

**Before the Board of Supervisors
County of Placer, State of California**

**In the matter of:
A Resolution Certifying
the Final Environmental Impact Report,
Mitigation Monitoring Plan,
adopting a statement of findings,
and approval the Kings Beach
commercial Core Project
(Four Lane Project)**

Resolution No. _____

The following RESOLUTION was duly passed by the Board of Supervisors of the County of Placer at a regular meeting held _____, 2008, by the following vote:

Ayes:

Noes:

Absent:

Signed and approved by me after its passage.

Attest:

Board of Supervisors

Ann Holman, Clerk

Chairman

I. OVERVIEW and INTRODUCTION

This Statement of Findings is made with respect to the "Project Approval" (as defined below) for the Kings Beach Commercial Core Improvement Project (the "Project") and states the findings of the Board of Supervisors (the "Board") of the County of Placer (the "County") relating to the potentially significant environmental effects ("Impacts") of the Project to be developed in accordance with the Project Approvals.

The Placer County Board of Supervisors hereby takes the following actions:

- Certification of an Environmental Impact Report
- Adoption of a Mitigation Monitoring and Reporting Plan

- Approve Alternative Three, the Four Lane Project, as described in these findings on Page 7.

The foregoing action to approve the four lane alternative, referred to as the "Project Approval". The Project Approval constitutes the "Project" for purposes of the California Environmental Quality Act (Public Resources Code Sections 21000 and following) ("CEQA") and CEQA Guidelines § 15378 and these determinations of the Board.

II. PROCEDURAL HISTORY

WHEREAS, the need for pedestrian, bicycle, water quality and aesthetic improvements in the Kings Beach Commercial Core area has been identified in the Kings Beach Community Plan and the TRPA Regional Transportation Plan/Air Quality Plan, two key planning documents that focus on local and regional land use and transportation issues in the Kings Beach area, and

WHEREAS, the California Department of Transportation ("Caltrans") owns and manages State Route 28 which runs through the Kings Beach area, and

WHEREAS, the County has proposed to construct pedestrian, bicycle, aesthetic, parking and water quality improvements on a portion of State Route 28 and on adjacent roads in the Kings Beach Commercial Core and after a determination of consistency by Caltrans that the projects meet their requirements and is consistent with the National Environmental Policy Act (NEPA) and with the Tahoe Regional Planning Agency ("TRPA") that the project meets the requirements of the TRPA Code of ordinances and TRPA Regional Plan, and

WHEREAS, the County, Caltrans and TRPA agreed to jointly prepare an environmental document that satisfies the requirements of the California Environmental Quality Act (environmental impact report--"EIR"), the National Environmental Policy Act (environmental assessment--"EA") and the TRPA Code of Ordinances (environmental impact statement--"EIS"), according to the operative statutes and ordinances applicable to the three separate public entities, and

WHEREAS, the County: issued a notice of preparation to prepare an environmental impact report on January 10, 2004; prepared a draft EA/EIR/EIS and released it for public comment in March, 2007; took public comments on the draft EA/EIR/EIS until May 28, 2007; prepared a final EA/EIR/EIS which was released on May 22, 2008; and

WHEREAS, the EA/EIR/EIS studied four (4) different project alternatives: Alternative One, no-build alternative; Alternative Two, a three lane alternative that includes on site parking and two roundabouts; Alternative Three, a four lane highway improvement with stoplights; and an Alternative Four, a three lane option with two roundabouts no on-street parking; and

WHEREAS, the Board gave notice of a public hearing to consider and act upon the final EIR for the Project, and public hearings were duly held before the Board on July, 22, 2008, and

WHEREAS, after holding public hearings, the Board duly considered the Final EIR ("FEIR") as prepared for the Project (which includes the draft EA/EIR/EIS dated March, 2007, the final EIR/EIS/EIS, dated May 22, 2008), the recommendations of the Planning Commission with respect thereto, the comments of the public, both oral and written, and all written materials in the record connected therewith, and is fully informed thereon.

NOW, THEREFORE, BE IT RESOLVED, by the Board of Supervisors of the County of Placer as follows:

1. The foregoing statements of procedural history are correct and accurate.
2. The FEIR has been prepared in accordance with all requirements of CEQA and the Guidelines.
3. The FEIR was presented to and reviewed by the Board. The FEIR was prepared under supervision by the County and reflects the independent judgment of the County. The Board has reviewed the FEIR, and bases the findings stated below on such review and other substantial evidence in the record.
4. The County finds that the FEIR considers a reasonable range of potentially feasible alternatives, sufficient to foster informed decision making, public participation and a reasoned choice. Thus, the alternatives analysis in the EIR is sufficient to carry out the purposes of such analysis under CEQA and the Guidelines.
5. The Board hereby certifies the FEIR as complete, adequate and in full compliance with CEQA and as providing an adequate basis for considering and acting upon the Project Approval and makes the following specific findings with respect thereto.
6. The Board agrees with the characterization of the FEIR with respect to all Impacts initially identified as "less than significant" and finds that those Impacts have been described accurately and are less than significant or beneficial as so described in the FEIR. This finding does not apply to Impacts identified as significant or potentially significant that are reduced by Mitigation Measures to a level characterized in the FEIR as less than significant. Each of those Impacts and the Mitigation Measures adopted to reduce them are dealt with specifically in the findings below.
7. Except as expressly otherwise stated in certain cases below, all mitigation measures proposed in the FEIR and adopted and incorporated into the Project.

8. Except as expressly otherwise stated below, the Mitigation Monitoring and Reporting Plan ("MMRP") will apply to all mitigation measures adopted with respect to the Project pursuant to all of the Project Approvals and will be implemented.

9. The Mitigation Measures and the MMRP have been incorporated into the Project Approvals and have thus become part of and limitations upon the entitlement conferred by the Project Approvals.

10. The descriptions of the Impacts in these findings is a summary statement. Reference should be made to the FEIR for a more complete description.

11. The Planning Department is directed to file a Notice of Determination with the County Clerk within five (5) working days in accordance with Public Resources Code section 21152(a) and CEQA Guidelines section 15094.

III. DEFINITIONS

The following definitions apply where the subject words or acronyms are used in these findings:

"Board" means the Board of Supervisors of the County of Placer.

"Caltrans" means the State of California, Department of Transportation.

"CDFG" or "DFG" means the State of California, Department of Fish and Game.

"CEQA" means the California Environmental Quality Act (Pub. Resources Code, § 21000 *et seq.*)

"Condition" means a condition of approval adopted by the County in connection with approval of the Project.

"Corps" means the United States Army Corps of Engineers.

"County" means County of Placer.

"DEIR" or "Draft EIR" means the Draft Environmental Impact Report dated March of 2007 for the proposed Kings Beach Commercial Core Improvement project.

"DPW" means the County of Placer, Department of Public Works.

"DRC" means the County of Placer, Development Review Committee.

"EIR" means environmental impact report.

"Environmental Health" means the County of Placer, Division of Environmental Health.

"Environmental Review Ordinance" means the Placer County Environmental Review Ordinance, as codified in Chapter 18 of the Placer County Code.

"ERC" means the County of Placer, Environmental Review Committee.

"EA/EIR/EIS" means the Joint Environmental Assessment, Environmental Impact for the report and Environmental Impact Statement prepared in accordance with NEPA, CEQA and TRPA ordinances for the Kings Beach Commercial Core Improvement Project.

"FEIR" means the Final EIR as prepared for the Project (which includes the draft EA/EIR/EIS dated March, 2007, and the final EA/EIR/EIS, dated May, 2008.

"FHWA" means the Federal Highway Administration

"General Plan" means the Placer County General Plan, as adopted in 1994 with subsequent amendments.

"MMRP" means the Mitigation Monitoring and Reporting Program for the Project.

"NOP" means notice of preparation.

"NRCS" means the United States Department of Agriculture, Natural Resource Conservation Service.

"NTRAC" means the North Tahoe Regional Advisory Council.

"PCAPCD" means the Placer County Air Pollution Control District.

"Planning Commission" means the County of Placer, Planning Commission.

"Planning Department" means the County of Placer, Planning Department.

"Project" means the proposed Kings Beach Commercial Core Improvement Project.

"ROD" means Record of Decision.

"TRPA" means the Tahoe Regional Planning Agency.

"USFWS" means the United States Fish and Wildlife Service.

"USFS" means United States Forest Service.

"Zoning Ordinance" means the Placer County Zoning Ordinance, including all amendments thereto.

IV. BACKGROUND and PROJECT HISTORY

Most of Kings Beach was subdivided under the Final Map of "Brockway Vista", which recorded in 1926. Much of the commercial activity centered around cottage motels and tourist support businesses. Very few, if any, pedestrian, bicycle and water quality facilities were ever constructed. The Kings Beach Community Plan, originally adopted in April, 1996, envisioned the addition of these public facilities, especially sidewalks within the commercial core. Caltrans owns and operates State Route 28 which runs through the center of town. The County agreed to sponsor a project to promote bicycle and pedestrian mobility, improve water quality and enhance the aesthetics of the commercial core.

The project proposes to construct curb, gutter, sidewalk, drainage, streetscaping and parking improvements along SR28 from SR267 to Chipmunk Street. In addition, off highway parking lots would be constructed to offset the loss of parking on the highway. In addition, pedestrian and parking improvements on County Roads adjacent to the Highway are proposed to interconnect parking lots with the commercial core and provide another place to offset parking losses on the highway. The Proposed Project is designed to address the following purposes:

- Improve pedestrian and bicycle mobility and safety
- Improve water quality
- Improve aesthetics of the commercial core

The need for these sidewalk and related improvements has been identified in the Kings Beach Community Plan, the Regional Transportation Plan/Air Quality Plan (RTP/AQP) and is recognized as a TRPA Environmental Improvement Project.

In 2007, a joint Environmental Assessment/Environmental Impact Report/Environmental Impact Statement (EA/EIR/EIS) was prepared to address the potential environmental effects of the proposed Project. The joint EA/EIR/EIS was prepared to satisfy the environmental review requirements of Placer County, the lead agency for CEQA, and Caltrans, the lead agency for the National Environmental Policy Act (NEPA) (under delegation authority from FHWA). In addition, the document was also prepared to serve the needs of the Tahoe Regional Planning Agency (TRPA), under the TRPA Code of Ordinances.

Placer County issued a Notice of Preparation (NOP) to prepare an EIR on January 15, 2004. The *Kings Beach Commercial Core Improvement Project EA/EIR/EIS* was then circulated for public review in March, 2007. The public comment period closed on May 25, 2007.

V. PROJECT DESCRIPTION

The proposed Project consists of Alternative Number 3, as described in Section 2.3.3 of the Draft EIR and generally consists of constructing curb, gutter, sidewalk, drainage and streetscaping improvements along SR28 from SR267 to Chipmunk Avenue. Associated with the proposed project would be the construction of parking lots off of the highway to offset parking losses associated with the highway improvements. Limited roadway improvements will be constructed on adjacent County roads to interconnect the proposed parking lots and provide some additional on-street parking. Some of the specific features of the Project:

- Improve SR28 (from SR267 to Chipmunk Avenue) to provide for four (4) 11-foot wide travel lanes, two (2) eight foot parking lane, two (2) 5-foot wide bike lanes and two (2) nominal 5-foot wide sidewalks. At intersections a left turn lane would be provided on the highway and parking would be removed. Year around parallel parking would be provided except at intersections and where sight distance from driveways cause safety issues.
- Traffic control at the intersections of State Route 267 and Coon streets will be accomplished with the modification of the existing traffic signals. A new traffic signal would be installed at the intersection with Bear Street.
- Space for approximately 202 cars will be disrupted by the proposed improvements. Approximately 103 parking spaces would be provided on the highway, 57 on adjacent County roadways and 42 in off-street parking lots.
- Sidewalk areas on the highway will be designed with various sidewalk amenities, such as benches, transit stops and landscaping that can be provided in the available area. Lighting will be provided along the highway for traffic safety and pedestrian activity.
- Limited pedestrian (sidewalk on one side of road) and parking improvements will be constructed on the first block of the following streets north of SR28:
 - Secline Street
 - Deer Street
 - Bear Street
 - Coon Street
 - Fox Street
 - Chipmunk Street
- Brook Avenue will be converted to one way eastbound traffic between Bear Street and Coon Street. Angled parking would be provide along this segment of roadway.

- Water Quality conveyance and treatment facilities will be constructed in the highway and all areas to receive various other improvements as shown on Figure 2-2 in the Final EA/EIR/EIS.
- Temporary construction easements will be required to match the new improvements to existing improvements along the corridor.

VI. RECORD OF PROCEEDINGS

In accordance with Public Resources Code section 21167.6, subdivision (e), the record of proceedings for the County's decision on the Project includes, without limitation, the following documents:

- The NOP and all other public notices issued by the County in conjunction with the Project;
- The Draft EA/EIR/EIS (March 2007) for the Project;
- All comments submitted by agencies or members of the public during the comment period on the Draft EA/EIR/EIS;
- All comments and correspondence submitted to the County with respect to the Project, in addition to timely comments on the Draft EA/EIR/EIS;
- The Final EA/EIR/EIS (May 2007) for the Project, including comments received on the Draft EA/EIR/EIS and responses to those comments;
- Documents cited or referenced in the Draft and Final EA/EIR/EISs;
- The mitigation monitoring and reporting program for the Project;
- All findings and resolutions adopted by the County in connection with the Project and all documents cited or referred to therein;
- All reports and documents prepared by the County or consultants of County for the California Department of Transportation (Caltrans), including the approved Draft Project Report who has ownership and responsibility over State Route 28
- All reports, studies, memoranda, maps, staff reports, or other planning documents relating to the Project prepared by the County, consultants to the County, or responsible or trustee agencies with respect to the County's compliance with the requirements of CEQA and with respect to the County's action on the Project;

- All documents submitted to the County (including the Planning Commission and Board of Supervisors) by other public agencies or members of the public in connection with the Project;
- Any minutes and/or verbatim transcripts of all information sessions, public meetings, and public hearings held by the County in connection with the Project;
- Any documentary or other evidence submitted to the County at such information sessions, public meetings and public hearings;
- The 1994 Placer County General Plan and all environmental documents prepared in connection with the adoption of the General Plan;
- The Placer County Zoning Ordinance and Environmental Review Ordinance (Placer County Code, Chapters 17 and 18), and all other County Code provisions cited in materials prepared by or submitted to the County;
- The Kings Beach Community Plan and EIR certified therewith;
- The Placer/Tahoe Regional Transportation Plan/Air Quality Plan;
- The Tahoe Regional Planning Agency (TRPA) Regional Plan and the EIR/EIS certified therewith;
- The TRPA Code of Ordinances;
- Any and all resolutions and/or ordinances adopted by the County regarding the Project, and all staff reports, analyses, and summaries related to the adoption of those resolutions;
- Matters of common knowledge to the County, including, but not limited to federal, state, and local laws and regulations;
- Any documents cited in these findings, in addition to those cited above; and
- Any other materials required for the record of proceedings by Public Resources Code section 21167.6, subdivision (e).

The official custodian of the record is the Clerk of the Placer County Board of Supervisors, 175 Fulweiler Avenue, Auburn CA 95603.

VII. GENERAL FINDINGS

POTENTIAL IMPACTS FOUND TO BE LESS THEN SIGNIFICANT

Impact AIR-2: Generation of Operation-Related Emissions of Ozone Precursors (Reactive Organic Gases and Oxides of Nitrogen), Carbon Monoxide, and Particulate Matter in Excess of Placer County Air Pollution Control District Standards

Finding: The Analysis in the FEIR shows that any impact of the project is less than significant.

Explanation: Long-term air quality impacts are associated with motor vehicles operating on the roadway network, predominantly the SR 28 corridor. The EMFAC2002 model and traffic data provided by LSC Transportation Consultants, Inc. (2003) were used to estimate operation-related emissions of ozone precursors (ROG and NO_x), CO, and PM10. As noted previously, the proposed action is not a traffic-generating project and would not result in any differences in traffic volumes throughout the action area between build and no-build conditions. The results of the vehicle emissions calculations for project operations are summarized in Table 3.1-5 of the Final EA/EIR/EIS. As indicated, emissions for future-year conditions would be well below the PCAPCD's thresholds for all alternatives.

LEVEL OF SIGNIFICANCE: Less than significant

Impact AIR-3: Nonconformance with State Implementation Plan

Finding: The Analysis in the FEIR shows that any impact of the project is less than significant.

Explanation: The proposed action is included in the 2004 Lake Tahoe Basin RTP (Tahoe Regional Planning Agency and Tahoe Metropolitan Planning Organization 2004) and 2004 Federal TIP (Tahoe Metropolitan Planning Organization 2004) for the Lake Tahoe Region. The U.S. Department of Transportation and the EPA developed guidance for determining conformity of transportation plans, programs, and projects in November 1993 in the Transportation Conformity Rule (40 CFR 51, 93). The demonstration of conformity to the SIP is the responsibility of the metropolitan planning organization (in this case, the TRPA), as well as preparation of RTPs and associated conformity analysis.

Any project listed in an RTP must demonstrate conformity with the SIP. That RTP also includes a conformity analysis that demonstrates that the RTP meets federal air quality requirements. TRPA has conducted air quality modeling that shows that emissions associated with the Lake Tahoe Basin 2004 RTP are within the allowable emission budgets for ozone precursors and in conformity with the SIP. Because the proposed action is listed in the RTP and the RTP has been demonstrated to be a conforming plan, the proposed action is a conforming project for ozone precursors.

LEVEL OF SIGNIFICANCE: Less than significant

Impact AIR-4: Generation of Carbon Monoxide Hotspot Emissions in Excess of the Federal or State Standards

Finding: The Analysis in the FEIR shows that any impact of the project is less than significant.

Explanation: Increases of CO concentrations at locations near congested intersections affected by the proposed action were modeled with the CALINE4 dispersion model. The modeling was performed at the intersections of SR 28/SR 267, SR 28/Secline Street, SR 28/Deer Street, SR 28/Bear Street, SR 28/Coon Street, SR 28/Fox Street, and SR 28/Chipmunk Street using the highest winter peak hour traffic data. The conditions modeled were existing 2008 with project and 2028 with project. It should be noted that the existing conditions had the highest modeled concentrations; emissions under future conditions are anticipated to be lower because of continuing improvements in engine technology and the retirement of older, higher-emitting vehicles. Modeled CO concentrations plus background CO levels from the nearest monitoring station are presented in Table 3.1-6 of the Final EA/EIR/EIS. As shown, emissions of CO hotspots are not anticipated to exceed the federal or state 1- and 8-hour standards.

LEVEL OF SIGNIFICANCE: Less than significant

Impact AIR-6: Atmospheric Deposition of Phosphorus from Re-Entrained Roadway Fugitive Dust into Lake Tahoe

Finding: The analysis in the FEIR shows that any impact of the project is less than significant.

Explanation: The deposition of phosphorus into Lake Tahoe is a concern for the lake ecosystem. A number of factors have been identified as contributors to poor water quality. Among them, it has been demonstrated that concentrations of phosphorus in Lake Tahoe are closely related to its capacity to support algal populations (i.e., as concentrations of phosphorus in the lake increase, algal growth may increase if all other factors remain equal). This is a primary concern for Lake Tahoe because its clarity and visual quality are unique and renowned. Within the region, atmospheric deposition of phosphorus and particulate matter from re-entrained fugitive dust into Lake Tahoe is a concern. Because of heavy winter sanding operations for snow control in the area, the roadway surfaces in the area contain higher levels of sand and gravel than other areas. This can result in higher levels of localized re-entrained fugitive dust as vehicles travel over the roadways and break the sand and gravel into ever smaller dust that is sufficient for aerial transport. This dust can be re-entrained into the air from wind blowing over the roadways and vehicles traveling over the roadways.

It is not anticipated that the proposed Project would result in an increased contribution to the atmospheric deposition of phosphorus in Lake Tahoe from re-entrained fugitive dust. The physical features associated with the proposed action would reduce the total area of roadway, which would reduce the amount of sand required for snow control in winter. This would in turn reduce the amount of re-entrained fugitive dust in the immediate project vicinity. In addition, the narrowing of the roadways and installation of roundabouts would reduce speeds during peak hours on SR 28, which would reduce the amount of re-entrained roadway dust in the action area because lower amounts of re-entrained roadway dust are associated with lower speeds. Overall, the proposed Project would not increase the amount of re-entrained fugitive dust and consequently would not contribute to the atmospheric deposition of phosphorus and particulate matter in Lake Tahoe.

LEVEL OF SIGNIFICANCE: Less than significant

Impact AIR-7: Generation of Significant Levels of Odors

Finding: The Analysis in the FEIR shows that any impact of the project is less than significant.

Explanation: Diesel emissions from construction equipment and volatile organic compounds from paving activities may create off-site odors during construction. These odors would be temporary and localized, and they would cease once construction activities have been completed. Operation of the proposed action is not anticipated to generate any objectionable odors that affect a substantial number of people.

LEVEL OF SIGNIFICANCE: Less than significant

Impact AIR-8: No Generation of Significant Levels of MSAT Emissions

Finding: The Analysis in the FEIR shows that any impact of the project is less than significant.

Explanation: The area of air toxics analysis is a new and emerging issue and is a continuing area of research. Currently, there are limited tools and techniques available for assessing project-specific health impacts from MSATs, as there are no established criteria for determining when MSAT emissions should be considered a significant issue in the NEPA context.

To comply with Council on Environmental Quality regulations (*40 CFR 1502.22(b)*) regarding incomplete or unavailable information, the MSAT methodology discussion above contains discussion regarding how air toxics analysis is an emerging field and current scientific techniques, tools, and data are not sufficient to accurately estimate human health impacts that would result from a transportation project in a way that would be useful to decision-makers. Also in compliance with *40 CFR 150.22(b)*, the MSAT methodology

discussion above contains a summary of current studies regarding the health impacts of MSATs.

Based on the FHWA's interim guidance for MSATs, the proposed project meets the criteria for a qualitative project-level MSAT analysis because it is not an exempt project or a project with no meaningful potential MSAT effects, and AADT is not projected to be in the range of 140,000 to 150,000 by the project design year (Federal Highway Administration 2006). When conducting a qualitative analysis, following factors should be considered.

