	<i>Centaurea maculosa</i>	Group 2	A	A	N	High	N	
Russian knapweed	<i>Centaurea repens</i>	Group 1b	B	B			N	
Yellow starthistle	<i>Centaurea solstitialis</i>	Group 1b	C	A		High	N	
Squarrose knapweed	<i>Centaurea squarrosa</i>		A	A			N	
Rush skeletonweed	<i>Chondrilla juncea</i>	Group 1b	A	A		Moderate	N	
Oxeye daisy	<i>Chrysanthemum leucanthemum</i>	Group 2				Moderate	N	
Canada thistle	<i>Cirsium arvense</i>	Group 1b	B	C		Moderate	N	
Bull thistle	<i>Cirsium vulgare</i>	Group 2	C		P	Moderate	N	
Poison hemlock	<i>Conium maculatum</i>			C		Moderate	N	
Field bindweed	<i>Convolvulus arvensis</i>		C				N	
Bearded creeper	<i>Crepina vulgaris</i>		A	A	P		N	
Scotchbroom	<i>Cytisus scoparius</i>	Group 2	C		P	High	N	
Teasel	<i>Dipsacus fullonum</i>	Group 1b				Moderate	N	
Stinkwort	<i>Dittrichia graveolens</i>	Group 1a				Moderate	N	
Quackgrass	<i>Elytrigia repense</i>		B				N	
French broom	<i>Genista monspessulana</i>		C			High	N	
St. John's wort / Klamath weed	<i>Hypericum perforatum</i>	Group 2	C	A	P		N	
Dyer's woad	<i>Isatis tinctoria</i>	Group 1a	B	A		Moderate	N	
Tall whitetop / Perennial pepperweed	<i>Lepidium latifolium</i>	Group 2	B	C	P	High	N	
Dalmatian toadflax	<i>Linaria genistifolia</i> spp. <i>dalmatica</i>	Group 2	A	A	P	Moderate	N	
Yellow toadflax	<i>Linaria vulgaris</i>	Group 2		A		Moderate	N	
Purple loosestrife	<i>Lythrum salicaria</i>	Group 1b	B	A			N	
Eurasian watermilfoil	<i>Myriophyllum spicatum</i>	Group 2		A	N	High	N	
Scotch thistle	<i>Onopordum acanthium</i>	Group 1a	A	B	P	High	N	
Reed canarygrass	<i>Phalaris arundinacea</i>	Group 1a					N	

Sulfur cinquefoil	<i>Potentilla recta</i>	Group 1b	A	A			N	
Russian thistle	<i>Salsola tragus</i>		C			Limited	N	
Perennial sowthistle	<i>Sonchus arvensis</i>		A	A			N	
Medusa-head	<i>Taeniatherum caput-medusae</i>	Group 1a	C	B		High	N	
Tamarisk	<i>Tamarix chinensis</i>	Group 1a	B	C			N	
Puncture vine	<i>Tribulus terrestris</i>		C	C	P		N	

Lake Tahoe Basin Weed Coordinating Group (LTBWCG) prioritizes invasive weeds of concern by management group.

- o Group 1a: Not currently present in the Lake Tahoe basin and are documented in areas adjacent to the basin where potential for introduction is high.
- o Group 1b: Present only as small, eradicable populations.
- o Group 2: Encourage the management/control of populations of these species to prevent further spread in the Lake Tahoe basin. Isolated populations will be targeted for eradication.

The California Department of Food and Agriculture’s (CDFA) noxious weed list (<http://www.cdfa.ca.gov/phpps/ipc/>) divides noxious weeds into categories A, B, and C.

- o A-listed Weeds: Eradication or containment is required at the state or county level.
- o B-listed Weeds: Eradication or containment is at the discretion of the County Agricultural Commissioner (CAC).
- o C-listed Weeds: Require eradication or containment only when found in a nursery or at the discretion of the CAC.

Nevada Department of Agriculture (NDA) (http://agri.nv.gov/nwac/PLANT_No WeedList.htm) divides noxious weeds into categories A, B, and C.