- For projects on an existing alignment, MSATs are expected to decline unless VMT more than doubles by 2020 (due to the effect of new EPA engine and fuel standards).
- Projects that result in increased travel speeds will reduce emissions of the VOC-based MSATs (acetaldehyde, benzene, formaldehyde, acrolein, and 1,3-Butadiene); the effect of speed changes on diesel particulate matter is unknown. This speed benefit may be offset somewhat by increased VMT if the more efficient facility attracts additional vehicle trips.
- Projects that facilitate new development may generate additional MSAT emissions from new trips, truck deliveries, and parked vehicles (due to evaporative emissions). However, these may also be activities that are attracted from elsewhere in the metro region (thus, on a regional scale there may be no net change in emissions).
- Projects that create new travel lanes, relocate lanes or relocate economic activity closer to homes, schools, businesses, and other sensitive receptors may increase concentrations of MSATs at those locations relative to No Action.

As discussed above, technical shortcomings of emissions and dispersion models and uncertain science with respect to health effects prevent meaningful or reliable estimates of MSAT emissions and effects of this project. However, even though reliable methods do not exist to accurately estimate the health impacts of MSATs at the project level, it is possible to qualitatively assess the levels of future MSAT emissions under the project. Although a qualitative analysis cannot identify and measure health impacts from MSATs, it can give a basis for identifying and comparing the potential differences among MSAT emissions—if any—from the various alternatives. The qualitative assessment presented below is derived in part from a study conducted by the FHWA, titled *A Methodology for Evaluating Mobile Source Air Toxic Emissions Among Transportation Project Alternatives*. (That study can be found at <<http://www.fhwa.dot.gov/environment/airtoxic/msatcompare/msatemissions.htm>>.)

For each alternative in this EA/EIR/EIS, the amount of MSATs emitted would be proportional to the vehicle miles traveled, or VMT, assuming that other variables such as fleet mix are the same for each alternative. The VMT estimated for each of the Build Alternatives is slightly higher than that for the No Build Alternative, because the additional capacity increases the efficiency of the roadway and attracts rerouted trips from elsewhere

in the transportation network. These increases in VMT would lead to higher MSAT emissions for the action alternative along the highway corridor, along with a corresponding decrease in MSAT emissions along the parallel routes. The emissions increase is offset somewhat by lower MSAT emission rates due to increased speeds; according to EPA's MOBILE6 emissions model, emissions of all of the priority MSATs except for diesel particulate matter decrease as speed increases. The extent to which these speed-related emissions decreases will offset VMT-related emissions increases cannot be reliably projected due to the inherent deficiencies of technical models.

Because the estimated VMT under each of the Alternatives would be the same, as the proposed Project is not a traffic-generating project and would not result in differences in traffic volumes throughout the action area between build and no-build conditions, it is expected there would be no appreciable difference in overall MSAT emissions among the various alternatives. Also, regardless of the alternative chosen, emissions will likely be lower than present levels in the design year as a result of EPA's national control programs that are projected to reduce MSAT emissions by 57 to 87 percent between 2000 and 2020. Local conditions may differ from these national projections in terms of fleet mix and turnover, VMT growth rates, and local control measures. However, the magnitude of the EPA-projected reductions is so great (even after accounting for VMT growth) that MSAT emissions in the study area are likely to be lower in the future in nearly all cases.

LEVEL OF SIGNIFICANCE: Less than significant

Impact CR-3: Destruction or Disturbance to a Significant Architectural Resource—Felte Building (No Impact)

Finding: The Analysis in the FEIR shows that any impact of the project is less than significant.

Explanation: The proposed action would construct a sidewalk along the east side of the Felte Building (8399 North Lake Boulevard). Proposed construction is not expected to materially impair (i.e., demolish or substantially alter the physical characteristics of) the building. Thus, the Felte Building would continue to convey its historical significance. Consequently, no effect on this resource is anticipated.

In an August 11, 2006 letter between Mr. Wayne Donaldson, SHPO, and FHWA, FHWA noticed SHPO of its intent to make *de minimis* impact findings for 4(f) properties if when SHPO concurs with "no adverse effect" findings. In the event that the SHPO does not respond to FHWA's finding of "no adverse effect" within 30 days; or when Caltrans notifies the SHPO of a "no historic properties affected" or "no adverse effect with standard conditions" finding, SHAW would likewise make a *de minimis* impact finding if the subject property is a 4(f) property. This letter, which is found in Appendix D, was subsequently signed and dated by Mr. Wayne Donaldson on August 28, 2006. On November 30, 2006, Caltrans sent a letter to Mr. Wayne Donaldson, SHPO, seeking his office's concurrence in the substitution of a finding of "No Historic Properties Affected"

pursuant to revised regulations issued by the ACHP (36 CFR Part 800). This letter may be found in Appendix D.

Under the 40-year-old provisions of Section 4(F), the Secretary of Transportation may not use land from a property in or eligible for the NRHP unless there is no prudent and feasible alternative to the use of that land and the Secretary has undertaken all possible planning to minimize harm to the historic property. Under a recently enacted amendment to Section 4(f), however, that statute will be considered satisfied if the project would result in a de minimis impact on the protected property (Federal Highway Administration pers. Comm.). For historic sites, the new law states that the Secretary may find such a de minimis impact if consultation with SHPO results in a determination that a transportation project will have "no adverse effect" on the historic site or that there will be "no historic properties affect" by the proposed action. With regard to the Felt Building, the SHPO concurred with the Caltrans' determination that no historic properties would be affected. Accordingly, the provisions of Section 4(f) would be considered satisfied should this alternative be selected.

LEVEL OF SIGNIFICANCE: Less than significant

Impact SOC-1: Displacement of a Substantial Number of People or Housing Units

Finding: The Analysis in the FEIR shows that any impact of the project is less than significant.

Explanation: There are no identified population or housing impacts resulting from the Project. There would be no adverse effects, and no mitigation is required.

LEVEL OF SIGNIFICANCE: Less than significant

Impact SOC-2: Impacts on Community Cohesion

Finding: The Analysis in the FEIR shows that any impact of the project is less than significant.

Explanation: Within the study area, SR 28 serves as the corridor connecting Kings Beach to surrounding communities, and it also provides commercial access for residents and tourists. Most homes and neighborhoods along the SR 28 action area are located north of SR 28. Residents of these neighborhoods use vehicles to reach commercial centers or homes along SR 28, but improvements would create more pedestrian friendly access. The SR 28 roadway would be narrowed under the 3-lane Alternative and would include bike lanes, pedestrian crosswalks, and sidewalks under all alternatives. Under Alternatives 2 and 4, sidewalks would be widened to 2.9 meters (9.5 feet) and 5.3 meters (17.4 feet), respectively. Under Alternative 3, the sidewalk would be widened to

1.7 meters (5.6 feet). Alternatives 2 and 4 would be more conducive to pedestrian and bicycle mobility than Alternative 3. All alternatives would serve to reduce the existing physical barrier that separates the opposing sides of the commercial strip from the surrounding neighborhoods. This is a beneficial effect and no mitigation measure is required.

LEVEL OF SIGNIFICANCE: Less than significant

Impact SOC-3: Disproportionate Environmental Effects on Races, Cultures, or Incomes (Environmental Justice)

Finding: The Analysis in the FEIR shows that any impact of the project is less than significant.

Explanation: An evaluation of data from the 2000 U.S. Census (U.S. Census Bureau 2000) indicates that the income and racial characteristics of the study area are markedly dissimilar to those of Placer County, with the study area comprising a proportionally larger minority population (Hispanic) than found in Placer County (Table 3.3-2). Median household income in the study area is significantly lower than in Placer County (Table 3.3-1). Additionally, the study area has a much larger percentage (17.7%) of its population living below the poverty level than the percentage countywide (5.8%). Based on this data and field observations, it is likely that the proposed action would have impacts on minority or low-income populations, but the effects are largely beneficial. Improved safety for pedestrians and bicyclists along SR 28 serves residents who may rely on transportation other than motor vehicles. Furthermore, construction and operations-related effects of the proposed action would occur along the length of the commercial corridor, with effects generally spread evenly across all populations residing near the action area. Based on the above discussion and analysis, all of the Build Alternatives will not cause disproportionately high and adverse effects on any minority or low-income populations as per Executive Order 11898 regarding environmental. Based on the above discussion and analysis, the Project will not cause disproportionately high and adverse effects on any minority or low-income populations as per Executive Order 12898 regarding environmental justice. As none of the alternatives would result in substantial adverse effects no mitigation measures are required.

LEVEL OF SIGNIFICANCE: Less than significant

Impact SOC-4: Loss of Property Tax Revenue

Finding: The Analysis in the FEIR shows that any impact of the project is less than significant.

Explanation: The total amount of area regarded as partial acquisitions of privately owned properties required for the Project is of such insignificance that property tax revenues currently being generated by these properties for Placer County and other local agencies would not be reduced. Because no retail commercial uses would be fully displaced by the alternatives, the proposed action is not anticipated to cause changes in sales tax revenues for Placer County.

The Project would not displace any residential property and therefore not result in losses in property tax revenue for Placer County. Therefore, this is not considered an adverse effect and no mitigation measure is required.

LEVEL OF SIGNIFICANCE: Less than significant

Impact SOC-5: Revenue Effects on Local and Roadside Businesses

Finding: The Analysis in the FEIR shows that any impact of the project is less than significant.

Explanation: Under the Project, ROW acquisition and changes in access and parking could cause impacts on businesses located adjacent to SR 28 between SR 267 and Chipmunk Street. Properties most impacted by this do not currently have a buffer between their buildings and the roadway or they use this area for parking.

The Project would result in the following impacts on businesses in the study area.

- Improvements at the intersection of SR 28/SR 267 would displace a portion of parking lot area on the corner of APN 117-180-007. The commercial building of Stone's Automotive uses this area as part of its parking lot. No parking would be displaced, but a loss of a portion of the lot would decrease the space available for vehicles to maneuver through the lot. Access change may also be imposed on the business, as entry along SR 28 may no longer be provided. However, entry along SR 267 would be maintained, so these changes should not create major problems for the business. This is not considered an adverse effect and no mitigation is required.
- The commercial property located at 8079 SR 28 (APN 090-071-026/090-071-025) would lose areas south and southwest of the building that is used by customers as a parking area. Loss of this area would require customers to access parking along Secline Street or along the proposed parking lane further east on SR 28. This is not considered an adverse effect and no mitigation measure is required.
- APN 090-142-002 may lose vehicle access along SR 28. This parcel currently has no existing buildings, and as such the severity of impacts depends on the future use of this property. This is not considered an adverse effect and no mitigation measure is required.
- APN 090-071-026/090-071-025 would lose approximately 10 spaces of parking. Although access is also being discontinued from SR 28, the loss of the 10

parking spaces is not anticipated to affect the operation of the businesses at this location. However, Placer County has committed to compensating for parking spaces that would be lost as a result of either build alternative (see discussion under *Section 3.7*). SR 28 improvements and ROW acquisition would displace the entire amount of parking used by customers of the business located at 8160 SR 28 (APNs 090-072-023/ 090-072-024).

- 8338 SR 28 (APNs 090-080-001/ 090-080-002) would lose approximately 12 parking spaces due to ROW acquisitions. These spaces make up the entire amount of parking available for the retail businesses in this building. However, Placer County has committed to compensating for parking spaces that would be lost as a result of either build alternative (see discussion under *Section 3.7*).
- The existing entry to the Jenkins Building (APN 090-123-008) would be discontinued in this alternative. No break in the sidewalk is planned for the parcel and access may be entirely pedestrian along SR 28. However, entry in front of APNs, 090-123-010 and 090-123-023 would be maintained so these changes should not create major problems for businesses located within this building. This is not considered an adverse effect and no mitigation measure is required.
- Wider lanes associated with an extra lane would reduce pedestrian and bicycle mobility and would make pedestrian crossing SR 28 more difficult, which could somewhat reduce shoppers in the KBCC area. This slight reduction in economic use is not considered an adverse effect and no mitigation measure is required.

LEVEL OF SIGNIFICANCE: Less than significant

Impact HYD-1: Substantial Alteration in the Quantity of Surface Runoff

Finding: The Analysis in the FEIR shows that any impact of the project is less than significant.

Explanation: The proposed Project involves a variation of improvements to the current SR 28 along with many drainage improvements. These improvements result in increased amount of impervious surfaces that will concentrate stormwater runoff. These impervious surfaces include additional paved surfaces due to the construction of new bike paths, sidewalks, and off-site parking areas. Buildout of the Project would increase the amount of impervious surface area by adding cement and asphalt over previously bare ground, which could potentially lead to a change in drainage patterns and would result in more surface runoff during winter storms compared to existing conditions.

Stormwater flows based on various precipitation events were estimated in the *Kings Beach Watershed Improvement Project Final Hydrologic Conditions Report* in which the

HEC-HMS model was used to estimate flows for the 25-year, 1-hour storm event and the 25-year, 72-hour storm event. Stormwater flows were estimated for Griff Creek along with all drainage outlets for the proposed action. The 25-year, 1-hour storm event flow for the Griff Creek Outlet was 53.8 cfs, while the 25-year, 72-hour flow was 1,199.6 cfs (Entrix 2006b). The 100-year, 24-hour event was also estimated as 1,000 cfs (Entrix 2006b). This discrepancy relates to the rainfall intensity for the different storms in relation to the infiltration rates. In the shorter duration storm, the initial precipitation goes to the soil moisture deficit, and subsequent precipitation goes to the constant infiltration and to runoff. With the longer duration storm, a greater amount of rainfall is available or runoff after removing the initial and constant infiltration amounts. For design flows on all other drainage outlets, refer to the *Kings Beach Watershed Improvement Project Final Hydrologic Conditions Report* (Entrix 2006b) located in Appendix G.

Chapter 2, Alternatives, and Figure 2-3 in the Final EA/EIR/EIS indicate drainage, collection, conveyance, and treatment improvements that will be implemented as part of the Kings Beach WIP to improve water quality in the Kings Beach region and action area. These design features will help to collect, convey, and treat water runoff from the on-street parking sites implemented as part of the proposed action and as well as runoff flowing into the action area from areas upstream of the action area. Moreover, as indicated in Chapter 2, the proposed action drainage, collection, conveyance, and treatment facilities that tie into and interface with the WIP improvements would be designed and built to handle these flows at all culverts, crossings, and drainage facilities affected by the proposed action. In addition, all off-street parking lots would be designed with water collection and infiltration features to contain runoff on-site for a 20-year, 1-hour storm flow. These water collection and infiltration features will be incorporated into the off-site parking lots and are designed to minimize runoff associated with the additional hard coverage from the parking lots. Because water would be contained entirely on-site, the off-site lots would not worsen water quality in the region. Consequently, while implementation of the proposed action would increase the quantity of surface runoff due to increased impervious surfaces (i.e., additional paved surfaces due to the construction of new bike paths, sidewalks, and off-site parking areas), the improvements as part of the proposed action will sufficiently handle these increased flows. In addition, improvements associated with the proposed WIP will further increase water treatment capacity.

LEVEL OF SIGNIFICANCE: Less than significant

Impact HYD-2: Placement of Structures that Would Impede or Redirect Flood-Flows within a 100-Year Floodplain

Finding: The Analysis in the FEIR shows that any impact of the project is less than significant.

Explanation: A preliminary 100-year, 24-hour storm event memorandum was completed by Entrix (2006c) in which the HEC-RAS model was used to estimate the 100-year, 24-hour event for Griff Creek. Currently, Griff Creek has three 4-foot-by-6-foot arch

corrugated metal pipe (CMP) culverts and two 30-inch CMPs. The model concluded that the current 100-year event will result in overtopping of SR 28 at Griff Creek with this current design. FIRMs obtained from Placer County for Griff Creek also indicate the 100-year flow would break out of the channel and flow across SR 28. Road realignment or placements of sidewalks (that are elevated higher than existing conditions) may alter the pattern of the overflow (and increase the size of the 100-year floodplain). (Entrix 2006c.)

Implementation of the Project would involve placement of structures in the 100-year floodplain. The *Location Hydraulic Study* prepared for the proposed action indicates these structures will not be in the direct path of flow and would not impede or redirect flow with implementation of the proposed action (Appendix H). The proposed action will not include any change in the roadway footprint at the Griff Creek crossing and will not change the configuration of the current culverts. The crossing is a multi-barrel culvert, and no changes will be made to this configuration. The highway grade (elevation and profile) will be maintained at this crossing with no change in the post-project condition. Therefore, the culvert hydraulics and overtopping will not change and flood damage risk will remain the same as under existing conditions. Applicable Placer County Design Criteria and Improvement Standards for floodplain construction will also be incorporated by design into the project plans and specifications in compliance with permit requirements. Although no substantial change to the course or flow of 100-year floodwaters is expected, if unanticipated projects occur that result in a substantial change, appropriate applications will be filed with USACE with plans for minimization through appropriate storm water conveyance, control, and treatment facilities.

LEVEL OF SIGNIFICANCE: Less than significant

Impact HYD-3: Exposure of People, Structures, or Facilities to Significant Risk from Flooding, Including Flooding as a Result of the Failure of a Levee or Dam

Finding: The Analysis in the FEIR shows that any impact of the project is less than significant.

Explanation: Implementation of the Project would not expose people, structures, or facilities to significant risk from flooding. In addition, the Project includes various improvements to current drainage facilities decreasing the chances of localized flooding in the area.

LEVEL OF SIGNIFICANCE: Less than significant

Impact HYD-4: Creation of or Contribution to Runoff that Would Exceed the Capacity of an Existing or Planned Stormwater Management System

Finding: The Analysis in the FEIR shows that any impact of the project is less than significant.

Explanation: Implementation of the Project will increase impervious surfaces (i.e., additional paved surfaces due to the construction of new bike paths, sidewalks, and off-site parking areas) resulting in an increase in stormwater runoff. Buildout of any of the alternatives would increase the amount of impervious surface area by adding cement and asphalt over previously bare ground, which could potentially lead to a change in drainage patterns and would result in more surface runoff during winter storms compared to existing conditions. Stormwater flows based on various precipitation events were estimated in the Kings Beach Watershed Improvement Project *Final Hydrologic Conditions Report* (Entrix 2006b).

Chapter 2, Alternatives, and Figure 2-3 of the Final EAEIR/EIS indicate drainage, collection, conveyance, and treatment improvements will be implemented as part of the WIP to improve water quality in the Kings Beach region and action area. These design features will help to collect, convey, and treat water runoff from the on-street parking sites implemented as part of the proposed action and as well as runoff flowing into the action area from areas upstream of the action area. Moreover, as indicated in Chapter 2, the proposed action drainage, collection, conveyance, and treatment facilities that tie into and interface with the WIP improvements would be designed and built to handle these flows at all culverts, crossings, and drainage facilities affected by the proposed action. In addition, all off-street parking lots would be designed with water collection and infiltration features to contain runoff on-site for a 20-year, 1-hour storm flow. These water collection and infiltration features will be incorporated into the off-site parking lots and are designed to minimize runoff associated with the additional hard coverage from the parking lots. Because water would be contained entirely on-site, the off-site lots would not worsen water quality in the region. Consequently, while implementation of the proposed action would increase the quantity of surface runoff due to increased impervious surfaces (i.e., additional paved surfaces due to the construction of new bike paths, sidewalks, and off-site parking areas), the improvements as part of the proposed action will sufficiently handle these increased flows. In addition, improvements associated with the proposed WIP will further increase water treatment capacity.

LEVEL OF SIGNIFICANCE: Less than significant

Impact HAZ-1: Potential Hazard to the Public or the Environment through the Routine Transport, Use, or Disposal of Hazardous Materials

Finding: The Analysis in the FEIR shows that any impact of the project is less than significant.

Explanation: The proposed Project is a roadway and streetscape improvement. Operation of the Project would not involve the routine transport, use, or disposal of hazardous materials in excess of current conditions in the area and surrounding areas. There would be no adverse effects, and no mitigation is necessary.

LEVEL OF SIGNIFICANCE: Less than significant

Impact HAZ-3: Potential Exposure of Schoolchildren to Hazardous Material

Finding: The Analysis in the FEIR shows that any impact of the project is less than significant.

Explanation: As noted in the *Physical Setting* section above, no schools are located within 0.25-mile of the project site. There would not be any adverse effects, and no mitigation is necessary.

LEVEL OF SIGNIFICANCE: Less than significant

Impact HAZ-5: Potential Safety Hazards in an Airport Zone

Finding: The Analysis in the FEIR shows that any impact of the project is less than significant.

Explanation: As noted in the *Physical Setting* section above, the proposed Project is not located in any of the airport land use planning areas of nearby airports. Therefore, no adverse effects related to potential safety hazards for people residing or working in the action area are anticipated. No mitigation is necessary.

LEVEL OF SIGNIFICANCE: Less than significant

Impact TRA-1: Degradation of SR 28 Roadway Level of Service (LOS) Below Applicable Standards

Finding: The Analysis in the FEIR shows that any impact of the project is less than significant.

Explanation: This alternative consists of four through travel lanes along SR 267 with traffic signals at SR 267, at Bear Street, and at Coon Street. New left turns along SR 28 would be provided at Bear Street, Coon Street, and Fox Street. Brook Avenue would be converted to a one way eastbound from Bear Street to Coon Street. For both summer and winter LOS standards in both directions the TRPA LOS would be attained, in both 2008 and 2028, and as such there would be no significant impact.

LEVEL OF SIGNIFICANCE: Less than significant

Impact TRA-2: Increase in Average Daily Traffic on Residential Streets in Excess of Applicable Standards

Finding: The Analysis in the FEIR shows that any impact of the project is less than significant.

Explanation: Because SR 28 roadway volumes would not exceed capacity and intersections (with mitigation) would not generate adverse levels of delay, this alternative is not anticipated to experience diverted traffic in excess of 3000 ADT on residential streets for 2008 or 2028. Consequently, there is no significant impact on residential streets under this alternative.

LEVEL OF SIGNIFICANCE: Less than significant

Impact TRA-3: Degradation of Intersection Levels of Service Below Applicable Standards

Finding: The Analysis in the FEIR shows that any impact of the project is less than significant.

Explanation: Adequate summer LOS of C or better would be provided under this alternative in 2008, except that the Secline and Fox Street intersections would provide poor (LOS E or F) conditions for side street approaches to the state highway in 2008. This condition is due to the estimated traffic volume, rather than the project alternative, which would not degrade LOS at the side streets from the Alternative 1 "No Project" condition. Winter peak-day LOS would be similar to summer LOS, except that the SR 267 intersection would provide LOS D.

Summer LOS would attain TRPA standards in 2028, except for the stop sign controlled intersections along SR 28, which will continue to provide poor (LOS F) conditions for side street approaches. This condition is due to the assumed future growth in traffic volumes, rather than the project alternative, which would not degrade LOS at the side streets from the Alternative 1 "No Project" condition. In addition, a separate westbound right-turn lane would be required to provide adequate LOS at the SR 267/SR 28 signal; this would provide a total intersection LOS of D. Without this additional lane, LOS F conditions would occur at least 1 hour per day throughout the summer and on all busy ski days in the winter. The results of the winter LOS analysis parallel those of the summer analysis.

The project alternative configuration of the SR 28/SR 267 intersection would provide unacceptable LOS F conditions in 2028 (but not in 2008). This would be an adverse effect. In comparison, the no-build alternative (Alternative 1) would also not attain LOS standards at this intersection in 2028 (but would attain standards in 2008).

Implementation of Mitigation Measure TRA-2 would help to reduce the severity of this effect. As discussed in the Kings Beach Urban Improvement Project Traffic Report (Appendix L), there are no additional feasible mitigation measures that would reduce this impact to a level that would be less than significant, or to a level that conforms to TRPA's existing LOS standard for signalized intersections.

LEVEL OF SIGNIFICANCE: Less than significant

Impact TRA-4: Degradation of Bicycle and Pedestrian Conditions along SR 28

Finding: The Analysis in the FEIR shows that any impact of the project is less than significant.

Explanation: This alternative provides for sidewalks and class II bike lanes along both sides of SR 28 through the Commercial Core area. A 1.7 meter sidewalk and landscape area would be added in each direction, which would be inconsistent with Placer County and TRPA standards (which is 3 meters) within the KBCC. The proposed project does not complete the set of improvements shown in the community plan in that it does not complete the sidewalk size Community Plan goal, but does not preclude expansion in the future. To complete the improvements shown in the Community Plan, additional right-of-way will need to be acquired along the entire length of the highway and that will be used entirely for the additional sidewalk area. Also, the provision of a signal would provide additional bicycle and pedestrian crossing opportunities, and would be a beneficial addition.

This would result in a beneficial impact. No mitigation measures are required.

LEVEL OF SIGNIFICANCE: Less than significant

Impact TRA-5: Degradation of Transit Operations

Finding: The Analysis in the FEIR shows that any impact of the project is less than significant.

Explanation: There is no change from the current baseline of the project relating to transit services, therefore no impacts to the movement of emergency services under this alternative.

LEVEL OF SIGNIFICANCE: Less than significant

Impact TRA-6: Degradation of Emergency Access or Response Times

Finding: The Analysis in the FEIR shows that any impact of the project is less than significant.

Explanation: There is no change from the current baseline of the project relating to emergency services, therefore no impacts to the movement of emergency services under this alternative.

LEVEL OF SIGNIFICANCE: Less than significant

Impact PK-1: Parking Utilization in Excess of 90%

Finding: The Analysis in the FEIR shows that any impact of the project is less than significant.

Explanation: Under the Project, on-street parallel parking would be provided along both sides of the street on SR 28 year round.

Post-Project Parking Conditions—2008 and 2028

Alternative 3 would result in a net loss of 94 spaces, while maintaining 108 parking spaces along SR 28. As with Alternative 2, any reduction over 60 spaces would result in parking utilization rates that exceed 90%. Moreover, an additional net loss of 78 existing spaces on private lots accessed directly off of the highway would result in a total reduction of 172 parking spaces (Table 3.7-2).

As indicated in Table 3.7-2, Alternative 3 would result in a net reduction of 172 parking spaces (public and private). Subtracting the 60 spaces currently available within the 90% utilization standard from the reduced parking supply of 172 spaces indicates that a minimum of 112 parking spaces are required to compensate for parking spaces lost from implementing Alternative 3. The greatest number of new spaces (40 spaces) will be required to compensate for the loss of existing spaces between Coon and Fox Streets.

To compensate for the loss of parking, Placer County will provide new parking spaces to meet the 90% utilization rate as part of the project, which would ensure adequate parking availability. In addition, Placer County will ensure the new parking spaces are located within a reasonable walking distance (i.e., one block) of the specific subareas of impact.

New parking spaces will be provided in a manner that addresses the parking requirements of each block—either within that block or within an adjacent block—in order to ensure that adequate parking conditions are maintained for all sub-areas (by block) within the action area. This block-level analysis is warranted because the action area is too large to be considered as a single parking area because drivers will not typically walk the distances from outlying areas to the areas of parking shortages. No compensation is required for the block between SR 267 and Secline Street; the nine spaces available in this block would be available to partially address the parking spaces needed for the adjacent Secline-Deer Street block.

Figure 3.7-1 shows potential parking that will be added to compensate for the project alternatives. Two parking lots totaling 40 spaces have already undergone environmental review and will be built prior to the start of construction of the proposed action. These two lots are shown in Figure 3.7-1 with red shading. They include the Minnow Avenue parking lot that would include 20 spaces (APN 090-192-025), and the

Brook Avenue parking lot that would add 20 spaces (APN 090-122-019). Figure 3.7-1 also shows locations (both on- and off-street) from which future additional parking spaces would be selected.

The analysis of construction phasing and staging necessary to evaluate temporary construction parking impacts has also not been conducted. It can be expected that short-term loss of public parking and loss of access to private parking will occur as part of project construction. To date, Placer County has constructed one new public parking lot that can be used to offset spaces lost during construction and intends to construct several more prior to the SR 28 project. In addition, Placer County DPW will develop construction plans to minimize the number and duration of temporary loss of parking during construction, will monitor parking conditions during construction, and will work with affected property owners to minimize effects. Placer County will also provide new lots and off-site parking spaces to compensate the loss of available on-street parking spaces.

As part of Alternative 3, Placer County has committed to compensating for parking spaces lost as a result of the project by adding spaces. Consequently, Alternative 3 would not result in substantial parking effects.

LEVEL OF SIGNIFICANCE: Less than significant

Impact LU-2: Potential Inconsistency with Local and Regional Plans and Policies

Finding: Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect as identified in the FEIR.

Explanation: No change to any plan would be necessary under this alternative.

LEVEL OF SIGNIFICANCE AFTER MITIGATION: Less than significant.

Impact LU-3: Impacts on Parking Availability

Finding: The Analysis in the FEIR shows that any impact of the project is less than significant.

Explanation:

The total parking space loss under this alternative is 172 spaces, but this impact is considered less than significant because Placer County has committed to replacing parking spaces that are lost as described in the FEIR (see discussion under *Section 3.7*).

LEVEL OF SIGNIFICANCE: Less than significant

Impact NZ-2: Exposure of Noise Sensitive Land Uses to Traffic Noise in Excess of Standards

Finding: The Analysis in the FEIR shows that any impact of the project is less than significant.

Explanation: Near-Term (2008) Traffic Noise Impacts

The traffic noise modeling results presented in Table 3.9-7 of the Final EA/EIR/EIS indicates that the predicted near-term (2008) traffic noise levels ranged between 64 dB and 73 dBA, L_{eq} . The reported noise levels for all of the Alternatives do not change. The noise levels reported in Table 3.9-7 are in whole numbers, as modeling results are rounded to the nearest decibel before comparisons are made (California Department of Transportation 1998a). In actuality, the modeling for each of the alternatives revealed subtle differences in the predicted noise levels. However, they were generally less than 0.5 dB and were not significant. Table 3.9-7 indicates that 21 of the 22 receivers (95%) approach or exceed the Caltrans NAC of 67 dBA, L_{eq} . As indicated above, under the Protocol, traffic noise abatement must be considered when the predicted noise levels "approach or exceed" the NAC or when the predicted noise levels substantially exceed existing noise levels and it is reasonable and feasible to provide noise attenuation. Because predicted traffic noise levels summarized in Table 3.9-7 approach or exceed the NAC of 67 dBA, $L_{eq}(h)$, for Activity Category B land uses within the study area, traffic noise impacts are predicted to occur at Activity Category B land uses within the study area, and noise abatement must be considered. However, barriers and berms used as mitigation for traffic noise impacts would not be feasible or reasonable because driveway access points would prevent the construction of barriers, due to significant gaps in the barriers. The gap or opening in a sound wall would compromise the barrier effectiveness. In addition, due to the aesthetic effects of constructing barriers along the SR 28 corridor, TRPA is not likely to approve barrier construction. Table 3.9-7 indicates that the Project (studied as Alternative 2) would not result in any traffic noise increases relative to 2008 no-build conditions (Alternative 1). Because the alternatives would not result in a 3 dB or greater increase in traffic noise, given the context and intensity of this noise increase, this effect is not considered adverse, and no mitigation is required.

1) Future-Year (2028) Traffic Noise Impacts

The traffic noise modeling results presented in Table 3.9-8 indicates that the predicted Future-Year (2028) traffic noise levels ranged between 66 dB and 74 dB L_{eq} . The reported noise levels for all build Alternatives do not change. The noise levels reported in Table 3.9-8 are in whole numbers. In actuality, the modeling for each of the alternatives revealed subtle differences in the predicted noise levels. However, they were generally less than 0.5 dB and were not significant. Table 3.9-8 indicates all of the 22 receivers (100%) approach or exceed the Protocol NAC of 67 dB L_{eq} . Consequently, based on the Protocol, traffic noise impacts are predicted to occur at Activity Category B land uses within the study area, and noise abatement must be considered. However, barriers and berms used as mitigation for traffic noise impacts would not be feasible or reasonable because driveway access points would prevent the construction of barriers,

due to significant gaps in the barriers. Table 3.9-8 indicates that the Project (studied as Alternatives 2) would not result in traffic noise increases, relative to 2028 no-build conditions (Alternative 1). Because the Project would not result in a 3 dB or greater increase in traffic noise, given the context and intensity of this noise increase, this effect is not considered adverse, and no mitigation is required.

LEVEL OF SIGNIFICANCE: Less than significant

Impact REC-1: Increase the Use of Recreational Facilities That Would Cause Physical Deterioration of the Facility

Finding: The Analysis in the FEIR shows that any impact of the project is less than significant.

Explanation: Through joint planning efforts of Placer County, TRPA, and Caltrans, many of the action components are proposed to accommodate the various public interests, including construction of bicycle lanes and pedestrian sidewalks. Implementation of the Project would improve access and safety for pedestrians and bicyclists to the Kings Beach SRA and would not result in an increase in population that would cause physical deterioration of the recreation facilities. Furthermore, no basins, drainages, or other features would adversely affect public land and recreation opportunities as a result of the proposed action. This is not considered an adverse effect, and no mitigation would be required.

LEVEL OF SIGNIFICANCE: Less than significant

Impact UT-1: Impacts on Utilities

Finding: The Analysis in the FEIR shows that any impact of the project is less than significant.

Explanation: No impacts on utilities are anticipated as a result of the implementation of this action.

LEVEL OF SIGNIFICANCE: Less than significant

Impact GEO-1: Increase the Potential for Structural Damage and Injury Caused by Fault Rupture

Finding: The Analysis in the FEIR shows that any impact of the project is less than significant.

Explanation: As described in the *Seismicity* section above, fault rupture from buried thrust faults, inferred faults, and unidentified faults presents a potentially adverse hazard. Fault rupture has the potential to compromise the structural integrity of proposed new roadway facilities and expose a greater surface area (and more people) to fault rupture hazard. However, this is not considered an adverse effect because, based on existing published data on officially recognized faults, the risk of surface rupture and faulting in the action area is apparently low because none of the faults described above occur within an Alquist-Priolo Earthquake Fault Zone nor directly occur in the vicinity of the action area. Additionally, new features in the form of off-street parking and operational improvements will lead to additional hard coverage with minimal changes to the existing landscape. Thus, the area that could potentially be affected by fault rupture would not adversely increase in size. Furthermore, the proposed action itself does not increase the present surface rupture hazard. No mitigation is required.

LEVEL OF SIGNIFICANCE: Less than significant

Impact GEO-3: Increase the Potential for Structural Damage and Injury as a Result of Development on Materials Subject to Liquefaction

Finding: The Analysis in the FEIR shows that any impact of the project is less than significant.

Explanation: Based on the sedimentological characteristics of the soils and the nonsaturated nature of the soil types and moderate depth to groundwater, the liquefaction hazard is expected to be low for the action area.

LEVEL OF SIGNIFICANCE: Less than significant

Impact GEO-4: Increase the Potential for Structural Damage and Injury as a Result of Landsliding

Finding: The Analysis in the FEIR shows that any impact of the project is less than significant.

Explanation: Within the limits of ground disturbance of the action area, there is no risk of naturally occurring large landslides because it is essentially flat and topographically featureless.

LEVEL OF SIGNIFICANCE: Less than significant

Impact GEO-6: Increase the Potential for Structural Damage and Injury as a Result of Development on Expansive Soils

Finding: The Analysis in the FEIR shows that any impact of the project is less than significant.

Explanation: Soil map units within the action area are not considered expansive. Expansive materials are those that could pose a risk to structural damage due to their significant clay content, which can result in swelling and compression during changes in moisture content.

LEVEL OF SIGNIFICANCE: Less than significant

Impact WQ-2: Substantial Degradation of Water Quality or Violation of any Water Quality Standards or Waste Discharge Requirements

Finding: The Analysis in the FEIR shows that any impact of the project is less than significant.

Explanation: Construction activities associated with the Project are not anticipated to violate or cause a violation of federal, state, or local water quality standards. Proposed construction activities do not involve treating, altering, or discharging materials from construction activities to streams or water bodies. All construction related materials will be held on-site, and construction activities are not expected to occur during the storm season. There would not be any adverse effects, and no mitigation required.

As indicated above, implementation of the Project would result in various improvements to the drainage, collection, conveyance, and treatment facilities that would ultimately improve water quality in the long term, and these improvements would not degrade water quality result in a violation of any water quality standards or waste discharge requirements.

LEVEL OF SIGNIFICANCE: Less than significant

Impact WQ-4: Substantial Reduction in Groundwater Quantity or Quality

Finding: The Analysis in the FEIR shows that any impact of the project is less than significant.

Explanation: Implementation of the Project would not result in the reduction of groundwater quantity or quality.

LEVEL OF SIGNIFICANCE: Less than significant

Impact GI-1: Induce Substantial Population Growth, Either Directly or Indirectly

Finding: The Analysis in the FEIR shows that any impact of the project is less than significant.

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Explanation: Because the Project does not create new roadways or increase capacity on existing roadways, none of these alternatives would induce growth through either hastening planned growth or promoting unplanned growth.

TRPA regulates the rate and distribution of additional public service development. The Tahoe Regional Planning Compact provides goals for development within the Tahoe Basin, while Planning Area Statements (PAS) and Community Plans provide specific land use policies. PASs set limits on parcel densities and recreational development. In order for a project to receive approval for additional growth, it must meet the policies set within the Community Plan and PASs that apply to the project's particular type of development. None of the build alternatives would have a direct or indirect effect on the rate of development.

LEVEL OF SIGNIFICANCE: Less than significant

Impact VIS-1: Temporary Visual Impacts Caused by Construction Activities

Finding: The Analysis in the FEIR shows that any impact of the project is less than significant.

Explanation: Construction activities in the action area would create temporary changes in views of and from the action area. While construction activities would take place over an 8- to 10-month period of time split over 2-3 years, construction of project elements would be intermittent and temporary. Construction activities associated with the proposed action would introduce considerable heavy equipment and associated vehicles, including dozers, graders, and trucks into the viewshed of all viewer groups. The proposed action would result in short-term visual effects.

All viewer groups would be affected by this change in visual quality, although the effect would vary in degree depending on the viewer location and sensitivity. The most affected viewers would be residents and businesses adjacent to the roadway. Adverse effects could occur to these residences and businesses because they would experience a short-term change in the visual character of their views. However, construction activities are temporary, and all viewer groups in the action area and vicinity are accustomed to seeing construction activities and equipment from other local construction activities.

This is not considered to result in an adverse effect because construction activities are intermittent and temporary and all viewer groups in the action area and vicinity are accustomed to seeing construction activities and equipment. Additionally, construction activities would be limited to the hours of 8:00 a.m. to 6:30 p.m. to comply with TRPA requirements for construction activities.

LEVEL OF SIGNIFICANCE: Less than significant

Impact VIS-2: Adversely Affect a Scenic Vista

Finding: The Analysis in the FEIR shows that any impact of the project is less than significant.

Explanation: The Project consists of a four lane cross-section and on-street parking along both sides of SR 28, with traffic signals at SR 267, Bear Street and Coon Street. Left Turn lanes would be provided at SR 28 at Fox Street. A sidewalk would be provided in both directions. These minimal changes from the current condition would not result in changes that would adversely affect scenic vistas.

LEVEL OF SIGNIFICANCE: Less than significant

Impact VIS-5: Conflict with Policies or Goals Related to Visual Resources

Finding: The Analysis in the FEIR shows that any impact of the project is less than significant.

Explanation: Under the Project, no conflict with policies or goals would occur. No mitigation is required.

LEVEL OF SIGNIFICANCE: Less than significant

IMPACTS REQUIRING MITIGATION

1. AIR QUALITY IMPACTS

Impact AIR-1: Generation of Construction-Related Emissions of Ozone Precursors (Reactive Organic Gases and Oxides of Nitrogen), Carbon Monoxide, and Particulate Matter contributing to the short-term ambient air quality in the area

Finding: Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect as identified in the FEIR.

Explanation: Construction activities for the proposed action would result in short-term effects on ambient air quality in the area. Temporary construction emissions would result from grubbing/land clearing, grading/excavation, drainage/utilities/subgrade, and paving activities and construction worker commuting patterns. Pollutant emissions would vary daily, depending on the level of activity, specific operations, and prevailing weather. It is anticipated that construction activities would continue for approximately 24 to 36 months.

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Table 3.1-4 of the Final EA/EIR/EIS indicates the level of pollutants estimated by construction activities. Although emissions are below PCAPCD threshold levels, they recommend that projects with construction emissions below the threshold of 82 pounds per day should implement all feasible control measures recommended by the PCAPCD in order to reduce the project's contributions to cumulative air quality impacts and for the project to be consistent with the PCAPCDs air quality attainment plan. Minimization Measure AIR-1 implements this recommendation. In addition, Minimization Measures AIR-2 and AIR-3 implement TRPA recommendations and Caltrans requirements, respectively.

Mitigation AIR-1: Implement All Applicable PCAPCD Best-Available Mitigation Measures

Placer County Department of Public Works (DPW) will implement all feasible and applicable fugitive dust mitigation measures from the PCAPCD's best-available mitigation measures, which are summarized below.

- Placer County DPW will require the construction contractor to submit to the PCAPCD and receive approval of a construction emission/dust control plan prior to groundbreaking. This plan must address the minimum Administrative Requirements found in section 300 and 400 of District Rule 228, Fugitive Dust (www.placer.ca.gov/airpollution/airpolut.htm).
- Placer County DPW will require the construction contractor to have a preconstruction meeting for grading activities for 20 or more acres to discuss the construction emission/dust control plan with employees and/or contractors and the District is to be invited.
- Placer County DPW will require the construction contractor to suspend all grading operations when fugitive dusts exceed District Rule 228 Fugitive Dust limitations.
- It is to be noted that fugitive dust is not to exceed 40% opacity and not go beyond property boundary at any time. If lime or other drying agents are utilized to dry out wet grading areas, they will be controlled so as to not to exceed District Rule 228 (fugitive dust limitations).
- Construction equipment exhaust emissions will not exceed District Rule 202, visible emission limitations. Operators of vehicles and equipment found to exceed opacity limits are to be immediately notified, and the equipment must be repaired within 72 hours.
- Apply water to control dust as needed to prevent dust impacts off-site. Operational water truck(s), will be on-site, as required, to control fugitive dust. Construction

vehicles leaving the site will be cleaned to prevent dust, silt, mud, and dirt from being released or tracked off-site.

- Apply approved chemical soil stabilizers, vegetative mats, or other appropriate BMPs to manufacturers' specifications to all-inactive construction areas (previously graded areas that remain inactive for 96 hours).
- Spread soil binders on unpaved roads and employee/equipment parking areas and wet broom or wash streets if silt is carried over to adjacent public thoroughfares.
- Install wheel washers or wash all trucks and equipment leaving the site.

Mitigation AIR-2: Implement All Applicable TRPA Best Management Practices

Placer County DPW will implement all feasible and applicable BMPs required by TRPA. Guidance is available from TRPA Best Management Practices Retrofit Program, TRPA Erosion Control Team's general information, and BMP Contractors Notes. (Tahoe Regional Planning Agency 2005.) This includes a limitation that all construction-related vehicles will idle for no more than 5 minutes.

Mitigation AIR-3: Implement Caltrans Standard Specification 7-1.01F and Standard Specification 10

Placer County DPW will follow Caltrans Standard Specification 7-1.01F and Standard Specification 10, which address the following of local air pollution control district rules and dust control, respectively.

LEVEL OF SIGNIFICANCE AFTER MITIGATION: Less than significant.

Impact AIR-5: Exposure of Sensitive Receptors to Elevated Levels of Diesel Exhaust and an Increased Health Risk

Finding: Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect as identified in the FEIR.

Explanation: Construction activities are anticipated to involve the operation of diesel-powered equipment for various activities. In October 2000, the ARB identified diesel exhaust as a TAC. It is anticipated that construction activities would occur over a 12-month period. An assessment of cancer health risks associated with exposure to diesel exhaust is typically for chronic exposure, in which a 70-year exposure period is often assumed. However, while cancer risks can result from exposure periods of less than 70 years, acute exposure periods to diesel exhaust (i.e., exposure periods of 2 to 3 years)

are not anticipated to result in increased health risks because health risks are typically seen in exposures periods that are chronic in nature. Construction of the proposed action is not anticipated to result in an elevated cancer risk to exposed persons because construction activities will occur over a 1-year period and will not result in long-term emissions of diesel exhaust at the project site.