- o Category A: Not found or limited in distribution throughout the state; actively excluded from the state and actively eradicated wherever found; actively eradicated from nursery stock dealer premises; control required by the state in all infestations.
- o Category B: Established in scattered populations in some counties of the state; actively excluded where possible; actively eradicated from nursery stock dealer premises; control required by the state in areas where populations are not well established or unknown.
- o Category C: Currently established and generally widespread in many counties of the state; actively eradicated from nursery stock dealer premises; abatement at the discretion of the state quarantine officer.

Sierra Nevada Forest Plan Amendment (SNFPA) (USDA 2004b) part 3.6 defines noxious weeds (NW) as those plant species designated as noxious weeds by Federal or State law. Noxious weeds generally possess one or more of the following characteristics: aggressive and difficult to manage, poisonous, toxic, parasitic, a carrier or host of serious insects or disease, and generally non-native. Noted as NW if it meets this definition, or if it is known to exist in or near the Lake Tahoe Basin Management Unit.

- o P: Present in the Lake Tahoe Basin.
- o N: Near Lake Tahoe Basin, reasonable to expect within next 5 years.

California Invasive Plant Council (Cal-IPC) invasive plant inventory (<http://www.cal-ipc.org/ip/inventory/weedlist.php>) categorizes non-native invasive plants by the ecological impacts of each plant on wild lands into three categories high, moderate, & limited as well as an alert. An “alert” is assigned for species with significant potential for invading new ecosystems.

- o High: these species have severe ecological impacts on physical processes, plant and animal communities, and vegetation structure.
- o Moderate: these species have substantial and apparent—but generally not severe—ecological impacts on physical processes, plant and animal communities, and vegetation structure.
- o Limited: these species are invasive but their ecological impacts are minor on a statewide level or there was not enough information to justify a higher score.

Table C-2.1. Special Status Wildlife Species Considered for the Tahoe Hills Erosion Control Project

Common Name <i>Scientific Name</i>	Federal Status ⁺	State Status ⁺		Local Status ⁺	Occur within 0.5 miles of Project Area	Suitable Habitat within 0.5 miles of Project Area	Potential for Occurrence
		CESA (CA)	DFG (CA)				
Amphibians							
Sierra Nevada yellow-legged frog¹ <i>Rana sierrae</i>	FC			S	No	Yes	Not expected to occur. The only location in the Tahoe Basin where Sierra Nevada yellow-legged frogs have been consistently detected is at the headwaters of Trout Creek (USDA 2008). Meeks Creek to the northwest of the project area may provide habitat; however, it is unlikely project improvements will impact this species.
Yosemite toad² <i>Anaxyrus canorus</i>	FC		SSC		No	No	Not expected to occur. Outside of the known range.
Birds							
American peregrine falcon <i>Falco peregrinus</i>	DL (8/99)	SCD	FP	TRPA	No	Yes	Not expected to occur. No Potential to Impact TRPA Threshold Standard. Suitable habitat does not exist in the project area. In addition, this species is not known to occur in the project area.
Bald eagle <i>Haliaeetus leucocephalus</i>	DL (8/07)	SE	FP	TRPA S	Yes	Yes	Moderate. No Potential to Impact TRPA Threshold Standard. There are several TRPA designated perch sites within or adjacent to the Project area. Locally, the only known nesting sites are near Emerald Bay and Marlette Lake. Wintering sites are located in Taylor, Tallac, Pope, and Upper Truckee Marshes (Romsos 2000).