Guidance provided by the ARB indicates that elevated health risks from operational exposure to diesel exhaust is associated primarily with facilities that have substantial diesel exhaust emissions, including truck stops, warehouse/distribution centers, large retail or industrial facilities, high-volume transit centers, schools with high volumes of bus traffic, high-volume highways, and high-volume arterials/roadways. The proposed action does not fall under any of these land use types. In addition, project operations are not anticipated to result in increased health risks from exposure to diesel exhaust from vehicles because the proposed action would not increase the number of truck trips or truck traffic throughputs in the vicinity of the action area.

Minimization Measure AIR-4: Implement Construction Emissions Control Technology

Placer County DPW will provide a construction work plan to the PCAPCD demonstrating that the heavy-duty (> 50 horsepower) off-road vehicles to be used in the construction project, including owned, leased and subcontractor vehicles, will achieve a project wide fleet-average 20 percent NO_x reduction and 45 percent particulate reduction compared to the most recent ARB fleet average at time of construction. Control measures to available to achieve emissions reductions include, but are not limited to use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology (e.g., diesel particulate matter filters and lean-NO_x or diesel oxidation catalysts) after-treatment products, and/or other options as they become

LEVEL OF SIGNIFICANCE AFTER MITIGATION: Less than significant.

2. CULTURAL RESOURCES

Impact CR-1: Potential Disturbance to Unidentified Archaeological Resources during Construction

Finding: Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect as identified in the FEIR.

Explanation: The proposed action involve modifications to SR 28 within the Kings Beach Commercial Core. Though a pedestrian inventory of the action area has been conducted and no cultural resources were located, only the ground surface was examined and there is the potential that buried deposits could be inadvertently unearthed during ground-disturbing activities associated with project construction.

Mitigation CR-1: Stop Work if Buried Resources Are Discovered Inadvertently

The project applicant and its construction contractor will take the steps specified below during project construction. If buried cultural resources, such as chipped or ground stone, historic debris, building foundations, or bone, are discovered during ground-disturbing activities, work will stop in that area and within 100 feet of the find until a archaeologist who meets the Secretary of the Interior's qualification standards can assess the significance of the find and, if necessary, develop appropriate treatment measures in consultation with the Caltrans, the SHPO, and other appropriate agencies. Appropriate treatment measures may include development of avoidance or protection methods, archaeological excavations to recover important information about the resource, research, or other actions determined during consultation.

LEVEL OF SIGNIFICANCE AFTER MITIGATION: Less than significant.

Impact CR-2: Inadvertent Discovery of Native American Human Remains

Finding: Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect as identified in the FEIR.

Explanation: In the case of inadvertent discovery of Native American human remains, it will be necessary to comply with both state and federal regulations.

The Native American Graves Protection and Repatriations Act (NAGPRA) (*Public Law 101-601*), (*25 U.S.C. 3001-3013*) requires consultation with appropriate native groups (e.g., Native Americans, Alaska Natives, Native Hawaiians) prior to excavation (either intentionally or through inadvertent discovery) of specified cultural items, comprising human remains, associated and unassociated funerary objects, sacred objects, and objects of cultural patrimony. It provides procedures for contacting and consulting the appropriate Native American groups. A similar state law exists in California that provides a parallel process (California Health and Safety Code Section 8010 et seq.).

According to the California Health and Safety Code, six or more human burials at one location constitute a cemetery (Section 8100) and disturbance of Native American cemeteries is a felony (Section 7052). Section 7050.5 requires that construction or excavation be stopped in the vicinity of discovered human remains until the coroner can determine whether the remains are those of a Native American. If the remains are determined to be Native American, the coroner must contact the NAHC.

No human remains are known to be located in the action area. However, there is always the possibility that unmarked burials may be unearthed during construction.

Mitigation CR-2: Comply with State and Federal Laws Relating to Native American Remains

If cultural materials are discovered during construction, all earth-moving activity within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find.

If human remains are discovered, *State Health and Safety Code Section 7050.5* states that further disturbances and activities shall cease in any area or nearby area suspected to overlie remains, and the County Coroner contacted. Pursuant to *PRC Section 5097.98*, if the remains are thought to be Native American, the coroner will notify the NAHC who will then notify the MLD. At this time, the person who discovered the remains will contact Caltrans so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of *PRC 5097.98* are to be followed as applicable.

- There will be no further excavation or disturbance of the site, or any nearby area reasonably suspected to overlie adjacent human remains, until:
- The Placer County coroner has been informed and has determined no investigation of the cause of death is required, or
- If the remains are of Native American origin;
- The NAHC has notified Tribal representatives for any federally or state recognized tribes or other interested grounds by telephone with written confirmation. Notification will include information about the kinds of human remains, etc., present, their condition, and the circumstances of their discovery. Return receipt mail provides proof of written notification. This initiates the 30-day waiting period. If a federally recognized tribe can claim the territory associated with the find, NAGPRA procedures will be followed. If no federally recognized tribes can claim the territory associated with the find, proceed directly to the requirements of California NAGPRA and *PRC Section 5097.98*;
- The descendants of the deceased Native Americans have made a recommendation to the landowner or the person responsible for the excavation work for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods or the NAHC is unable to identify a descendant or the descendant fails to make a recommendation within 24 hours after being notified by the NAHC.

LEVEL OF SIGNIFICANCE AFTER MITIGATION: Less than significant.

3. SOCIAL ENVIRONMENT

Impact SOC-6: Construction related economic impacts

Finding: Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect as identified in the FEIR.

Explanation: The construction of proposed improvements would have temporary economic effects in the local area and region. One temporary effect would be the increase in economic activity due to project related spending. This would include the purchases of goods and services required for construction and employment of workers needed for construction. The increased economic activity would prompt secondary economic activity as a portion of the construction-related revenue and employee compensation is spent in sectors throughout the local and regional economy. The extent of the economic impact of construction-related expenditures on the local and regional economy would depend on the proportion of construction expenditures that would occur in the local and regional area and on the residential location of persons employed by construction contractors.

A separate temporary economic effect would be a decrease in economic activity due to decreased tourism. As previously indicated, tourism generates 70% of jobs and over \$17 million dollars in taxes in the North Lake Tahoe area (Dean Runyan Associates 2003). This heavy reliance on tourism can be easily affected by accessibility and transportation changes leading into and around the action area. Because SR 28 is a main corridor within the action area, the secondary economic impacts that could occur during construction periods are related to tourism. Access changes, parking disruptions, and traffic delays could discourage visitors and decrease local tax revenues and sales within the action area. The extent of the economic effect of the construction-related decrease in tourist volumes on the local and regional economy would depend on the length and season of the construction period and the construction timing of other related projects. Proposed mitigation measures would act to spread awareness about the proposed action and coordinate efforts in order to minimize the effects of construction activities. In addition, the cumulative effects of construction-related projects on major routes of travel in the greater action area could also affect the regional economy. To minimize these effects, the implementation of an interregional transportation management plan (RTMP) is recommended to coordinate efforts between agencies and the scheduling of projects.

Mitigation LU-1: Implement a Community Involvement and Public Participation Plan

Placer County will implement a Community Involvement and Public Participation Plan with the following measures to mitigate for the land use impacts of the proposed action:

- Create a CIPP in accordance with Caltrans' Tahoe Basin Public Communication and Outreach Guidelines. Placer County will identify stakeholders within the action area and create a CIPP that will allow for coordination between local agencies and generate public awareness about the proposed action. By providing the following outreach mechanisms, the CIPP would minimize construction related impacts through advanced planning and public participation. Caltrans' Tahoe Basin Public Communication and Outreach Guidelines recommend that the following public outreach actions be included in the CIPP.
- Informational brochures or flyers sent to homeowners, renters, and business operators with information and updates regarding construction related details.

- Implementation of regularly conducted 'stakeholder wide' project development team (PDT) meetings. These meetings can also be used as a mechanism for spreading project related information to the constituencies of the various groups.

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Mitigation TRA-3: Implement a Construction Traffic Management Plan during Construction

During the final stage of project design, Placer County will prepare a Construction Traffic Management Plan (CTMP) in accordance with the Manual on Uniform Traffic Control Devices, California Supplement 2003, Part 6 Temporary Traffic Control (or current version) and Caltrans draft *Guidelines for Projects Located on the California State Highways in the Lake Tahoe Basin* (California Department of Transportation n.d.) that specifies those days and periods of each day over the construction season that specific lane closures can be accommodated without resulting in delays exceeding Caltrans construction delay standards. In addition, traffic diverting onto local streets should be monitored when delays to SR 28 traffic is expected, and temporary traffic controls should be implemented as necessary. When implemented, a CTMP reduces project-related traffic delay and fewer accidents through the effective combination of public and motorist information, demand management, incident management, system management, alternate route strategies, construction strategies, and other strategies.

The CTMP will be designed to reduce the amount of significant delay time due to lane closures and construction related activity. Significant delay time is 30 minutes above normal recurring traffic delay on the existing facility or the delay threshold set by the district traffic manager, whichever is less. Caltrans traffic management has indicated that SR corridors on the North Shore of Lake Tahoe might require a cumulative delay time of less than 30 minutes per CTMP guidelines. The Caltrans CTMP Unit shall make determinations of thresholds for delays as the development of the CTMP is being undertaken. Once these thresholds have been established, Placer County will ensure that they are incorporated into the CTMP. The CTMP will include, but is not limited to, the following measures, which will be implemented prior to construction:

- Maintain 2 lanes of traffic at all times through the commercial core of Kings Beach during construction of the new curb, gutter, and sidewalk. (Not required that existing lanes of traffic be provided throughout project).
- Require that one lane of traffic be open during working hours.
- Maintain a maximum vehicle delay of 20 minutes.
- Disperse public information such as brochures and mailers.
- Hold public meetings prior to construction.
- Install changeable message signs (portable) and ground mounted signs.

- Utilize the highway advisory radio and the Caltrans Highway Information Network to provide road/construction information to the traveling public.
- Construction Zone Enhanced Enforcement Program.
- Construction strategies such as lane closure charts, reduced speed zones, moveable barriers, K-Rails, staged construction, and Traffic Contingency Plan/Emergency Detour Plan.
- Enforce alternate route strategies and parking restrictions.
- BMPs, such as seasonal construction restrictions, to avoid impacting the Griff Creek Watershed.
- Maintain pedestrian and bicycle traffic during construction.
- Allow active construction on one side of the roadway at a time.
- Mitigate the loss of parking before construction as much as possible.

Caltrans shall develop a Regional Transportation Management Plan (RTMP) due to the large number of transportation improvement proposals scheduled to occur within a similar timeframe in the greater action area. The RTMP would be expected to promote greater coordination between agencies and projects to minimize potentially significant impacts associated with multiple construction projects.

The following are objectives to be achieved from the RTMP, as described in the Caltrans draft *Guidelines for Projects Located on the California State Highways in the Lake Tahoe Basin* (California Department of Transportation n.d.).

- Provide accurate and timely information to the public.
- Minimize traffic delays while maximizing public and worker safety during construction.
- Minimize impacts on businesses, residences, schools, public services, and special events during construction.
- Provide design and instructional information regarding traffic management to the Project Engineer, Resident Engineer, and project specific Standard Special Provisions (SSPs) to be included in the project contract.
- Ensure that no more than 30 minutes of cumulative corridor delay will occur.

Timing and execution remain the greatest concern for most proposed construction projects in the immediate and greater action area. Project coordination between Caltrans'

functional units is crucial and will take place. In particular, interagency synchronization within Caltrans will include the TMP Unit, Environmental Management, District 03 Public Information Office, Construction Engineering, and the project development teams. Close contact with local stakeholder agencies will be maintained in order to minimize cumulative socioeconomic-related impacts that would otherwise result from these related projects.

LEVEL OF SIGNIFICANCE AFTER MITIGATION: Less than significant.

4. HAZARDOUS WASTE

Impact HAZ-2: Potential Accidental Release of Hazardous Materials into the Environment

Finding: Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect as identified in the FEIR.

Explanation: Small quantities of hazardous materials or potentially toxic substances (such as diesel fuel and hydraulic fluids) would be used in the action area during construction. Accidental releases of small quantities of these substances could contaminate soils and degrade the quality of surface water and groundwater, resulting in a public safety hazard. Because of the relatively small volumes of materials on site and the limited duration of construction, the potential for release and exposure is limited.

Should any removal of yellow traffic markings in the existing portion of the roadway occur, it is important to note that they may contain heavy metals such as lead and chromium, which may produce toxic fumes when heated.

Mitigation Measure HAZ-1: Incorporate Measures to Reduce Potential for Accidental Release or Exposure to Hazardous Materials

- If yellow stripe is to be removed, the roadway will be ground in its entirety instead of removing just the yellow paint stripe. If it is not feasible to grind the roadway in its entirety, the removed paint material will be disposed of at a Class 1 disposal facility. If any yellow traffic markings are going to be removed separate from the adjacent pavement, the levels of lead and chromium need to be determined. Common practice has been to determine the levels during construction. Otherwise, a preliminary site investigation (PSI) to determine the concentration of lead chromate should be performed prior to construction. Removal of Yellow Traffic Stripe and Pavement Markings shall be conducted in accordance with Caltrans SSP 15-300 for removal of "Stripe Removal."
- Potential exposure to chromium and lead from traffic striping will be minimized. A project-specific Lead Compliance Plan approved by an industrial hygienist certified in comprehensive practice by the American Board of Industrial Hygiene to prevent or minimize worker exposure to lead in accordance with the *CCR Title 8, Section 1532.1 (Title 8, "Lead")* will be implemented. Before performing work

in areas containing lead, personnel who have no prior training, including state personnel, will complete a safety training program, including use of personal protective equipment and washing facilities, as required by *Title 8, "Lead."* In addition, an EPA hazardous waste generator identified number (EPA ID#) is to be obtained for this project and is to be included on the labels of any containers holding hazardous waste.

- Any removed yellow thermoplastic and yellow painted traffic stripe and pavement marking residue will be stored and labeled in covered containers in a secured enclosure at a location within the project limits for no more than 90 days until disposal. Labels will conform to the provisions of *CCR Title 22*. Labels will be marked with the date when the waste is generated, the words *Hazardous Waste*, composition and physical state of the waste (for example, asphalt grindings with thermoplastic or paint), the word *Toxic*, the name and address of the Placer County project Resident Engineer (RE), the RE's telephone number, contract number, and Contractor or subcontractor. The containers will be a type approved by the U.S. Department of Transportation for the transportation and temporary storage of the removed residue. The containers will be handled so that no spillage will occur. Removed yellow thermoplastic and yellow paint will be disposed of at a Class 1 disposal facility in conformance with the requirements of the disposal facility operator. Testing will include, at a minimum, (1) total lead and chromium by EPA Method 7000 series, (2) soluble lead and chromium by California Waste Extraction Test, and (3) soluble lead and chromium by the Total Characteristic Leaching Procedure. If the yellow thermoplastic and yellow-painted traffic stripe and pavement-marking residue is transported to a Class 1 disposal facility as a hazardous waste, a manifest will be used, and the transporter will be registered with the DTSC.
- If the project involves any structure modifications, such as widening or demolition, asbestos and lead based-paint surveys will be performed prior to construction. The asbestos surveys must be performed by qualified Asbestos Hazard Emergency Response Act (AHERA)/Cal-OSHA certified asbestos inspector, and a lead based-paint survey will be performed by a California Department of Health Services (DHS) certified inspector/assessor.
- Placer County is to provide records regarding any contamination encountered in regards to this project, to any appropriate requesting party, concerning any investigation as to the extent of any such contamination. An appropriate requesting party includes, but is not limited to, the LRWQCB, Placer County HHS-Environmental Health, any responsible party or potentially responsible party, or the designated environmental consultant to any responsible party or potentially responsible party.
- All encountered soil and groundwater impacted with petroleum hydrocarbons must be managed (see Mitigation Measure HAZ-2 for management of soil and Mitigation Measures WQ-1 and WQ-2 for management of groundwater).

LEVEL OF SIGNIFICANCE AFTER MITIGATION: Less than significant

Impact HAZ-4: Potential Exposure of the Public to Contaminated Soils

Finding: Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect as identified in the FEIR.

Explanation: As discussed above and in detail in the ISA, soil and groundwater contaminated with petroleum hydrocarbons are known to exist in the action area. Proposed construction activities associated with the proposed action may require excavation and dewatering activities in locations where recognized environmental conditions occur. Currently, engineering design for proposed improvements has not been completed. Information reviewed in the preparation of the ISA suggests sufficient subsurface characterization has not been performed on the majority of these identified sites to determine the horizontal and vertical location and concentrations of petroleum hydrocarbon occurrences that may be encountered during construction activities related to the proposed action. Seasonal surface and groundwater movements may substantially relocate petroleum hydrocarbon compounds from the point of origin over time. Inconsistent subsurface conditions, and buried utility corridors, may also contribute to irregular, accelerated, or restricted movements of these compounds through soil and groundwater.

Project features in potential conflict with contaminated soil/groundwater will be eliminated or moved if possible. If conflicts cannot be eliminated, the handling of the contaminated material can be covered in contract special provisions.

No aboveground or underground heating oil tanks were observed during the site visit, nor were any home heating oil tanks identified in data reviewed during this report preparation. However, there is still a potential for the existence of unregistered USTs in the action area that may have been, or are being, used for heating oil storage as many parcels in Kings Beach historically used oil to heat structures. Often, individual heating oil tanks were placed underground on each parcel. However, it is unlikely that any such heating oil tanks are in the ROW.

An ADL investigation was performed to evaluate whether lead attributable to ADL from motor vehicle exhaust exists in the surface and near-surface soils within the action boundaries (Geocon 2004). The investigation collected and analyzed soil samples to determine the highest lead values. The investigation compared the highest reported total lead values in the action area to the EPA Region 9 preliminary remediation goal (PRG) for lead in residential soil. PRGs are used to estimate contaminant concentrations in environmental media (soil, air, and water) that are protective of human health, including sensitive groups, over a lifetime. The California modified PRG for lead in residential soil is 150 mg/kg. The 2004 ADL investigation determined that the highest calculated upper confidence level (UCL) for lead concentration was 66 mg/kg, which is below the PRG of 150 mg/kg. The analysis concluded that lead in the soil in the area did not pose a

significant risk to the health of workers performing the construction activities or to surrounding sensitive receptors.

Known hazardous materials and potentially contaminated soils located in the proposed action area could create a hazard to the public or the environment by creating a potential exposure pathway for the hazardous materials and surrounding residences and sensitive receptors. Soil disturbance could generate windblown particulates that also contain hazardous material. This material could be transported to nearby sensitive receptors or create an increased health risk for construction workers. Disturbance of soils potentially contaminated with hazardous materials could create a short-term exposure through airborne transport and inhalation. Long-term exposure through local waterways could also potentially occur.

Mitigation HAZ-2: Implement Measures to Reduce Potential Exposure to Contaminated Soils

- Project features in potential conflict with contaminated soil/groundwater will be eliminated or moved if possible. If conflicts cannot be eliminated, the handling of the contaminated material can be covered in contract special provisions. If encountered, all soil and groundwater impacted with petroleum hydrocarbons and/or all solvents must be removed, managed and disposed of properly, as hazardous waste or as non-hazardous waste or as a non-hazardous waste disposed to a receiving landfill facility. This will apply to excavated soil as well as groundwater or water resulting from dewatering activities. Impacted soil is not to be used as backfill. Impacted soil and groundwater encountered during this project are to be removed to the fullest extent feasible, within areas of the project that are accessible to Placer County (i.e., public ROWs, under the control of Placer County or Caltrans).
- A Phase II Site Assessment was prepared and areas with elevated levels of petroleum hydrocarbons were identified through soil and groundwater sampling. Prior to performing any excavation work at the location containing material classified as petroleum-impacted, all personnel, including state personnel, will complete a safety training program that meets requirements of the Contractor's Health and Safety Work Plan covering the potential hazards as identified. The Contractor will provide the training and a certification of completion of the safety-training program to all personnel.
- During excavation activities, monitoring will be conducted for any suspected petroleum hydrocarbons contamination with a photo ionization detector, combustible gas meter, or similar equipment approved by Caltrans. The Consultant must be present to on site to identify any impacted soil/groundwater. If any suspected contaminated materials are encountered, work will immediately stop, and the suspected contamination will be managed appropriately. If contamination is confirmed, the Contractor will prepare a detailed Health, Safety and Work Plan for all site personnel in accordance with the DTSC and Cal-OSHA regulations. The Health, Safety and Work Plan will include a plot plan indicating

the exclusion zones and clear zones as defined by CCR, Title 26, a schedule of procedures, sampling and testing procedures, and physical barrier; and will be submitted at least 10 working days prior to beginning any excavation for review and acceptance by the RE. Prior to submittal, the Contractor will have the Health, Safety and Work Plan approved by a civil engineer registered in the State of California and by an industrial hygienist certified by the American Conference of Governmental Industrial Hygienists (ACGIH).

- In the event suspected contaminated materials are encountered, the Contractor will stop work in the affected area and notify the RE immediately. The Contractor, or the Contractor's listed environmental subcontractor, will prepare, and submit for approval, a Site Safety Plan consistent with the requirements of 29 CFR 1910.120. The contractor will be required to comply with the provisions of the approved Site Safety Plan during construction.
- Any construction that is found to hinder any ongoing/future remediation needs to be reviewed/modified so as to not hinder the remediation.

Impact HAZ-6: Potential Conflict with Emergency Response

Finding: Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect as identified in the FEIR.

Explanation: During construction, emergency access to and in the vicinity of the project site could potentially be affected by lane closures, detours, and construction-related traffic.

Mitigation TRA-3: Implement a Construction Traffic Management Plan during Construction

This mitigation measure is described in *Section 3.6, Traffic*.

Impact HAZ-7: Potential Risk of Wild Fire

Finding: Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect as identified in the FEIR.

Explanation: The urban/rural interface is generally considered an area of concern, as these areas tend to have a large amount of vegetation and, when construction activities are introduced to the area, have the potential to result in wildfires. The proposed action corridor is primarily urban. However, the risk of wild fire could be increased in some parts of the proposed action area.

Mitigation Measure HAZ-3: Require Spark-Generating Construction Equipment be Equipped with Manufacturers' Recommended Spark Arresters

Placer County will require contractors to fit any construction equipment that normally includes a spark arrester with an arrester in good working order. Subject equipment includes, but is not limited to, heavy equipment and chainsaws. Implementation of this measure will minimize a source of construction-related fire.

Mitigation Measure HAZ-4: Clear Materials That Could Serve as Fire Fuel from Areas Slated for Construction Activities Before Construction Begins

If dry vegetation or other fire fuels exist on or near staging areas, welding areas, or any other area on which equipment will be operated, contractors will clear the immediate area of fire fuel. To maintain a firebreak and minimize the availability of fire fuels, Placer County will require contractors to maintain areas subject to construction activities clear of combustible natural materials to the extent feasible. To avoid conflicts with policies to preserve riparian habitat, areas to be cleared will be identified with the assistance of a qualified biologist.

Mitigation Measure TRA-3: Implement Construction Traffic Management Plan during Construction

This mitigation measure is described in *Section 3.6, Traffic*.

5. TRAFFIC

Impact TRA-7: Short-Term Construction-Related Changes in Circulation and Local Traffic Patterns

Finding: Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect as identified in the FEIR.

Explanation: Although detailed construction plans and phasing are not available, it is expected that the Project would require significant periods of lane closures and turn restrictions along SR 28. Though it should be possible to provide one lane of travel in each direction except for relatively short periods, traffic volumes in busy periods would exceed the capacity provided by one lane of travel in each direction.

Mitigation TRA-3: Implement a Construction Traffic Management Plan during Construction

During the final stage of project design, Placer County will prepare a Construction Traffic Management Plan (CTMP) in accordance with the Manual on Uniform Traffic Control Devices, California Supplement 2003, Part 6 Temporary Traffic Control (or current version)

and Caltrans draft *Guidelines for Projects Located on the California State Highways in the Lake Tahoe Basin* (California Department of Transportation n.d.) that specifies those days and periods of each day over the construction season that specific lane closures can be accommodated without resulting in delays exceeding Caltrans construction delay standards. In addition, traffic diverting onto local streets should be monitored when delays to SR 28 traffic is expected, and temporary traffic controls should be implemented as necessary. When implemented, a CTMP reduces project-related traffic delay and fewer accidents through the effective combination of public and motorist information, demand management, incident management, system management, alternate route strategies, construction strategies, and other strategies.

The CTMP will be designed to reduce the amount of significant delay time due to lane closures and construction related activity. Significant delay time is 30 minutes above normal recurring traffic delay on the existing facility or the delay threshold set by the district traffic manager, whichever is less. Caltrans traffic management has indicated that SR corridors on the North Shore of Lake Tahoe might require a cumulative delay time of less than 30 minutes per CTMP guidelines. The Caltrans CTMP Unit shall make determinations of thresholds for delays as the development of the CTMP is being undertaken. Once these thresholds have been established, Placer County will ensure that they are incorporated into the CTMP. The CTMP will include, but is not limited to, the following measures, which will be implemented prior to construction:

- Maintain 2 lanes of traffic at all times through the commercial core of Kings Beach during construction of the new curb, gutter, and sidewalk. (Not required that existing lanes of traffic be provided throughout project).
- Require that one lane of traffic be open during working hours.
- Maintain a maximum vehicle delay of 20 minutes.
- Disperse public information such as brochures and mailers.
- Hold public meetings prior to construction.
- Install changeable message signs (portable) and ground mounted signs.
- Utilize the highway advisory radio and the Caltrans Highway Information Network to provide road/construction information to the traveling public.
- Construction Zone Enhanced Enforcement Program.
- Construction strategies such as lane closure charts, reduced speed zones, moveable barriers, K-Rails, staged construction, and Traffic Contingency Plan/Emergency Detour Plan.
- Enforce alternate route strategies and parking restrictions.

- BMPs, such as seasonal construction restrictions, to avoid impacting the Griff Creek Watershed.
- Maintain pedestrian and bicycle traffic during construction.
- Allow active construction on one side of the roadway at a time.
- Mitigate the loss of parking before construction as much as possible.

Caltrans shall develop a Regional Transportation Management Plan (RTMP) due to the large number of transportation improvement proposals scheduled to occur within a similar timeframe in the greater action area. The RTMP would be expected to promote greater coordination between agencies and projects to minimize potentially significant impacts associated with multiple construction projects.

The following are objectives to be achieved from the RTMP, as described in the Caltrans draft *Guidelines for Projects Located on the California State Highways in the Lake Tahoe Basin* (California Department of Transportation n.d.).

- Provide accurate and timely information to the public.
- Minimize traffic delays while maximizing public and worker safety during construction.
- Minimize impacts on businesses, residences, schools, public services, and special events during construction.
- Provide design and instructional information regarding traffic management to the Project Engineer, Resident Engineer, and project specific Standard Special Provisions (SSPs) to be included in the project contract.
- Ensure that no more than 30 minutes of cumulative corridor delay will occur.

Timing and execution remain the greatest concern for most proposed construction projects in the immediate and greater action area. Project coordination between Caltrans' functional units is crucial and will take place. In particular, interagency synchronization within Caltrans will include the TMP Unit, Environmental Management, District 03 Public Information Office, Construction Engineering, and the project development teams. Close contact with local stakeholder agencies will be maintained in order to minimize cumulative socioeconomic-related impacts that would otherwise result from these related projects

LEVEL OF SIGNIFICANCE AFTER MITIGATION: Less than significant

6. LAND USE AND PLANNING

Impact LU-1: Potential Inconsistency with Existing Land Uses

Finding: Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect as identified in the FEIR.

Explanation: Under the proposed project, the ROW proposed for the SR 28 improvements would not require full acquisitions of any parcels. Partial acquisitions under the Project would be required from 41 properties. Most of these acquisitions would consist of sliver or corner acquisitions from parcels adjacent to the existing SR 28 ROW and would not result in substantial effects on existing land uses, but several of the acquisitions would displace uses within the existing or proposed new ROW. The size of the acquisitions for the affected parcels would be limited to a few feet. The following is a summary of the potential impacts on the parcels that would be most affected by partial acquisitions under the Project.

Assessor's Parcel Numbers (APN)

- **APN 117-180-007/117-180-006 (Sheet 1):** Vehicular access from SR 28 to the commercial building located at 8001 and 8011 SR 28 may be affected by this alternative. Patrons of Stone's Automotive would have to access the parking lot from SR 267, as entry along SR 28 may be discontinued.
- **APN 090-071-026/090-071-025 (Sheet 1):** The commercial property located at 8079 SR 28 would lose areas south and southwest of the building that is used by customers as a parking area. Loss of this area would require customers to access parking along Secline Street or along the proposed parking lane further east on SR 28. This would reduce but not eliminate parking for the ACE Hardware store. The economic impact would be small even without replacement parking, however the available parking would be reduced from 11 spaces to 6 spaces which could cause a loss of business if nearby replacement parking is not made available.
- **APN 090-123-023 (Sheet 3):** SR 28 improvements along this property, currently a 7-Eleven, would restructure the area of the intersection such that vehicular access would no longer be available from SR 28. Access would be provided from Coon Street and two parking spaces would be displaced due to the widening of this entry. However, the parking lot would be created such that 6 additional spaces would be made available for customers.
- **APN 090-072-023/ 090-072-024.** SR 28 improvements and right-of-way acquisition would displace the entire amount of parking used by customers of the business located at 8160 SR 28. The five available spaces in front of the Crosswinds café would be removed. This would be a potentially major economic impact on the business if replacement parking is not located within one block of the restaurant.
- **APN 090-080-001/ 090-080-002.** The right-of-way acquisitions would displace parking spaces in front of the commercial building located at 8338 SR 28. These

spaces make up the entire amount of parking available for the building. There are three businesses located in this building: Jason's T-shirts & swim, Dana Sports and Ski, and Inside outfitters. Loss of street-side parking would have a negative effect on these businesses, however there is some parking on the side of the building and there is a large parking lot behind the building. If customers were allowed to use the parking behind the building the impact on the businesses would be minor. If customers are not allowed to use the lot behind the building, replacement parking would need to be located within a block of the businesses to avoid a major impact on the businesses.

- **APN 090-075-018.** SR 28 improvements would affect the entire area that currently serves as parking for customers of the business located at 8345 SR 28. Parking spaces would be displaced by the installation of the sidewalk area. The five available spaces in front of Las Panchitas café would be removed. This would be a potentially major economic impact on the business if replacement parking is not located within one block of the restaurant. It appears that access to the restaurant would be maintained from SR 28 and that there is space at the back of the building along Trout Avenue that could be used as replacement parking. This would likely require eliminating access from Trout Avenue.
- **APN 090-142-002 :** May lose vehicle access along SR 28. No break in the sidewalk is planned for the parcel, and access may be entirely pedestrian. Nearby breaks in front of APNs 090-142-001 and 090-142-024 may serve as alternative points of entry.

In addition to this impact, ROW acquisition and roadway improvements would result in reduced setbacks and landscaping impacts on the remaining parcels along SR 28. Although small portions of some existing structures encroach on the current ROW, this alternative would not displace any residences or buildings. As previously indicated, several of the acquisitions would displace uses within the existing or proposed new ROW.

Mitigation LU-1: Implement a Community Involvement and Public Participation Plan

- Placer County will implement a Community Involvement and Public Participation Plan with the following measures to mitigate for the land use impacts of the proposed action:
- Create a CIPP in accordance with Caltrans' Tahoe Basin Public Communication and Outreach Guidelines. Placer County will identify stakeholders within the action area and create a CIPP that will allow for coordination between local agencies and generate public awareness about the proposed action. By providing the following outreach mechanisms, the CIPP would minimize construction related impacts through advanced planning and public participation. Caltrans' Tahoe Basin Public Communication and Outreach Guidelines recommend that the following public outreach actions be included in the CIPP.

- Informational brochures or flyers sent to homeowners, renters, and business operators with information and updates regarding construction related details.
- Implementation of regularly conducted 'stakeholder wide' project development team (PDT) meetings. These meetings can also be used as a mechanism for spreading project related information to the constituencies of the various groups.
- Use of the local media outlets, including radio, newspaper, and television ads, to publicize the project and update information

Mitigation TRA-3: Implement a Construction Traffic Management Plan during Construction

This mitigation measure is described in *Section 3.6, Traffic* of the Final EA/EIR/EIS. It is also described under Impact TRA-7.

LEVEL OF SIGNIFICANCE AFTER MITIGATION: Less than significant.

7. NOISE IMPACTS

Impact NZ-1: Generation of Construction Noise in Excess of Standards

Finding: Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect as identified in the FEIR.

Explanation: During the construction phases of the project, noise from construction activities would dominate the noise environment in the immediate area. Activities involved in construction would generate noise levels ranging from 70 to 90 dB, Leq at a distance of 50 feet, and noise produced by construction equipment would be reduced over distance at a rate of about 6 dB per doubling of distance. Construction activities would be temporary in nature, typically occurring during normal working hours. However, it is anticipated that some nighttime construction may occur. Construction noise during nighttime activities or during use of unusually noisy equipment could result in annoyance or sleep disruption for nearby residences and other noise-sensitive land uses.

Construction noise is regulated by Caltrans standard specifications Section 7-1.011, *Sound Control Requirements*. These requirements state that noise levels generated during construction shall comply with applicable local, state, and federal regulations and that all equipment shall be fitted with adequate mufflers according to the manufacturer's specifications.

During construction, traffic noise generated by approaching traffic would be reduced due to a reduction in speed required by working road crews. Conversely, traffic noise levels of vehicles leaving the construction area would be slightly higher than normal due to acceleration. The net effect of the accelerating and decelerating traffic upon noise would

not be appreciable. The most important project-generated noise source would be truck traffic associated with transport of heavy materials and equipment and construction equipment.

Mitigation NZ-1: Employ Noise-Reduction Construction Measures

The construction contractor will employ noise-reducing construction practices such that noise from construction does not exceed 55 dBA, L_{eq} at noise-sensitive uses during daytime hours. Measures that can be used to limit noise may include but are not limited to the following.

- Locating equipment as far a practical from noise sensitive uses.
- Using sound control devices such as mufflers on equipment.
- Turning off idling equipment.
- Using equipment that is quieter than standard equipment.
- Selecting construction access routes that affect the fewest number of people.
- Using noise-reducing enclosures around noise-generating equipment.
- Constructing barriers between noise sources and noise-sensitive land uses or taking advantage of existing barrier features (terrain, structures) to block sound transmission.
- Temporarily relocating residents during periods of high construction noise that cannot be effectively reduced by other means.

The construction contractor will prepare a detailed noise control plan based on the construction methods proposed. This plan will identify specific measures determined to be feasible by Placer County that will be taken to ensure compliance with the noise limits specified above. The noise control plan will be reviewed and approved by Placer County before any noise-generating construction activity begins.

Mitigation NZ-2: Prohibit Nighttime Construction Activities

Consistent with TRPA's construction noise limitations, Placer County will ensure that construction activities are limited to the hours between 8:00 a.m. and 6:30 p.m. This stipulation will be made a part of the construction contract.

Mitigation NZ-3: Disseminate Essential Information to Residences and Implement a Complaint/Response Tracking Program

The construction contractor will notify residences within 500 feet of the construction areas of the construction schedule in writing, prior to construction. The construction contractor will designate a noise disturbance coordinator who will be responsible for responding to complaints regarding construction noise. The coordinator will determine the cause of the complaint and will ensure that reasonable measures are implemented to correct the problem. A contact telephone number for the noise disturbance coordinator will be conspicuously posted on construction site fences and will be included in the written notification of the construction schedule sent to nearby residents.

LEVEL OF SIGNIFICANCE AFTER MITIGATION: Less than significant.

8. RECREATION

Impact REC-2: Section 4(f) Use of Land

Finding: Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect as identified in the FEIR.

Explanation: Implementation of the Project would all require a Section 4(f) use of land from the Kings Beach SRA of approximately 2,483 square feet.

The land required from the Kings Beach SRA for the proposed action is located in the main entrance area of the Kings Beach SRA and on the northeast corner of the plaza area adjacent to the intersection of SR 28 and Coon Street. The use at the main entrance area is required for the improvements to the intersection at Bear Street, Brook Street, and SR 28, and on the northeast corner for improvements to the intersection at Coon Street and SR 28. In addition as part of the water quality improvements included in the proposed action, a vault and media filter would be installed beneath the parking lot west of the main entrance area. The exact dimensions of the vault and media filter will be determined during final design, however the area of construction disturbance would be minimized as much as possible.

The two portions of land required for the improvements to SR 28, and the parking area affected by the vault and media filter, are not located in the area used for recreation, as shown on Figures 3.10-2 through 3.10-4. These lands are currently used for pedestrian and vehicle access to the Kings Beach SRA and parking. The parking lot and grassy areas separate the beach and plaza areas from the main entrance and SR 28. The activities, features, and attributes that qualify the Kings Beach SRA for protection under Section 4(f) are integral to the central plaza, beach, and shoreline areas. These areas would not be adversely affected by the minor use of land immediately adjacent to SR 28 or

the temporary construction effects as a result of installation of the water quality improvements in the parking lot.

Use of this land for the improvements to SR 28 will not impair the use of the remaining Kings Beach SRA, in whole or in part, for its intended purpose of recreation. Rather use of these areas for the proposed improvements would improve access and safety for pedestrians and bicyclists to the Kings Beach SRA in both locations. The installation of the vault and media filter would result in long-term beneficial effects (i.e., water quality and aesthetic) by collecting and treating the runoff that would otherwise flow directly through the action area and into Lake Tahoe without implementation of the proposed action.

The improvements would include the construction of sidewalks for pedestrian mobility, construction of bicycle lanes, and safety and curb returns to design standards for the intersections. These improvements would result in beneficial impacts on pedestrians and bicyclists both accessing the Kings Beach SRA and moving through the KBCC. Under all alternatives, the sidewalks and bike lanes would be installed. This would not only increase safety but would increase pedestrian and bicycle mobility and would enable greater numbers of people to safely walk and bike throughout the Kings Beach area. In addition, the land required from the Kings Beach SRA for the proposed action (Figures 3.10-2 through 3.10-4) would facilitate and enhance motorists entering and exiting the SRA due to the widening and reconfiguration of the Kings Beach SRA entrance at Bear Street. The reconfiguration at this intersection would result in a wider approach, which would reduce the angle motorists would have to turn into and out of the Kings Beach SRA, thereby improving their ability to access the Kings Beach SRA. The main entrance to the parking area will be reconstructed to provide a pedestrian crosswalk across the entrance and the proper geometry for the type of intersection to be constructed.

The vault and media filter would be operated and maintained by Placer County at a service level acceptable to the NTPUD and the DPR. Placer County may contract with the NTPUD to maintain the facilities.

Temporary construction effects associated with the construction of the vault and media filter would be minimized. It is anticipated that installation of the vault and media filter would occur within a 1-month period, with the actual installation and "plumbing" occurring over a 10- to 15-day period. Access to the Kings Beach SRA and the main parking area would be maintained to minimize potential impacts on visitors to the beach and plaza areas. The parking lot area disturbed as a result of installation of the water treatment facilities would be restored to the original condition (or better) and no parking spaces would be permanently affected or lost.

Consultation and coordination with the officials with jurisdiction over the Kings Beach SRA is ongoing. Coordination has occurred and written concurrence that the proposed action will not adversely affect the activities, features, or attributes that qualify the Kings Beach SRA for protection under Section 4(f) has been received. These letters are included in Appendix O of the Final EA/EIR/EIS.

Mitigation REC-1: Implement Measures to Minimize Effects to Kings Beach SRA

Placer County will implement measures to minimize impacts on the Kings Beach SRA. Measures include, but are not limited to the following.

- Placer County and Caltrans will work with the agencies having jurisdiction over the Kings Beach SRA to provide advanced notice of construction activities.
- Placer County will ensure that the area of the construction footprint is kept to a minimum and that parking lot access and parking, to the extent feasible, will be maintained. In addition, Placer County will restore the construction area to its original condition (or better) and will repave and restripe the affected construction area to maintain the most efficient use of the parking area.
- The automatic pay gate at the main entrance will be maintained in place as long as feasible and relocation/reinstallation of the gate will be coordinated with the NTPUD.
- Any signage removed, will be replaced.
- Timely information will be provided relating to any potential traffic delays, and access will be maintained to the greatest extent feasible. Construction activities with high noise levels will be limited to daytime hours. Measures will be taken to reduce, minimize, and compensate for impacts on vegetation and the existing terrain and within the Kings Beach SRA. Removal and disturbance of vegetation will be limited as feasible. Facilities will be designed to blend in with the existing terrain. Disturbed areas will be revegetated upon completion of construction. During construction, measures may include watering of disturbed areas and prompt covering and removal of dirt. Dust generation will be minimized by inclusion in the construction contract specification to reduce this irritant.

LEVEL OF SIGNIFICANCE AFTER MITIGATION: Less than significant.

9. PUBLIC SERVICES AND UTILITIES

Impact UT-2: Impacts on Law Enforcement, Fire Protection, and Emergency Medical Services

Finding: Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect as identified in the FEIR.

Explanation: Travel on SR 28 could be temporarily disrupted during project construction, including short-term closures and one-lane traffic controls on SR 28 between SR 267 and

Chipmunk Street. The *Manual on Uniform Traffic Control Devices 2003 California Supplement* (Part 6, Temporary Traffic Control) adopted by Caltrans from the FHWA document of the same name establishes basic requirements for safely controlling traffic while working in state highways. Roadway closures and traffic controls could periodically affect response times for law enforcement and emergency service providers during construction periods, although emergency vehicle access would be maintained for public safety. Consequently, the build alternatives would have an adverse effect on law enforcement, fire protection, and emergency medical services.

Mitigation UT-1: Implement Measures to Reduce Potential Impacts on Law Enforcement, Fire Protection, and Emergency Medical Services

Placer County will ensure that its Contractor implements the following measure to reduce potential impacts on law enforcement, fire protection, and emergency medical services during project construction.

- A TMP will be prepared in accordance with the *Manual on Uniform Traffic Control Devices, California Supplement 2003, Part 6 Temporary Traffic Control* (or current version) (American Association of State Highway and Transportation Officials 2003) and Caltrans draft *Guidelines for Projects Located on the California State Highways in the Lake Tahoe Basin* (California Department of Transportation n.d.) during the final stage of project design to ensure local traffic is accommodated during construction and that access to businesses and residences is maintained. Among other things, the TMP will provide the following:
- reduce, to the extent feasible, the number of vehicles (construction and other) on the roadways adjacent to the proposed action;
- reduce, to the extent feasible, the interaction between construction equipment and other vehicles;
- promote public safety through actions aimed at driver and road safety;
- ensure safety for bicyclists and pedestrians throughout the action area; and
- ensure adequate emergency access for police, fire, ambulance, and other emergency service vehicles.

The provisions of the TMP will be incorporated into the project bid documents.

- In addition, the following measures will be incorporated into the TMP prepared for the proposed action.
- Notify law enforcement, fire protection, and emergency medical services at least 1 week in advance of detours and roadway or lane closures so that alternative routes

or response actions can be taken. Notifications will specify the location and duration of closures, allowing providers to advise dispatchers and station personnel about alternative routes. Notification and providing continued access on SR 28 would ensure that response times for emergency service providers are not adversely affected during construction periods.

- Allow emergency vehicles through any roadway segments temporarily closed for construction purposes
- Placer County will undertake Underground Service Alert (USA) requirements to ensure that no underground utilities are disturbed. These requirements include outlining the digging location in a manner sufficient to enable underground facility members to determine the area of digging to be field marked and calling USA 2 days prior to digging.

LEVEL OF SIGNIFICANCE AFTER MITIGATION: Less than significant.