¹ Formerly mountain yellow-legged frog, *Rana muscosa*

² Formerly *Bufo canorus*

Common Name <i>Scientific Name</i>	Federal Status ⁺	State Status ⁺		Local Status ⁺	Occur within 0.5 miles of Project Area	Suitable Habitat within 0.5 miles of Project Area	Potential for Occurrence
		CESA (CA)	DFG (CA)				
California spotted owl <i>Strix occidentalis occidentalis</i>			SSC	S	No	Yes	Low. There are recent detections southwest of the Project area. This species, which primarily feeds at night, may pass through the Project area while foraging, but it is not likely to nest within or directly adjacent to an urban habitat.
Golden eagle <i>Aquila chrysaetos</i>			FP	TRPA	No	No	Not expected to occur. No Potential to Impact TRPA Threshold Standard. The Project area is impacted by human use and suitable habitat is fragmented.
Great gray owl <i>Strix nebulosa</i>		SE		S	No	Yes	Not expected to occur. Undisturbed mature red fir forests used for roosting are not present in the project area. The Meeks Creek watershed to the north may provide suitable foraging habitat; however, it is unlikely this species would occur in the project area.
Northern goshawk <i>Accipiter gentilis</i>			SSC	S TRPA	No	No	Low. No Potential to Impact TRPA Threshold Standard. There are several recent detections to the southwest and northwest. Historic nests and the associated Non Disturbance Zones are located outside the 0.5 mile project buffer. This species may pass through the Project area while foraging, but it is not likely to nest within or directly adjacent to urban habitat due to the high levels of human disturbance existing in this region.
Osprey <i>Pandion haliaetus</i>				TRPA	Yes	Yes	Moderate. No Potential to Impact TRPA Threshold Standard. Osprey nest buffers overlap the 0.5 mile project buffer and in one case intersect the project boundary. However, there is a moderate potential for occurrence of this species in the project area as a result of nearby nest sites.

Common Name <i>Scientific Name</i>	Federal Status ⁺	State Status ⁺		Local Status ⁺	Occur within 0.5 miles of Project Area	Suitable Habitat within 0.5 miles of Project Area	Potential for Occurrence
		CESA (CA)	DFG (CA)				
Waterfowl (collectively)				TRPA	No	Yes	Low. No Potential to Impact TRPA Threshold Standard. There is no Designated Wildlife Habitat for Waterfowl within 0.5 mile of the project area. In addition, there is not suitable waterfowl habitat located within the project area. Waterfowl may use Meeks Creek to forage and nest, but this area is not expected to be impacted by project improvements.
Willow flycatcher <i>Empidonax traillii</i>		SE		S	Yes	Yes	Low. The willow flycatcher (WIFL) has very distinct habitat requirements that dictate meadow size, vegetation type, height, and access to water. There is a single WIFL detection to the northwest of the project area along Meeks Creek.
Mammals							
American marten <i>Martes americana</i>				S	Yes	Yes	Moderate. While habitat requirements for cover, breeding, and foraging are lacking within the Project area, three American marten detections within 0.5 mile of the project area have been made by the USFS between 1977 and 2011.
California wolverine <i>Gulo gulo luteus</i>		ST	FP	S	No	No	Not expected to occur. Suitable alpine habitat is not present in the project area. There are very few documented occurrences in the region.
Sierra Nevada mountain beaver <i>Aplodontia rufa californica</i>			SSC		No	Yes	Low. Riparian habitat is present along Meeks Creek; however, high levels of disturbance and a lack of optimal habitat conditions make it unlikely this species would occur within the Project area.