Impact UT-3: Impacts on Stormwater Drainage Facilities

Finding: Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect as identified in the FEIR.

Explanation: Most development in the community of Kings Beach occurred before drainage issues were commonly considered from an area wide perspective. As a result, the stormwater conveyance system is not sized to accommodate flows generated up-gradient and does not meet current standards. Recent upgrades north of SR 28 have increased drainage network capacity and improved sediment control up-gradient from the project site. However, the restricted capacity of culverts underneath the roadway limits the extent to which up-gradient waters can be conveyed through the ROW. Consequently, the build alternatives would have an adverse effect on stormwater drainage facilities.

Mitigation 15-2: Mitigation Measure UT-2: Develop a Comprehensive Stormwater Drainage Conveyance Plan

Prior to completion of project design, Caltrans and Placer County will, in cooperation with TRPA, develop a comprehensive stormwater drainage conveyance plan for the proposed action that will provide sufficient conveyance capacity beneath the roadway to accommodate design flows. The design flows will be determined by agreement of the three agencies. This plan will be implemented in conjunction with construction of the project and will be operative upon project completion. The drainage improvements in the proposed action are those within the action area as shown on Figure 3.13-2 of the Final EA/EIR/EIS. They do not include planned water quality improvements in the up gradient WIP area. The up-gradient WIP improvements will be made as funding

becomes available and will likely be implemented in phases as separate projects following and possibly during construction of the proposed action, with priority given to areas of the project watershed having the poorest drainage conditions. At a minimum, drainage upgrades will be made within the action area as part of the proposed action (see Figure 3.13-2).

The drainage conveyance plan will include the following components (within the proposed action area):

- source control and reduction of the quantity of runoff reaching stormwater conveyances;
- provision of stormwater collection facilities along SR 28, along side streets (if necessary), and in parking areas (if necessary);
- sizing of conveyance facilities (particularly those extending under SR 28) to accommodate agreed-upon design flows; and
- provisions for continued operations and maintenance of the conveyance facilities.

LEVEL OF SIGNIFICANCE AFTER MITIGATION: Less than significant.

10. GEOLOGY AND SOILS

Impact GEO-2: Increase the Potential for Structural Damage and Injury Caused by Ground Shaking

Finding: Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect as identified in the FEIR.

Explanation: A large earthquake could potentially cause moderate ground shaking in the action area. Anticipated ground acceleration at the site is great enough to cause structural damage to new features. However, new features in the form of off-street parking and operational improvements will lead to minimal changes to the existing landscape and man-made facilities. Thus, the area project improvements that could potentially be affected by ground shaking would not significantly increase in size and would have a low potential to result in any adverse effects, structural damage, or injury. Furthermore, the proposed action itself does not increase the present ground-shaking hazard.

Mitigation GEO-1: Incorporate Recommendations from Geotechnical Reports into Project Design

Recommendations in a geotechnical report concerning site preparation, excavation, structural fill, compacted fill, utility trench bedding and backfill, subsurface drainage,

subgrade and aggregate base for paved areas, aggregate base for concrete slabs, and asphalt concrete pavement will be incorporated into the project design, thus minimizing any negative effects associated with ground-shaking hazards, and runoff, erosion, and sedimentation from construction activities. In addition, these recommendations, if fully implemented, will result in well-built, long-term functioning improvements. The project applicant and its contractor(s) will be required to implement this minimization measure before any construction activities begin. The recommendations will be incorporated into the project construction specifications as appropriate.

LEVEL OF SIGNIFICANCE AFTER MITIGATION: Less than significant.

Impact GEO-5: Temporarily Increase the Potential for Accelerated Runoff, Erosion, and Sedimentation as a Result of Grading and Construction Activities

Finding: Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect as identified in the FEIR.

Explanation: The proposed roadway and off-street improvements would involve grading, removal of vegetation cover, and loading activities associated with construction activities. These activities could temporarily increase runoff, erosion, and sedimentation. Construction activities could also result in soil compaction and wind erosion effects that could adversely affect soils and reduce the revegetation potential at the construction sites and staging areas. The following actions will ensure that runoff, erosion, and sedimentation do not occur as a result of the proposed action.

Mitigation GEO-1: Incorporate Recommendations from Geotechnical Reports into Project Design

See Description under Impact GEO-2.

11. WATER QUALITY

Impact WQ-1: Substantial Alteration in the Quality of Surface Runoff

Finding: Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect as identified in the FEIR

Explanation: Short-term effects to water quality could occur during construction activities. Construction activities associated with the proposed action will not result in the physical alteration of the course of any annual or perennial creeks, streams, or streambeds present in the action area because construction activities will stay within the existing ROW. In addition, concentrations of TOC, TSS, turbidity, dissolved oxygen (DO), and nutrients such as nitrogen and phosphorus in creeks and groundwater would not be affected substantially by construction activities as streambeds will not be physically altered

or moved. However, construction activities could result in short-term elevated nutrient loads from the erosion of disturbed soils during construction could occur if precipitation events would occur simultaneously with construction activities. In addition, spills of hazardous, toxic, toxic, or petroleum substances during construction activities could result in temporary effects to water quality.

Implementation of the Project would result in various improvements to the drainage, collection, conveyance, and treatment facilities that would ultimately improve water quality in the long term. As indicated in *Chapter 2, Alternatives*, and Figure 3.13-2 in the Final EA/EIR/EIS, drainage, collection, conveyance, and treatment improvements will be implemented as part of the proposed WIP to improve water quality in the Kings Beach region and action area. These design features will help to collect, convey, and treat water runoff from on-street parking sites implemented as part of the proposed action and as well as runoff flowing into the action area from areas upstream of the action area. Moreover, as indicated in Chapter 2, the proposed action drainage, collection, conveyance, and treatment facilities that tie into and interface with the proposed WIP improvements would improve the quality of the surface runoff through the action area. In addition, all off-street parking lots would be designed with water collection and infiltration features to contain runoff on-site for a 20-year, 1-hour storm flow. These water collection and infiltration features will be incorporated into the off-site parking lots and are designed to mitigate runoff associated with the additional hard coverage from the parking lots. Because water would be contained entirely on-site, the off-site lots would not worsen water quality in the region. Consequently, implementation of the proposed action would result in long-term benefits to the quality of surface runoff due to these improved drainage, collection, conveyance, and treatment facilities. As indicated in *Section 3.11*, proposed action drainage improvements will be implemented as part of the proposed action. However, the proposed WIP improvements will be implemented in phases likely as separate projects with priority given to areas of the project watershed having the poorest drainage conditions.

Mitigation WQ-1: Implement Construction BMPs Contained in the SWPPP

To reduce or eliminate construction-related water quality effects before onset of any construction activities, Placer County will require that project contractors obtain coverage under the NPDES General Construction Permit. Placer County will be responsible for ensuring that construction activities comply with the conditions in this permit, which will require development of a SWPPP, implementation of BMPs identified in the SWPPP, and monitoring to ensure that effects on water quality are minimized.

All projects in the Lake Tahoe Basin are required to implement BMPs to protect water quality from impacts related to temporary construction activities and permanent site improvements. BMP guidance issued by regulatory agencies include the following:

- TRPA's *Handbook of Best Management Practices* (1988);

- TRPA Best Management Practices Retrofit Program;
- TRPA Erosion Control Team's general information;
- BMP Contractors Notes (Tahoe Regional Planning Agency 2005);
- TRPA guidance for BMP installation developed to incorporate advancing technology; and
- Nevada Department of Transportation *Storm Water Quality Manuals: Construction Site BMPs Manual* (Nevada Department of Transportation 2004).

As part of this process, Placer County will require the implementation of multiple erosion and sediment control BMPs in areas with potential to drain to Lake Tahoe. These BMPs will be selected to achieve maximum sediment removal and represent the best available technology that is economically achievable. BMPs to be implemented as part of this mitigation measure may include, but are not limited to, the measures below.

- Temporary erosion control measures (such as silt fences, staked straw bales/wattles, silt/sediment basins and traps, checkdams, geofabric, sandbag dikes, and temporary revegetation or other ground cover) will be employed to control erosion from disturbed areas.
- Drainage facilities in downstream off-site areas will be protected from sediment using BMPs acceptable to the Placer County, the RWQCB, and TRPA.
- Grass or other vegetative cover will be established on the construction site as soon as possible after disturbance.

In addition, construction-related BMPs should be used to minimize the mobilization of sediment from construction activities. The following erosion and sediment control measures, which are based on standard measures and standard dust-reduction measures, will be included in the SWPPP, which is to be included in the construction specifications and project performance specifications.

- Cover or apply nontoxic soil stabilizers to inactive construction areas (previously graded areas inactive for 10 days or more) that could contribute sediment to waterways.
- Enclose and cover exposed stockpiles of dirt or other loose, granular construction materials that could contribute sediment to waterways.
- Contain soil and filter runoff from disturbed areas by berms, vegetated swales, silt fencing, straw wattle, plastic sheeting, catch basins, infiltration basins, or other means necessary to prevent the escape of sediment from the disturbed area.

- Refrain from depositing or placing earth or organic material where it may be directly carried into a stream, marsh, slough, lagoon, or body of standing water.
- Prohibit the following types of materials from being rinsed or washed into the streets, shoulder areas, or gutters: concrete, solvents and adhesives, thinners, paints, fuels, sawdust, dirt, gasoline, asphalt and concrete saw slurry, and heavily chlorinated water.
- Employ temporary erosion control measures (such as silt fences, staked straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, and temporary revegetation or other ground cover) to control erosion from disturbed areas.

TRPA requires that projects address water quality by reducing the projected level of contaminant loading. Untreated urban runoff from parking lots and roads does not typically meet the numeric standards for discharge to surface water. The following contaminant types and associated sources are being considered during project design and construction.

- **Sediment-related issues:** sediment generated from erosion during storm events and from increased flow attributable to impermeable surfaces; sediment generated during construction.
- **Nutrient-related issues:** nutrients transported with sediment, atmospheric deposition, organic matter (leaves, grass clippings), and landscape fertilizer.
- **Trash-related issues:** debris from construction and debris deposited by facility users.
- **Oil- and-grease-related issues:** oil and grease deposited by vehicles present on site during construction and facility use.
- **Toxic contaminant-related issues:** concrete-washing during construction, paving during construction (loose gravels, sealants), materials used in structures (paint, wood preservatives), and landscape pesticides.

To address the potential generation of contaminated stormwater discharges, temporary BMPs shall be applied during and immediately after the construction period. The conscientious application and maintenance of temporary BMPs can protect water quality during construction periods. The minimum temporary BMPs needed to be consistent with the TRPA and Caltrans guidance documents referenced above and to satisfy TRPA Code requirements (Chapters 25, 64, and 81) are outlined in Table 3.13-3.

Table 3.13-3. Temporary Best Management Practices

<u>Temporary Construction Site Practices (BMP-TCS)</u>	<u>Temporary Soil Stabilization Practices (BMP-TSS)</u>
Development site plan (BMP-1)	(nonvegetative)
Grading season (BMP-2)	Straw mulch (BMP-15)
Boundary fencing (BMP-4)	Hydromulch (BMP-16)
Stabilized construction entrance (BMP-6)	Pine needle mulch (BMP-17)
Protection of trees and other vegetation (BMP-8)	Jute netting (BMP-18)
<u>Temporary Sediment Barriers (BMP-TSB)</u>	Plastic netting (BMP-19)
Straw bale sediment barriers (BMP-9)	Wood excelsior blanket (BMP-20)
Filter fencing (BMP 10)	Erosion control blankets or geotextiles (BMP-21)
Straw bale drop inlet sediment barrier (BMP-11)	Chemical mulches and tackifiers (BMP-22)
Sandbag curb inlet sediment barrier (BMP-12)	<u>Temporary Runoff Control on Slopes (BMP-TD)</u>
Filter berm (BMP-13)	Diversion dike (BMP-23)
Siltation berm (BMP-14)	Interceptor swale (BMP-28)
<u>Temporary and/or Permanent Sediment Retention Structures</u>	Diversion swale (BMP-24) - Interception dike (BMP-27)
Sediment trap (BMP-33)	

Source: Tahoe Regional Planning Agency 1988.

Final selection of BMPs will be subject to review by Placer County. Placer County will verify that an NOI and a SWPPP have been filed before allowing construction to begin. Placer County or its contractor will perform routine inspections of the construction area to verify that the BMPs specified in the SWPPP are properly implemented and maintained. Placer County will notify contractors immediately if there is a noncompliance issue and will require compliance.

Mitigation WQ-2: Implement a Spill Prevention and Control Program

Placer County will require contractors to develop and implement a spill prevention and control program to minimize the potential for, and effects from, spills of hazardous, toxic, or petroleum substances during construction activities. The program will be completed

before any construction activities begin. This plan will be a part or section of the SWPPP required for the proposed action as the SWPPP addresses non-stormwater releases.

Placer County will review and approve the spill prevention and control program before onset of construction activities. Placer County will routinely inspect the construction area to verify that the measures specified in the spill prevention and control program are properly implemented and maintained. Placer County will notify contractors immediately if there is a noncompliance issue and will require compliance.

The federal reportable spill quantity for petroleum products, as defined in the EPA's CFR (40 CFR 110) is any oil spill that (1) violates applicable water quality standards, (2) causes a film or sheen upon or discoloration of the water surface or adjoining shoreline, or (3) causes a sludge or emulsion to be deposited beneath the surface of the water or adjoining shorelines.

If an appreciable spill has occurred and is reportable, the contractor's superintendent will notify Placer County and the county will need to take action to contact the appropriate safety and clean-up crews to ensure the spill prevention plan is followed. A written description of reportable releases must be submitted to the RWQCB and TRPA. This submittal must include a description of the release, including the type of material and an estimate of the amount spilled, the date of the release, an explanation of why the spill occurred, and a description of the steps taken to prevent and control future releases. The releases would be documented on a spill report form. If the results determine that project activities have adversely affected surface water or groundwater quality, a detailed analysis will be performed by a registered environmental assessor to identify the likely cause of contamination. This analysis will conform to American Society for Testing and Materials standards and will include recommendations for reducing or eliminating the source or mechanisms of contamination. Based on this analysis, Placer County and its contractors will select and implement measures to control contamination, with a performance standard that surface water quality groundwater quality must be returned to baseline conditions. These measures will be subject to approval by Placer County.

LEVEL OF SIGNIFICANCE AFTER MITIGATION: Less than significant.

Impact WQ-3: Substantial Alterations of the Existing Drainage Pattern of the Site Area Such That Flood Risk and/or Erosion and Siltation Potential Would Increase

Finding: Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect as identified in the FEIR

Explanation: Construction of the Project could result in short-term erosion and siltation effects.

As indicated in *Chapter 2, Alternatives*, implementation of The Project would result in various improvements to the current drainage facilities. As a result, the outdated drainage facilities would be improved to handle greater stormwater flows. It is anticipated that these drainage improvements would prevent overtopping of SR 28 at all culverts, crossings, and drainage facilities affected by the proposed action, which would decrease the possibility to transport sediment to the lake. In addition, drainage, collection, conveyance, and treatment improvements will be implemented as part of the proposed WIP to improve water quality in the Kings Beach region and action area. These design features will help to collect, convey, and treat water runoff from the action area, and would result in long-term benefits to the quality of surface runoff due to these improved drainage, collection, conveyance, and treatment facilities.

Mitigation WQ-1: Implement Construction BMPs Contained in the SWPPP

See description under Impact WQ-1

Mitigation WQ-2: Implement a Spill Prevention and Control Program

See description under Impact WQ-1

LEVEL OF SIGNIFICANCE AFTER MITIGATION: Less than significant.

12. VISUAL RESOURCES

Impact VIS-3: Degrade the Existing Visual Character or Quality of the Site and Its Surroundings

Finding: Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect as identified in the FEIR.

Explanation:

The proposed changes in the Project are anticipated to adversely degrade the existing visual character or quality of the site and its surroundings.

Mitigation VIS-1: Implement Project Landscaping Plan to Replace Trees that are Removed, Using the Specified Guidelines

In addition to Biological Resources *Mitigation Measure 3.16.4.4, Revegetate Disturbed Areas*, found in the Final EA/EIR/EIS, to the greatest extent possible, selecting the proposed off-street parking lots will be prioritized in the order of those that severely damage LSOGs from least to most (see Table 3.15-3, *Summary of Impacts on Trees* below).

These practices will also be followed to implement the project landscaping plan.

- Vegetation will consist of plant material that is indigenous to the Lake Tahoe Basin.
- Vegetation will be planted within the first year following project completion.
- Vegetation will be used to screen newly established parking areas using a planting design that is randomized to mimic natural patterns.
- Measures will be taken to ensure revegetation success such as amending any insufficient soils.
- An irrigation and maintenance program will be implemented during the plant establishment period.



Table 3.15-3. Summary of Impacts on Trees

Element ^a	LSOGs Severely Damaged	LSOGs Removed	Trees Severely Damaged ^b	Trees Removed	LSOG Quantity	Tree Quantity
1	3	0	2	2	3	7
3	9	0	1	3	10	16
4	3	0	2	2	3	7
6	5	0	1	3	8	7
7	1	0	0	0	1	2
8	5	0	4	6	7	20
9	5	0	2	7	8	7
10	0	0	0	0	NA ^c	NA ^c
14	3	0	1	8	3	12
15	1	0	4	3	2	13
17	2	0	1	2	2	11
18	0	0	0	0	0	3
19	0	0	0	3	0	3
20	0	0	0	0	NA ^c	NA ^c
21	1	0	4	1	2	6
22	3	0	1	0	3	4
23	2	0	0	1	2	3
24	0	0	1	0	0	1
25	10	0	2	7	10	23
26	1	0	2	1	1	4
27	0	0	3	5	0	8
28	0	0	0	0	NA ^c	NA ^c
29	1	0	4	1	1	6
30	3	0	1	0	3	4
31	1	0	0	0	1	1
32	0	0	2	4	0	30
33	1	0	2	0	1	6
34	1	0	1	4	1	6
Totals	61	0	41	63	72	210

Element ^a	LSOGs Severely Damaged	LSOGs Removed	Trees Severely Damaged ^b	Trees Removed	LSOG Quantity	Tree Quantity
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Notes:

- ^a Figure 3.15-17 illustrates the locations of each project element within the biological study area. The locations, dbh, and removal status of trees found within each element within the KBCC are found in Appendix P.
- ^b *Severely damaged* is soil disturbance within a radius equal to three times the tree's dbh.
- ^c Non-LSOGs may be located on these potential parking locations. However, the trees would be avoided and no trees would be removed if these locations are chosen.

LEVEL OF SIGNIFICANCE AFTER MITIGATION: Less than significant.

Impact VIS-4: Create a New Source of Light and Glare that Affects Views in the Area

Finding: Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect as identified in the FEIR.

Explanation: The project proposes replacing existing standard tall galvanized steel streetlights, presumably with a larger number of shorter lights, each with a more narrow spread of light.

Nighttime Light

This lighting plan is expected to be slightly less obtrusive and more pleasing overall for nighttime views of the area. Further, the Project would reduce the number of primary traffic lanes by two, which would reduce the effects of vehicle headlights at any one time on SR 28 but also potentially increase the duration of headlight glare during congestion. The Project is not anticipated to create a new source of light and glare that adversely affects views in the area. Although effects are not anticipated to be adverse, implementing Mitigation Measures VIS-2, VIS-3, and VIS-4 would improve the aesthetics of the proposed action area and help to minimize effects.

Daytime and Nighttime Glare

The proposed action would presumably replace chrome-colored streetlights with shorter earth-toned materials that would provide less daytime and nighttime glare. Therefore, all alternatives are not anticipated to adversely create a new source of light and glare that affects views in the area. Although no adverse effects are anticipated, implementing

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Mitigation Measures VIS-3 and VIS-4 would improve the aesthetics of the proposed action area and help to minimize effects.

Mitigation VIS-2: Lighting Levels

Avoid consistent overall lighting and overly bright lighting. The location of lighting should respond to the anticipated use and should not exceed the amount of light actually required by users. Lighting for pedestrian movement should illuminate entrances, changes in grade, path intersections, and other areas along paths that, if left unlit, would cause the user to feel insecure. As a general rule of thumb, one foot candle per square foot over the entire action area is adequate. Lighting suppliers and manufacturers have lighting design handbooks that can be consulted to determine fixture types, illumination needs, and light standard heights.

Mitigation VIS-3: Directed Lighting

Lights will be screened and directed away from residences to the highest degree possible and the amount of nighttime lights used will be minimized to the highest degree possible. In particular, lighting will employ shielding to minimize off-site light spill and glare. In addition, the following measures apply.

- Luminaire spacing should be the maximum allowable for traffic safety.
- Luminaires should be cutoff-type fixtures that cast low-angle illumination to minimize incidental spillover of light onto adjacent private properties and undeveloped open space. Fixtures that project upward or horizontally should not be used.
- Luminaires should be directed toward the roadway and away from adjacent residences and open space areas.
- Luminaire lamps should provide good color rendering and natural light qualities. Low-pressure and high-pressure sodium fixtures that are not color-corrected should not be used.
- Luminaire intensity should be the minimum allowable for traffic safety.
- Luminaire mountings should be downcast and the height of the poles minimized to reduce potential for backscatter into the nighttime sky and incidental spillover of light into adjacent private properties and open space.
- Luminaire mountings should have nonglare finishes.

Mitigation Measure VIS-4: Highway Fixtures with Low-Sheen and Non-Reflective Surface Materials

Guardrails and other highway fixtures, including but not limited to, retaining walls, safety barriers, traffic signals and controllers, light standards, and other structures, will be limited to the minimum length, height, and bulk necessary to adequately provide for the safety of the highway user. Earth tone colors of dark shades and flat finish will be used on all highway fixtures. New and replacement guardrails will not have a shiny reflective finish. (These features are typically galvanized steel, which weathers naturally to a non-glare finish typically within a year or so.) Retaining walls and other erosion control devices or structures, will be constructed of natural materials whenever possible and will, to the maximum extent possible, be designed and sited as to not detract from the scenic quality of the corridor. Such structures will incorporate heavy texture or articulated plane surfaces that create heavy shadow patterns. Adopted community plans may establish equal or superior standards for highway fixtures.