Common Name Scientific Name	Federal Status ⁺	State Status ⁺		Local Status ⁺	Occur within 0.5 miles of Project Area	Suitable Habitat within 0.5 miles of Project Area	Potential for Occurrence
		CESA (CA)	DFG (CA)				
Sierra Nevada snowshoe hare <i>Lepus americanus tahonesis</i>			SSC		Yes	Yes	Low. Most information regarding this species comes from the literature. As a result, limited Tahoe basin data exists. An historic CNDDDB occurrence is documented south of the project area. However, there is a low potential for occurrence as a result of the urbanized nature of the Tahoe Hills residential area.
Mule deer <i>Odocoileus hemionus</i>				TRPA	No	Yes	Low. No Potential to Impact TRPA Threshold Standard. Suitable riparian habitat is located outside the Project area. As a result, it is unlikely this species would occur.
Pacific fisher <i>Martes pennanti pacifica</i>	FC		SSC		No	No	Not expected to occur. Appropriate riparian habitat for denning and foraging is not present.
Sierra Nevada red fox <i>Vulpes vulpes necator</i>		ST		S	No	No	Not expected to occur. Appropriate riparian habitat for denning and foraging is not present. Presumed extirpated from the Tahoe Basin (Schlesinger and Romsos 2000).
Townsend's big ear bat <i>Corynorhinus townsendii</i>			SSC	S	No	No	Not expected to occur. There are few occurrences of this species in the Tahoe Basin, and they are not known to occur in the project area. This species is vulnerable to disturbance, so it is not likely they would roost within the highly impacted project area. Because roosting sites (undisturbed caves or cave surrogates) are the most important limiting resource for Townsend's big ear bat (Zeiner et al. 1990), their occurrence in the project area is unlikely.
Fish							
Lahontan cutthroat trout <i>Oncorhynchus clarkii henshawi</i>	FT			TRPA	No	No	Not expected to occur. The LTBMU "Currently Occupied Lahontan Cutthroat Trout Habitat Map" produced 6/19/2009 identifies LCT Occupied Waterbodies in the headwaters of the Meeks Creek Watershed.

Common Name <i>Scientific Name</i>	Federal Status ⁺	State Status ⁺		Local Status ⁺	Occur within 0.5 miles of Project Area	Suitable Habitat within 0.5 miles of Project Area	Potential for Occurrence
		CESA (CA)	DFG (CA)				
Lahontan Lake tui chub <i>Gila bicolor pectinifer</i>			SSC	S	Yes	Yes	Not expected to occur. Prime habitat has been mapped along the lake shore near the northeastern project boundary. This area provides feed and cover habitat for native fishes.
Aquatic Invertebrates							
Great Basin rams-horn <i>Helisoma newberryi newberryi</i>				S	Yes	Yes	Not expected to occur. Suitable habitat has been mapped for Lake Tahoe; however, project improvements are not expected to occur in this area.
Lake Tahoe benthic stonefly <i>Capnia lacustra</i>					Yes	Yes	Not expected to occur. Suitable habitat has been mapped for Lake Tahoe; however, project improvements are not expected to occur in this area.

⁺ Special Status Codes

No species in the Lake Tahoe Basin are currently listed as "Endangered" by the USFWS under the ESA

FT = Federally Threatened under the ESA

FC = Federal Candidate species for listing as Threatened or Endangered under the ESA

DL = Federally De-listed

SCD = CESA State Candidate for Delisting

SE = CESA State Endangered

ST = CESA State Threatened

SSC = DFG Species of Special Concern

FP = DFG Federally Protected

S = USFS Region 5 Sensitive Species

TRPA = TRPA Special Interest Species

Sources: CDFG 2008, CDFG 2011, CNDDDB 2003, TRPA 1987, TRPA 2006, TRPA 2010, USDA 2004, USDA 2007, and USFWS 2011

Table C-2.2. Birds Observed in the Tahoe Hills ECP Area

Common Name	Scientific Name
Birds	
Common raven	<i>Corvus corax</i>
Evening grosbeak*	<i>Coccothraustes vespertinus</i>
Dark-eyed junco	<i>Junco hyemalis</i>
Lesser goldfinch	<i>Carduelis psaltria</i>
Mountain chickadee	<i>Poecile gambeli</i>
Northern flicker*	<i>Colaptes auratus</i>
Red-breasted nuthatch	<i>Sitta canadensis</i>
Steller's jay	<i>Cyanocitta stelleri</i>
White-breasted nuthatch	<i>Sitta carolinensis</i>
Yellow-rumped warbler	<i>Dendroica coronate</i>

*Incidental sightings not detected during point counts

Table C-2.3. Mammals and Other Wildlife Observed in the Tahoe Hills ECP Area

Common Name	Scientific Name
Mammals	
Chipmunk spp.	<i>Tamias spp.</i>
Douglas squirrel	<i>Tamiasciurus douglasii</i>