LEVEL OF SIGNIFICANCE AFTER MITIGATION: Less than significant.

13. BIOLOGICAL RESOURCES

Impact BIO-1: Disturbance of Urban-Altered Jeffery Pine Forest

Finding: Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect as identified in the FEIR.

Explanation: Implementation of the Project would result in tree and understory vegetation removal and incidental damage to trees and tree root systems. These and other effects would directly and indirectly affect the urban-altered Jeffrey pine forest in the action area. These effects would be limited to approximately 64 acres within action elements 1–34 (see Table 3.16-4 of the Final EA/EIR/EIS) and would be associated with actions outside the paved ROWs.

Approximately 63 trees (no LSOGs) would be removed from the action area during construction (Table 3.16-4). Permanent and indirect effects on stability of additional trees (including isolated LSOGs) would result from major lateral tree root disturbance during construction and excavation. Soil disturbance within a radius equal to three times the tree's dbh may affect the tree's stability, with the severity the greatest where the disturbance would be closest to the trunk (Jones pers. comm.). Within the zone of most severe effect, 102 trees would be affected, including 61 LSOGs .

Removal of these trees and cover vegetation, incidental tree damage, and disturbance of tree roots during construction and excavations will cause both direct and indirect effects on forest community. Tree removal will reduce the natural structural diversity of the area and the associated shelter and forage value the trees provide to wildlife species that use them. Tree and root damage will also likely result in increased susceptibility to disease and/or

reduction of water and nutrient uptake that would potentially affect the long-term viability of the trees. Removal of trees and understory vegetation could also result in increased surface runoff, altered local hydrology, erosion, subsequent sediment loading in Griff Creek, and an increase in airborne dust. Vegetation removal may also promote the invasion and spread of weedy species into the community.

Although this plant community within the action area has been fragmented and urbanized, the further reduction of the plant and structural diversity of this Jeffrey pine forest would be contrary to the vegetation thresholds established by TRPA. Therefore, this would result in an adverse effect.

Mitigation BIO-1: Establish Exclusion Zones

The contractor will install orange construction barrier fencing to demarcate environmentally sensitive areas (e.g., wetlands, riparian vegetation, streams, tree root zones). The construction specifications will require that a qualified biologist identify sensitive biological habitats on-site and identify areas to avoid during construction. Before construction, the construction contractor will work with the project engineer and a resource specialist to identify the locations for the barrier fencing and will place stakes around the sensitive resource sites to indicate these locations. The protected areas will be designated as environmentally sensitive areas and clearly identified on the construction plans and specifications. The fencing will be installed before construction activities are initiated and will be maintained throughout the construction period.

Mitigation BIO-2: Seasonal Restrictions on Construction

The construction specifications entered into by TRPA and the contractor will minimize construction impacts on wetlands and streams. Ground-disturbing activities will only be conducted when soils are sufficiently dry to avoid or minimize compaction and sufficiently stable to avoid and/or minimize erosion. Soils are considered sufficiently dry when they are not inundated or saturated. Construction activities that could disturb nesting migratory birds and/or spawning trout will be conducted outside of the nesting and spawning season for these species. Appropriate noise and vibration mitigation measures (*Section 3.9, Noise*) will be implemented to minimize disturbance impacts on these species.

Mitigation BIO-3: Avoid the Introduction of New Noxious Weeds

The contractor will be responsible for avoiding the introduction of new noxious weeds in the action area. Accordingly, the following measures will be implemented during construction.

- Educate construction supervisors and managers on weed identification and the importance of controlling and preventing the spread of noxious weed infestations.
- Clean construction equipment at designated wash stations before entering the construction area.
- Conduct a follow-up inventory of the construction area to verify that construction activities have not resulted in the introduction of new noxious weed infestations. If new noxious weed infestations are located during the follow-up inventory, the appropriate resource agency will be contacted to determine the appropriate species-specific treatment methods.
- In compliance with the Executive Order on Invasive Species, Executive Order 13112, and subsequent guidance from the FHWA, the landscaping and erosion control included in the project will not use species listed as noxious weeds. In areas of particular sensitivity, extra precautions will be taken if invasive species are found in or adjacent to the construction areas. These include the inspection and cleaning of construction equipment and eradication strategies to be implemented should an invasion occur.

Mitigation BIO-4: Revegetate Disturbed Areas

The contractor will revegetate all temporarily disturbed areas of natural vegetation, including wetlands, riparian habitat, and trees, according to the standards provided in the TRPA *Code of Ordinances* (Section IX, Chapter 77). Chapter 77 provides standards for revegetation following activities that disturb vegetation and soils. Trees that die or fall over as a result of root damage will be compensated for by replanting new trees at a ratio not less than 1:1 (inches dbh of trees lost: inches dbh of trees planted).

LEVEL OF SIGNIFICANCE AFTER MITIGATION: Less than significant.

Impact BIO-2: Loss or Disturbance of Wetlands and Streams

Finding: Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect as identified in the FEIR.

Explanation: SR 28 improvements are proposed adjacent to Griff Creek. However, these improvements would occur in existing, paved highway ROWs and would not affect wetlands or streams under any proposed alternative.

Roadside drainages are located where they would be impacted by proposed on-street parking on Deer Street, Trout Avenue, near the intersection of Trout Avenue and Coon Street, Salmon Avenue, and Chipmunk Street, and where ditch lining and revegetation is proposed on Bear Street. Two proposed parking elements are also located adjacent to rock-lined drainage ditches that support some herbaceous plant species. These project elements in total contain approximately 0.088 hectare (0.217 acre) of drainage ditches.

Permanent direct and/or temporary direct effects on these ditches would occur as a result of alterations to existing hydrology, removal of vegetation, root zone disturbance of shrubs and trees in or adjacent to these ditches, and other disturbances associated with the installation of ditch linings and revegetation of existing roadside ditches and swales. Indirect effects due to vegetation removal would include increased sediment loading during runoff events, airborne dust, and increased potential for the establishment of weedy plant species.

The Project would have an adverse effect on the riparian vegetation in the action area.

Mitigation BIO-1: Establish Exclusion Zones

See description under Impact BIO-1

Mitigation BIO-2: Seasonal Restrictions on Construction

See description under Impact BIO-1

Mitigation BIO-3: Avoid the Introduction of New Noxious Weeds

See description under Impact BIO-1

Mitigation BIO-4: Revegetate Disturbed Areas

See description above

LEVEL OF SIGNIFICANCE AFTER MITIGATION: Less than significant.

Impact BIO-3: Impacts on Regional Wildlife Species of Concern

Finding: Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect as identified in the FEIR.

Explanation:

Bald Eagles and Ospreys

No bald eagles or ospreys were observed during the surveys, nor was there suitable foraging, nesting, or wintering habitat for these species. However, the tallest trees in the Jeffery pine community (mostly LSOGs) could potentially provide occasional-use

roosting habitat for these species during quiet periods (daily or seasonal). (Spaulding and Gordon pers. comms.) However, because no eagles or ospreys have been observed roosting in the action area and existing high levels of urban activity in the Kings Beach area will likely deter/preclude eagle and/or osprey from roosting in the vicinity, it likely the project will not affect either species. Further, *Section 3.9, Noise*, indicates that implementation of the proposed action is not anticipated to result in any long-term noise level increases from project operations.

Migratory Birds

Permanent and direct effects on migratory bird habitat would occur from proposed on- and off-street project elements that result in the removal of vegetation (including trees). Migratory bird habitat within the action area consists of approximately 775.4 acres of Jeffrey pine forest and 11 acres of riparian woodland/scrub habitat. On- and off-street parking elements could affect approximately 63.98 acres of migratory bird habitat. Direct, permanent, and temporary effects on area birds would occur as a result disturbance from project construction activities that result in the abandonment of a nest and/or death of the adults and/or their young. Direct and temporary effects could also result from construction activities and noise disturbance that temporarily displace foraging adults.

Rainbow and Brook Trout

Rainbow and brook trout habitat within the BSA is limited to Griff Creek. Noise and disturbance from SR 28 construction activities could displace trout from the lower portion of Griff Creek adjacent to the roadway. Effects on the trout from each alternative would be the same. Direct effects on fish and fish habitat as a result of on- and off-street project elements are not expected to occur because no habitat occurs within those portions of the action area. However, some effects from increased siltation could occur from erosion of areas where vegetation has been removed and/or the hydrology has been altered. Any improvement to erosion control and water quality as a result of SR 28 or on- and off-street project elements would result in a positive, long-term effect on fish and fish habitat.

Mitigation BIO-2: Seasonal Restrictions on Construction

See description under Impact BIO-1

Mitigation BIO-4: Revegetate Disturbed Areas

See description under Impact BIO-1

LEVEL OF SIGNIFICANCE AFTER MITIGATION: Less than significant.

Impact BIO-4: Spread of Weedy Plant Species

Finding: Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect as identified in the FEIR.

Explanation: Because the action area is primarily urban, the proposed action would not substantially add to the level of disturbance already present in the area and would not substantially add to the area available for colonization by weedy plant species. However, roads, highways, and related construction projects are some of the principal dispersal vectors for weedy plant species. The introduction and spread of weedy plant species could degrade natural plant communities by displacing native plant species that provide shelter and forage for wildlife species. Therefore, the proposed action could result in the spread of weedy or noxious plant species into the action area, which could result in an adverse effect. However, it should be noted that none of the species on the California list of noxious weeds is currently used by Caltrans for erosion control or landscaping in Placer County

Mitigation BIO-3: Avoid the Introduction of New Noxious Weeds

See description under Impact BIO-1

Mitigation BIO-4: Revegetate Disturbed Areas

See description under Impact BIO-1

LEVEL OF SIGNIFICANCE AFTER MITIGATION: Less than significant.

VII. PROJECT ALTERNATIVE FINDINGS

NO BUILD ALTERNATIVE – ALTERNATIVE 1

Description: The existing roadway configuration would be unchanged and no improvements would be constructed.

Environmental Factors

Because there are no improvements under this alternative, there would be no improvements to water quality, aesthetics or other resource areas. Therefore there would be no impacts to the built or natural environment.

Relationship to Project Objectives

This alternative would also not realize the benefits of the proposed project, including construction of water quality improvements, pedestrian and bicycle improvements and enhancement to aesthetics. Lack of a project would not further the purposes outlined for this project or the goals of the Regional and Community Plans.

FINDING: The Board finds that this alternative is not feasible because it does not meet any of the stated purposes of the project to

- Improve pedestrian and bicycle mobility; and

- Improve water quality; and
- Improve aesthetics of commercial core.

ALTERNATIVE 2: THREE-LANES WITH ON-STREET PARKING AND TWO ROUNDABOUTS

Description: This alternative would construct 2 travel lanes, a two-way left turn lane, 2 bike lanes, 2 parking lanes and 2 nominal 9.5 foot wide sidewalks. Roundabouts would be constructed at Bear and Coon Streets. On-highway parking would be provided seasonally and would be precluded during peak summer and winter periods. Water quality conveyance and treatment facilities would be constructed throughout the core and various streetscaping elements would be constructed in the sidewalk areas. Additional off-highway parking would be constructed in parking lots and on adjacent County roads

Environmental factors

Construction of this alternative would provide many beneficial impacts to pedestrian/bicycle mobility, water quality and aesthetics.

Reduction of the roadway from 4-lanes to 3-lanes would lead to several, traffic related, significant and unavoidable impacts. Due to a reduction in roadway capacity, roadway intersections and segments would experience traffic congestion during peak periods of the year and not meet level of service criteria. The peak period congestion would also lead to cut through traffic through adjacent neighborhoods and impact transit operations due to busses caught in the traffic congestion.

Relationship to Project Objectives

This alternative does meet all of the project purposes and furthers many goals with the Regional and Community plans particularly in respect to pedestrian and bicycle mobility.

FINDING: The Board rejects this alternative because Caltrans has formally found this alternative unacceptable and does not provide the best balance of meeting the project purposes and minimizing environmental impacts.

ALTERNATIVE 4: THREE LANES WITH TWO ROUNDABOUTS AND WITHOUT ON-STREET PARKING

Description: This alternative would construct 2 travel lanes, a two-way left turn lane, 2 bike lanes and 2 nominal 17.5 foot wide sidewalks. Roundabouts would be constructed at Bear and Coon Streets. On-highway parking would be precluded on the highway. Water quality conveyance and treatment facilities would be constructed throughout the core and various streetscaping elements would be constructed in the sidewalk areas. Additional off-highway parking would be constructed in parking lots and on adjacent County roads

This alternative varies from Alternative two in that it provides no on-highway parking.

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Environmental Factors

Construction of this alternative would provide many beneficial impacts to pedestrian/bicycle mobility, water quality and aesthetics

Reduction of the roadway from 4-lanes to 3-lanes would lead to several, traffic related, significant and unavoidable impacts. Due to a reduction in roadway capacity, roadway intersections and segments would experience traffic congestion during peak periods of the year and not meet level of service criteria. The peak period congestion would also lead to cut through traffic through adjacent neighborhoods and impact transit operations due to busses caught in the traffic congestion.

Relationship to Project Objectives

This alternative does meet all of the project purposes and furthers many goals with the Regional and Community plans particularly in respect to pedestrian and bicycle mobility. The business community has expressed a desire to provide parking on the highway

FINDING: The Board rejects this alternative because although it does meet the project purposes it provides no on-highway parking and does not provide the best balance of maximizing the project benefits and minimizing environmental impacts.

VIII. GROWTH INDUCEMENT FINDING

Because the proposed Project does not result in developing additional residential or commercial space, the provision of new or extended development-related service infrastructure, or an increase in population, it would not be growth inducing.

IX. CUMULATIVE IMPACTS FINDINGS

Based on discussions with staff at Placer County, Caltrans, and TRPA, there are numerous activities planned within the Tahoe Basin in the near future. Many are related to regional efforts to implement Environmental Improvement Projects (EIP) necessary to attain and maintain environmental thresholds or ongoing maintenance of the highway system. Scheduling of individual projects to minimize overlapping construction activities and mitigate for regional traffic/circulation concerns requires ongoing coordination through project proponents, TRPA, and Nevada Department of Transportation, and Caltrans.

PROJECTS IDENTIFIED WITHIN THE KINGS BEACH COMMUNITY

Recent and current Caltrans, Placer County, and TRPA projects within the Kings Beach community are listed below in Tables 4-1 through 4-3. TRPA's EIP strategy is to achieve the environmental goals for the Lake Tahoe Basin. The EIP strategy builds on the

regulatory and capital improvement approaches that have been underway within the Region for more than 10 years. This strategy is designed to accomplish, maintain, or exceed multiple environmental goals and to develop a more integrated, proactive approach to environmental management. Key to this strategy is reliance upon partnerships within all portions of the community, including the private sector, and local, state, and federal government.

Table 4-1. Recent and Current Projects—Kings Beach, California

Caltrans Transportation Projects		
Project Title	County	Roadway
PLA 28	Placer	SR 28
PLA 267	Placer	SR 267

Caltrans Water Quality Improvement Projects		
Project Name	Construction Year	Project Boundaries
SR 28	2008–2010	SR 28 from Tahoe State Park (0.8 mile east of SR 89) to SR 267
SR 28	2007	SR 28 from Chipmunk Street to California/Nevada Stateline
SR 89	2010–2012	Alpine County Line to SR 50
SR 89	2010–2012	Junction SR 50/89 to Cascade Road
SR 89	2010–2012	Cascade Road to north of Eagle Falls viaduct
SR 89	2010–2012	Meeks Creek to Placer County Line
SR 89	2009–2011	El Dorado County Line to Junction SR 89/28
SR 89	2007–2008	Junction SR 89/28 to Squaw Valley Road
SR 50	2010–2011	0.2 mile to 1.1 miles each of Echo Summit
SR 50	2010–2012	Meyers Road to Incline Road
SR 50	2010–2012	South Lake Tahoe Airport to Junction SR 50/89
SR 50	2010–2012	Sky Run Boulevard to Stateline
SR 50	2010–2012	Junction SR 50/89 to Trout Creek
SR 267	2009	Stewart Way to Junction SR 267/28
SR 267	2007	SR 28 to 2.8 miles north of SR 28

Other Caltrans Projects		
Project Location	Construction Year	Description
SR 50	To be determined	Bridge and barrier rail improvements on Echo Summit

SR 50	2010–2011	Upgrade rock barrier from Echo Summit to 1.3 miles east of Echo Summit
SR 50	2010–2011	Streetscape/drainage improvements from Trout Street to Ski Run Boulevard
SR 50	2009	Signal improvement at Sierra Boulevard
SR 50	To be determined	Traffic improvements at South Lake Tahoe "Y" at Junction SR 50/89
SR 89	2011	Vista Point improvements from 0.2 mile north of Elizabeth Drive to 0.9 mile north of Fanny Bridge
SR 89	To be determined	Realign/replace Fanny Bridge from 1.0 miles south of Fanny Bridge to 0.9 mile north of Fanny Bridge
SR 89	2009	Install traffic signal at Alpine Meadows Road
SR 89	2007	Rock wall repair at Emerald Bay Viaduct
Various locations	2009	Install traffic operation system

Placer County Projects

Project Title	Lead Agency	SCH#
Brook Avenue Parking Facility (PDSA-T2004 0102)	Placer County Planning Department	NA
Salmon Avenue Parking Facility (PDSD T20060649)	Placer County Planning Department	NA
Minnow Avenue Parking Facility (PDSD T20060685)	Placer County Planning Department	NA
Kings Beach CCIP Parking Compensation	Placer County Planning Department	NA
Coordinated Resource Management and Planning for the Endangered Plant, Tahoe Yellow Cress	Placer County Planning Department	NA
Restoration Project, Coon Street	Placer County Planning Department	NA
North Tahoe Beach Center Replacement Project	Placer County Planning Department	NA
Red Wolf Lodge, Phase V (increase units per acre from 15 to 18)	Placer County Planning Department	NA
Erosion Control, Beaver Street	Placer County Planning Department	NA
Replace signals at SR 28 and 267	Placer County Planning Department	NA

Placer County Projects		
Project Title	Lead Agency	SCH#
Commercial Core Improvement Project	Placer County Planning Department	2002112087
KB Mixed Use Village	Placer County Planning Department	2005082096
KB Student Activity Center	Tahoe Truckee Unified School District	2002042094
Area Restoration Projects	Tahoe Conservancy	2001068008
Water Quality Improvement Project, Planning Grant	Tahoe Conservancy	2000128334
Fire Hazard Reduction Project	Tahoe Conservancy	2000068001
KB Elementary School Expansion	Tahoe Truckee Unified School District	1997107177
		1997042042
KB Elementary School/Adopt-A-Watershed Program	Tahoe Conservancy	1996104035
Site Protection Projects	Tahoe Conservancy	1995101616
School Restoration Project	Tahoe Conservancy	1994107639
Restoration Enhancement Project	Tahoe Conservancy	1993103936
Recreation Enhancements	Tahoe Conservancy	1993022021
Erosion Control Project	Tahoe Conservancy	1992101561
Recreation Enhancement Project	Tahoe Conservancy	1990104093
Recreation Enhancement Project	Tahoe Conservancy	1990102403

Table 4-2. Summary of TRPA EIP Project—Kings Beach, California

TRPA Threshold	EIP Project Name	EIP Project #
Air Quality/Trans	Class 2 SR 28 to SR 267 Summit	748
Air Quality/Trans	Placer County Transit Improvements	816
Fisheries	East of Kings Beach Boat Ramp Spawning	530

Habitat Restoration		
Fisheries	Griff Creek – Stream Restoration	410
Fisheries	Griff Creek	658
Recreation	Kings Beach SRA Public Pier	619
Soil	California State Parks	351
Conservation/SEZ		
Water Quality	Kings Beach Commercial	10060
Water Quality	Kings Beach Industrial	733
Water Quality	Kings Beach Residential Area Treatment - Phase II	15
Water Quality	SR 267 at Intersection of SR 28	997

Table 4-3. Summary of Nevada Department of Transportation Projects—Kings Beach Area

Project Title	Lead Agency
Erosion Control – SR 28 from SR28/SR431 Intersection to Nevada California Border	Nevada Department of Transportation

The assessment of cumulative effects includes short-term, temporary effects associated with construction activities and long-term effects associated with project operation. Each of these types of cumulative effects is discussed separately.

SHORT TERM CUMULATIVE EFFECTS

Potential temporary effects resulting from the proposed action will be limited to the construction phase of the project. Dust controls, noise controls, BMPs to control erosion and water resources, and avoidance measures for special status wildlife and plant species and their habitat will be implemented during construction activities to minimize potential impacts on these resources. Public notifications of traffic interruptions will also be implemented during the construction phase of the proposed action.

Short-term, indirect cumulative effects on traffic would occur during the construction of the selected SR 28 build alternative. The impact would be related to the rerouting of traffic and/or delays associated with construction. However, once construction is complete, this impact would not have substantial effects or would have substantial effects that can be mitigated as improved traffic capacity via the alternative is implemented.

Projects occurring simultaneously with the proposed action may add to temporary impacts. Therefore, coordination with agencies with jurisdiction over other projects within the action area is needed. Caltrans requires a CTMP for all construction activities on the state highway system. Where several consecutive or linking projects or activities within a region or corridor create a cumulative need for a CTMP, Caltrans coordinates individual CTMPs

or develops a single interregional CTMP. A CTMP, when implemented, results in minimized project-related traffic delay and accidents by the effective combination of public and motorist information, demand management, incident management, system management, alternate route strategies, construction strategies, and other strategies. Furthermore, CTMPs are designed to reduce the amount of significant delay time due to lane closures and construction related activity. Significant delay time is 30 minutes above normal recurring traffic delay on the existing facility or the delay threshold set by the district traffic manager, whichever is less. The Caltrans traffic management unit has indicated that SR corridors on the north shore of Lake Tahoe might require a cumulative delay time of less than 30 minutes per CTMP guidelines. Tables 4-1 through 4-3 list proposed Caltrans, Placer County, and TRPA projects. Through its CTMP process, Caltrans will ensure that cumulative construction activities of the projects listed in Tables 4-1 through 4-3 will result in cumulative delay times of 30 minutes or less on the state highway system, including within the Kings Beach area.

Some project features will contribute longer lasting effects. The proposed action is not anticipated to adversely affect any viewsheds in the area, as new features added by the project are anticipated to blend in with the existing environment. Furthermore, temporarily disturbed areas of natural vegetation, including wetlands, riparian habitat, and trees, must be restored according to the standards provided in the TRPA Code of Ordinances (Section IX, Chapter 77). Chapter 77 provides standards for revegetation following activities that disturb vegetation and soils. Trees that die or fall over as a result of root damage must be compensated for by replanting new trees at a ratio not less than 1:1 (inches dbh of trees lost: inches dbh of trees planted). These revegetation activities will be required upon completion of the project.

Some cumulative effects may occur if other projects also remove vegetation prior to the reestablishment of vegetation by this project. However, this impact is speculative and is not likely to be substantial, given the projects listed above.

The proposed action would generate short-term effects on biological resources. With mitigation, those effects can be reduced or eliminated. Consequently, with biological mitigation, the proposed action's short-term cumulative effects on biological resources would not be substantial. Further discussion of cumulative biological effects is described below in *Section 4.3.2, Long-Term Cumulative Effects*.

The cumulative effects of the independent projects are not expected to generate adverse effects in terms of temporary employment increases, housing shortages, or competition for public services.

LONG TERM CUMULATIVE EFFECTS

(A) Air Quality

The proposed action's long-term air quality impacts were all found to have no substantial effects. The incremental emissions associated with the three build alternatives would not differ substantially from the no-build alternative. Alternatives 2 and 4 would have slightly higher emissions due to idling associated with increased congestion during peak travel periods. However, the increase in emissions associated with this congestion is relatively minor and would be outweighed by the decrease in emissions over time as cleaner, lower-emitting vehicles replace higher-emitting vehicles. Additional land use projects in the Kings Beach area would also generate vehicle trips and associated emissions. The air quality analysis represents a cumulative impact analysis because it uses the traffic projections developed for this project. The traffic projections assumed development of community plans within the Tahoe Basin along with traffic resulting from buildout of community plans for Truckee and the Martis Valley. Therefore, the air analysis evaluates the cumulative effects of regional growth on air emissions. That analysis finds that the project, when combined with other projects in the area, would not result in significant cumulative effects on air quality.

The carbon monoxide modeling for the proposed action found that existing and future concentrations from vehicle idling would not exceed existing state, federal, or TRPA standards. This modeling was based on traffic volumes that assumed cumulative growth throughout the northern Lake Tahoe area. Consequently, neither of the alternatives would result in a substantial cumulative effect.

(B) Cultural Resources

The cultural and historic resources analysis finds that each build alternative would either have no substantial effects on cultural and historic resources or substantial effects that can be mitigated. Several other projects are proposed for the Kings Beach area. These projects would also be required to conduct environmental review and would be required to mitigate any significant cultural or historic resource impacts. Consequently, with appropriate mitigation, each of the three build alternatives would have no substantial direct effects on cultural or historical resources and, when considered with other proposed projects in the Kings Beach area, would have no substantial cumulative effects.

(C) Social Environment

The social environment analysis finds that each build alternative would have no substantial effects or substantial effects that can be mitigated. Those social effects are primarily limited to economic effects during project construction. No other proposed projects in the Kings Beach area are expected to have significant effects on the Kings Beach social environment. Consequently, with appropriate mitigation, each of the three build alternatives would have no substantial direct social effects, and when considered with other proposed projects, would have no substantial cumulative effects.

(D) Hydrology

The hydrology analysis finds that each build alternative would either have no substantial effects or substantial effects that can be mitigated. The proposed action drainage facilities will be designed and built to handle flows from cumulative development of the entire Griff Creek water basin. This is because the project represents a component of the Kings Beach Watershed Improvement Project. Consequently, the project, when considered with other cumulative development in the area, would not result in significant cumulative hydrology impacts.

(E) Hazardous Waste

The hazardous waste analysis finds that each build alternative would either have no substantial effects or substantial effects that can be mitigated. There are no other proposed projects in the Kings Beach vicinity that would be likely to have significant hazardous impacts. Consequently, with appropriate mitigation, each of the three build alternatives, when combined with other proposed projects, would have no substantial cumulative effects with respect to exposing humans to hazardous waste and hazardous materials.

(F) Traffic

The traffic analysis included in *Section 3.6* was based on traffic associated with cumulative growth in the northern Lake Tahoe area. As such, the traffic analysis represents a cumulative analysis.

Traffic analysis for Alternatives 2 and 4 for the proposed SR 28 improvements (*Section 3.6*) indicates that there will be a reduction of traffic capacity on SR 28 in both the short term (through the year 2008), and the long term (through the year 2028). Under each of these alternatives, the LOS on SR 28 degrades to a level F on a limited number of peak travel days (specifically, 10 days per summer in the peak direction) during the summer season beginning in 2008. By the year 2028, the LOS on SR 28 degrades to a level F for virtually all days in the summer, and for up to 11 hours per day. Under both of these modeling scenarios, queuing of traffic would occur along the SR 28 roadway segments in the commercial core area. It is expected that traffic would divert through the neighboring side streets to avoid the queuing and delays. This breakdown in LOS will result in direct short- and long-term cumulative effects on traffic flow and capacity and would result in up to 4,000 vehicles per day on local residential streets. Due to the added congestion associated with Alternatives 2 and 4, the additional delay would also have a significant and unavoidable delay to transit operations, resulting in a substantial cumulative effect.

Traffic analysis for the Alternative 3 for the proposed SR 28 improvements (*Section 3.6*) indicates that there will be no unacceptable LOS or traffic queuing in either the short-term (through 2008) or the long-term (through 2028). Adequate traffic capacity under each of these modeling scenarios is maintained by this alternative. There would be no short- or long-term direct or indirect cumulative effects associated with this alternative. It should be noted that an updated warrant analysis conducted for this environmental analysis has

indicated that a signal at Fox Street and Deer Street may be warranted for future years. However, the determination of traffic control devices at these intersections will be considered as a separate roadway improvement project.

(G) Parking

The parking analyses (*Section 3.7*) indicates there would be no direct effects on parking as a result of either build alternative. This is because Placer County, as part of this project, has committed to compensating for the effects of lost parking spaces for either build alternative. There are no other proposed projects in the Kings Beach area that would require a substantial demand for parking. Therefore, there are no known long-term cumulative parking impacts associated with cumulative growth in the Kings Beach area.

(I) Land Use

The land use analysis finds that each of the build alternatives would require partial acquisitions of properties along the SR 28 corridor. However, for each build alternative, these acquisitions are not considered substantial. New parking lots and spaces would be needed to compensate for parking spaces taken by the project. The required parking would include both on-street (but off of SR 28) and off-street parking. The parking lots would also require land use acquisitions. The land use acquisitions associated with the partial acquisitions of property and to site parking lots are not considered to be substantial direct impacts. Although a few other land use development projects are proposed for Kings Beach—Kings Beach Mixed Use Village, Kings Beach Student Activity Center—the land use demands for these projects are relatively small and would not constitute a substantial cumulative land use impact when combined with the proposed action.

(J) Noise

The noise analysis (*Section 3.9*) was based primarily on traffic volumes estimated for the traffic analysis (*Section 3.6*). The traffic volumes in the traffic analysis were based on cumulative growth in the northern Lake Tahoe area. Consequently, the noise analysis was also based on cumulative growth and represents cumulative effect conditions. As indicated in Tables 3.9-7 and 3.9-8, implementation of the build alternatives is not expected to result in noise increases relative to the no-project alternative. Consequently, because no noise increases are associated with the build alternatives, implementation of the proposed project would not result in a cumulative increase in traffic noise.

(K) Recreation

The recreation analysis finds that each build alternative would not affect recreational resources in the Kings Beach area. Several projects proposed for the Kings Beach area would enhance recreation, while none of the proposed projects would have negative recreational impacts. Consequently, none of the three build alternatives would have a substantial direct or cumulative effect on recreation when considered with other proposed projects for the area.

(L) Public Services and Utilities

The public services and utilities analysis finds that each build alternative would either have no effect or no adverse effect on public services and utilities in the Kings Beach area. None of the proposed projects in the Kings Beach area would have negative effects on public services or utilities. Consequently, none of the three build alternatives would have a substantial direct or cumulative effect on public services and utilities when considered with other proposed projects.

(M) Geology and Soils

The geology and soils analysis finds that each build alternative would either have no substantial effects or would have substantial effects that can be mitigated. Several soil conservation and erosion control projects are proposed for the Kings Beach area (see Tables 4-1 through 4-3). Although some of the proposed land use projects in the area could have effects on soils, those effects would be relatively minor and would not result in substantial effects on geology and soils when considered with the proposed project. Consequently, with appropriate mitigation, none of the three build alternatives would have a substantial direct or cumulative effect on geology and soils.

(N) Water Quality

One of the purposes of the proposed action is to improve water quality. Several other proposed projects in the vicinity of the proposed action are also designed to improve water quality. Those include projects sponsored by Placer County, Caltrans, TRPA, and the Nevada Department of Transportation (Tables 4-1 through 4-3).

Placer County is preparing a Watershed Improvement Project that is designed to improve water quality throughout the entire Kings Beach watershed, which includes the boundaries of the action area. Three main treatment options are being evaluated as part of that effort. Note that each of the treatment alternatives proposes a different approach for the type of treatment: localized runoff, basinwide, and regional.

(1) Localized Runoff Approach

The proposed runoff treatment includes a localized approach to solve the identified water quality problems in the action area. This approach would reduce flow volume and promote infiltration along the sub-basins through a new series of BMPs including vegetated swales, infiltration galleries, and detention basins. Runoff from a city-block-sized area would be treated with these BMPs. Runoff from the adjacent forest will continue to enter the action area. There would be no forest runoff treatment under this alternative.

Conveyance-related improvements proposed in this alternative would include roadside ditches, vegetated swales, rock swales, and rock-lined channels. These features would convey water and also promote infiltration, thereby reducing the flow. The improvements would be installed on all of the streets in the urban area. Vegetated swales would also be

constructed at locations along SR 267 to direct runoff to an existing sediment basin near the golf course.

Detention basins, infiltration galleries, and sediment traps would be constructed at several locations in each subbasin to promote infiltration. Each BMP would treat the runoff from a one- to two-city-block area. The type of runoff collection methods selected would be based on available land. Infiltration galleries would be installed along Secline Street and Coon Street. Sediment traps and vaults would be built just upstream of six existing storm drain discharge points to the lake. Runoff from the short section of Speckled Avenue and Dolly Varden Avenue between SR 267 and Wolf Street would be collected in sediment traps before discharge to Griff Creek.

Existing storm drains would continue to release treated runoff to Lake Tahoe. The level of treatment would be higher than under existing conditions.

(2) Basinwide Approach

The second approach consists of a basinwide approach to collecting and treating runoff that would be conveyed through the action area. Runoff in the urban area would be directed to treatment facilities sited closer to SR 28 than under the localized runoff approach. Runoff would be collected from most of the subbasin before it receives treatment in a basin.

This alternative proposes an earthen berm to direct sheet flow upslope of Speckled Avenue to Griff Creek or Coon Creek. A separate berm on the east would collect water from the forest portion of the Cutthroat, Beaver, and Park subbasins and direct it to collection facilities near the commercial core. The berm will divert forest flows to a collection facility near SR 28 and then to Lake Tahoe. This eastern berm is used along the length of the urban area.

Conveyance-related improvements proposed for the basinwide approach include roadside ditches, vegetated swales, rock swales, curb and gutter, and storm drains. Roadside ditches and curb and gutter would be used to convey runoff on all of the urban streets. Curb and gutter would tie into existing curbs and on the streets near SR 28. Rock and vegetated swales would be installed at several locations to promote infiltration.

Urban runoff would be collected at low points midslope in watersheds and subbasins at proposed detention basins or existing sediment basins for infiltration to reduce flow and reduce sediment. Overflow and runoff would be collected at other proposed detention basins or existing sediment basins near the base of the watersheds/subbasins. Sediment traps and vaults would be installed just upstream of six existing storm drain discharge points to the lake. Runoff from the short section of Speckled Avenue and Dolly Varden Avenue between SR 267 and Wolf Street would be collected in sediment traps before discharge to Griff Creek.

Existing storm drains would continue to release treated runoff to the lake. The level of treatment will be higher than under existing conditions.

(3) Regional Approach

The third treatment alternative proposes to collect and convey runoff using curb and gutter and storm drains installed in the action area to primary collection points. The runoff would then be conveyed from the collection points to a regional stormwater treatment facility. This third alternative proposes to use earthen berms to direct sheet flow from the forested areas north of Speckled Avenue to Griff Creek. This would separate the forest runoff from runoff generated in the urbanized area. Currently, the forest in the Coon subbasin flows to the Coon Street SEZ channel near Speckled Avenue and Fox Street. Because of the slope of the subbasin, this runoff would not be collected by the berm but would continue to enter the urban area and be conveyed in the Coon Street SEZ. Within the urban area, urban runoff would be conveyed away from the Coon Street SEZ to prevent comingling with the forest runoff.

To the east, this alternative proposes to use an earthen berm at the margins between the forest and urbanized area to direct sheet flow that originates in the forested area. The berm would divert forest flows to a collection facility near SR 28 and then to Lake Tahoe.

Conveyance-related improvements proposed in this third alternative include curb and gutter, new storm drains and pretreatment areas, and new drainage inlets. Curb and gutters are proposed on all roads to convey runoff along the street to the nearest intersection, where drop inlets are proposed. These new drop inlets would collect and direct runoff from the gutters to new storm drain under all of the north/south running roads. The runoff would be conveyed to collection facilities near SR 28.

This alternative proposes to collect the storm drain flow at five pretreatment vault/lift stations. The vaults would provide pretreatment by settling out coarse materials and provide temporary runoff storage. The runoff would be pumped from the vaults through a new force-main line under SR 28, Secline, and Wolf streets to a regional treatment facility proposed in the city block bounded by Speckled Avenue, Cutthroat Avenue, Wolf Street, and Deer Street. Runoff from the short section of Speckled Avenue and Dolly Varden Avenue between SR 267 and Wolf Street would be collected in sediment traps before being discharged to Griff Creek.

Following treatment, the runoff would be discharged through a new pipeline under Deer Street to Lake Tahoe near the existing Deer Street outfall. This would be a closed line and would not pick up any runoff between the treatment plant and the lake.

(4) Best Management Practices

In addition to the implementation of one of the three watershed improvement alternatives discussed above, all projects within the Lake Tahoe Basin are required to implement BMPs to protect water quality from impacts related to temporary construction activities and permanent site improvements. Regulatory agencies that have applicable BMP guidance documents for the proposed action include the following:

- *The Handbook of Best Management Practices* (Tahoe Regional Planning Agency 1988);
- TRPA Best Management Practices Retrofit Program;

- TRPA Erosion Control Team's general information;
- BMP Contractors Notes (Tahoe Regional Planning Agency 2005);
- TRPA guidance for BMP installation developed to incorporate advancing technology; and
- *Storm Water Quality Manuals: Construction Site Best Management Practices (BMPs) Manual* (Nevada Department of Transportation 2004).

TRPA requires that projects address water quality by reducing the projected level of contaminant loading. Untreated urban runoff from parking lots and roads does not typically meet the numeric standards for discharge to surface water. The following list of contaminant types and associated sources are considered during project design and construction.

- Sediment-related issues: sediment generated from erosion during storm events and from increased flow due to additional coverage and sediment generated during construction.
- Nutrient-related issues: nutrients transported with sediment, atmospheric deposition, organic matter (e.g., leaves, grass clippings), and landscape fertilizer.
- Trash-related issues: debris from construction and debris deposited by facility users.
- Oil- and grease-related issues: oil and grease deposited by vehicles present on site during construction and facility use.
- Toxic contaminant-related issues: concrete washing during construction, paving during construction (e.g., loose gravels, sealants), materials used in structures (e.g., paint, wood preservatives), and landscape pesticides.

To address the potential generation of contaminated stormwater discharges, each component of the proposed action must implement temporary and permanent source control BMPs. Temporary BMPs are applied during and immediately after the construction period. Permanent BMPs involve the design, installation, and maintenance of structural features intended to remain functional over the projected life of the proposed development. BMPs are formally incorporated into the plans and specifications prepared for each project component.

In general, the conscientious application and maintenance of temporary BMPs has been demonstrated to protect water quality during the construction period and reduce effects on water quality to less-than-substantial levels. The minimum temporary BMPs needed to be consistent with TRPA and Caltrans guidance documents referenced above and to satisfy TRPA Code requirements (Chapters 25, 64, and 81) are outlined in Table 4-4.

Table 4-4. Temporary Best Management Practices

<u>Temporary Best Management Practices (BMP-T)</u>	
<u>Temporary construction site practices (BMP-TCS)</u>	<u>Temporary soil stabilization practices (BMP-TSS)</u>
Development site plan (BMP-1)	(non-vegetative)
Grading season (BMP-2)	Straw mulch (BMP-15)
Boundary fencing (BMP-4)	Hydromulch (BMP-16)
Stabilized construction entrance (BMP-6)	Pine needle mulch (BMP-17)
Protection of trees and other vegetation (BMP-8)	Jute netting (BMP-18)
<u>Temporary sediment barriers (BMP-TSB)</u>	Plastic netting (BMP-19)
Straw bale sediment barriers (BMP-9)	Wood excelsior blanket (BMP-20)
Filter fencing (BMP 10)	Erosion control blankets or geotextiles (BMP-21)
Straw bale drop inlet sediment barrier (BMP-11)	Chemical mulches and tackifiers (BMP-22)
Sandbag curb inlet sediment barrier (BMP-12)	<u>Temporary runoff control on slopes (BMP-TD)</u>
Filter berm (BMP-13)	Diversion dike (BMP-23)
Siltation berm (BMP-14)	Interceptor swale (BMP-28)
<u>Temporary and/or permanent sediment retention structures</u>	Diversion swale (BMP-24) - Interception dike (BMP-27)
Sediment trap (BMP-33)	
Source: Tahoe Regional Planning Agency 1988.	

This project alone cannot be expected to meet all of the TRPA thresholds. As noted above, Caltrans contributes only 2.4% of the runoff in HAS 634.20 from its road surfaces. This includes runoff from routes 28, 89 and 267. The amount of runoff from SR 28 is only a fraction of this 2.4%. However, the proposed action will greatly improve stormwater treatment on and along SR 28. Newly installed drainage facilities will capture many pollutants before they enter the lake. These improvements will greatly outweigh any negative impacts associated with newly created impervious surfaces. No cumulative adverse impacts are anticipated. When the proposed action is considered in combination with either of the watershed improvement alternatives, and with other water quality improvements proposed by other agencies, the proposed action, would result in a cumulative improvement in water quality.

(O) Visual Resources

The visual analysis finds that each build alternative would either have no substantial effects or substantial effects that can be mitigated. Any cumulative visual impacts of the project alternatives would be limited to the Kings Beach area. No other projects in the area (see Tables 4-1 through 4-3) would result in visual impacts that, when considered with each project alternative, would result in significant cumulative effects. Consequently, with appropriate mitigation, none of the three build alternatives would have substantial direct or cumulative effects on visual resources.

(P) Biological Resources

The biology analysis finds that each build alternative would have substantial direct effects on biological resources. Each of these effects would be limited to the construction period and would occur within the vicinity of that construction. No adverse effects on biological resources were identified for project operation. Several projects proposed for the Kings Beach area are designed to improve biological resources, such as the Griff Creek Stream Restoration project, the East of Kings Beach Boat Ramp Spawning Habitat Restoration project, and several Tahoe Conservancy Restoration Enhancement projects. Although there are a few other land use development projects proposed for Kings Beach, they would not result in cumulative long-term biological effects. Because the proposed action's effects on biological resources would be short-term and limited to the project area, because all of these effects can be mitigated, and because there are no other cumulative projects likely to cause substantial effects, the cumulative effects on biological resources would not be substantial.

SHORT-TERM USES AND LONG-TERM PRODUCTIVITY

This section describes the relationship between the short-term use of resources versus the long-term maintenance and enhancement of productivity. Short-term effects are those that occur during and immediately after the construction period. Long-term effects relate to the remaining life of the proposed action. The issue is whether either of the proposed build alternatives narrows the range of beneficial uses of the environment, poses long-term risks to health or safety, or detracts from the ability to attain and maintain environmental thresholds.

Construction activities related to the proposed action will result in short-term loss of land use and impacts on soils, water quality, air quality, noise levels, recreation, scenic, and biological resources. Impacts will be rectified through the implementation of the mitigation measures discussed in *Sections 3.1 through 3.17* of the Final EA/EIR/EIS. The short-term costs also include the commitment of substantial financial and material resources. Long-term commitments of resources are associated with maintenance and operation of the proposed action.

The build alternatives are expected to improve bicycle and pedestrian circulation, and preserve scenery and water quality needs within the Kings Beach Commercial Core area.

The benefits to long-term productivity are expected to offset short-term effects of the proposed build alternatives.

IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

This section describes the irreversible and irretrievable commitment of resources if the either of the build alternatives is constructed. When actions change an area to the point that it cannot be restored to its original undisturbed condition, it is considered an irreversible commitment of resources. When actions consume resources that cannot be retrieved, it is considered to be an irretrievable commitment of resources.

Each of the Alternatives would create few irreversible commitments of resources. The proposed construction activities along SR 28 would occur within the paved travel lane of the existing highways and be restored to original condition or better when construction is completed, such that no irreversible impacts would be incurred. Most project impacts are temporary and will not create irreversible changes in air quality, noise, traffic patterns, or water quality. Exceptions include the minor loss of vegetation from areas of new impervious coverage, minor alterations of wildlife habitat from removal of trees, and a slight increase in visibility of structures at areas of proposed off-street parking. Materials employed during construction, as well as the consumption of nonrenewable energy sources during construction, are considered an irretrievable loss directly attributed to the proposed action, and the use of these resources would preclude the availability for other needs.