DRAFT

Environmental Impact Report/
Environmental Impact Statement/
Environmental Impact Statement

Upper Truckee River Restoration and Golf Course Reconfiguration Project

Volume I

Executive Summary and Chapters 1 and 2

SCH# 2006082150

Lead Agencies:

California State Parks

Lake Tahoe Environmental Improvement Program

Bureau of Reclamation

August 2010

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EXECUTIVE SUMMARY

ES.1 PROJECT LOCATION AND SETTING

The California Department of Parks and Recreation (State Parks) is proposing a project to restore the reach of the Upper Truckee River within Lake Valley State Recreation Area (SRA) and Washoe Meadows State Park (SP) to address its contributions of fine sediment to the river and Lake Tahoe. The Upper Truckee River is the largest tributary to Lake Tahoe, with a watershed spanning more than 50 square miles. The river's headwaters are located in wilderness 10 miles south of Lake Tahoe along the Sierra Nevada crest at Red Lake Peak. From there, the river flows north into a flat glacial valley eventually draining into Lake Tahoe.

The 520-acre study area is at the upstream end of the flat glacial valley of the river just north of Meyers and south of the City of South Lake Tahoe, within El Dorado County, California. It includes the southern portion of Washoe Meadows SP, Lake Valley SRA, and small portions of US Forest Service (USFS) and California Tahoe Conservancy (Conservancy) lands, as well as a 1.5 mile reach of the Upper Truckee River.

The primary purpose of the proposed project is to restore natural geomorphic and ecological processes along this reach of river and to reduce the river's suspended sediment discharge to Lake Tahoe. Four alternatives approaches to implementing the proposed project are being considered, along with the No Project/No Action Alternative. Depending on which alternative is selected, the proposed restoration project may include continuing existing golf course use, removal of the entire Lake Tahoe Golf Course, or reconfiguration of the golf course to allow for restoration of the river, to reduce the area of Stream Environment Zone (SEZ) occupied by the golf course, and to allow for establishment of a buffer area between the golf course and the river.

ES.2 OVERVIEW OF THE EIR/EIS/EIS PROCESS

This joint document is an environmental impact report (EIR) prepared on behalf of State Parks pursuant to the California Environmental Quality Act (CEQA); an environmental impact statement (EIS) prepared on behalf of the Tahoe Regional Planning Agency (TRPA) pursuant to Article VII of the Tahoe Regional Planning Compact and Chapter 5 of the TRPA Code of Ordinances; and an EIS prepared on behalf of the U.S. Bureau of Reclamation (Reclamation) pursuant to the National Environmental Policy Act (NEPA) and the Council of Environmental Quality (CEQ)Regulations implementing NEPA.

ES.2.1 CALIFORNIA DEPARTMENT OF PARKS AND RECREATION

State Parks is a lead agency for this project, pursuant to CEQA. As part of its environmental review process, State Parks, jointly with TRPA, prepared and circulated a Notice of Preparation (NOP) informing responsible agencies and the public that the project could have a significant effect on the environment, and soliciting their comments. The NOP was circulated from August 28, 2006, though October 20, 2006. A copy is included in Appendix A of this draft EIR/EIS/EIS. This draft EIR/EIS/EIS addresses comments received during the NOP scoping period.

Section 21091(a) of the California Public Resources Code requires lead agencies to circulate Draft EIRs for a minimum of 45 days. However, because this document is also an EIS, pursuant to TRPA code and NEPA, it is being circulated for at least 60 days. During this time, State Parks is holding a public hearing to present the conclusions of the draft EIR/EIS/EIS and receive oral comments from the public and responsible agencies. After the 60-day comment period, a final EIR/EIS/EIS will be prepared that includes comments received on the draft EIR/EIS/EIS; written responses to comments that raise environmental issues; a list of all persons, organizations, and agencies commenting on the draft EIR/EIS/EIS; a copy of the draft EIR/EIS/EIS, including any necessary revisions; and a mitigation monitoring and reporting plan.

ES.2.2 U.S. BUREAU OF RECLAMATION

Reclamation is a lead agency for the project, pursuant to NEPA. The project has received Federal funding through Reclamation for the planning phase and may receive funding for implementation. As part of its environmental review process, a Notice of Intent (NOI) was published in the Federal Register on September 5, 2006, informing federal agencies and the public that the project could have a significant effect on the environment, and soliciting their comments. A copy of the NOI is included in Appendix A of this draft EIR/EIS/EIS.

Pursuant to Reclamation procedures, this draft EIR/EIS/EIS is being circulated for public comment for at least 60 days. After the 60-day comment period, a final EIR/EIS/EIS will be prepared as described above under Section ES.2.1.

ES.2.3 TAHOE REGIONAL PLANNING AGENCY

TRPA is a lead environmental review agency for the project, pursuant to Article VII of the Tahoe Regional Planning Compact and the TRPA Code of Ordinances. The NOP prepared by State Parks also served as the NOP under the Tahoe Regional Planning code. A copy is included in Appendix A of this draft EIR/EIS/EIS.

Pursuant to TRPA Code Section 5.8.A(4), this draft EIR/EIS/EIS is being circulated for public comment for at least 60 days. After the 60-day comment period, a final EIR/EIS/EIS will be prepared as described above under Section ES.2.1.

ES.3 SUMMARY DESCRIPTION OF THE PROJECT ALTERNATIVES

ES.3.1 PURPOSE AND NEED AND PROJECT OBJECTIVES

The fundamental need for restoration of the study area's reach of the Upper Truckee River stems from its contribution of fine sediment to the river and Lake Tahoe through accelerated bank and bed erosion, the impaired natural geomorphic processes and ecological functions, and the diminished quality of the habitat in the riparian corridor caused by prior human alterations, as described above. The purpose of the project is, therefore, to improve geomorphic processes, ecological functions, and habitat values of the Upper Truckee River within the study area, helping to reduce the river's discharge of nutrients and sediment that diminish Lake Tahoe's clarity while providing access to public recreation opportunities in the State Park and SRA. Its implementation is an important component of the integrated objectives of State Parks, Reclamation, and TRPA to improve environmental quality in the Basin.

Consistent with the purpose and need, the following basic objectives of the project were developed during the early planning and public scoping phases of the project.

- Restore, to the extent feasible, natural geomorphic processes that sustain channel and floodplain morphology.
- Restore, to the extent feasible, ecosystem function in terms of ecological processes and aquatic and riparian habitat quality.
- Create a more continuous riparian habitat corridor.
- Reduce erosion and improve water quality including reduction of the reach's contribution of suspended sediment and nutrient loading in the Upper Truckee River and Lake Tahoe.
- Minimize and mitigate short-term water quality and other environmental impacts during construction.

- Reduce the environmental impact of the golf course on the river's water quality and riparian habitat by integrating environmentally sensitive design concepts.
- In the SEZ, reduce the area occupied by golf course and improve the quality and increase the extent of riparian and meadow habitat.
- Maintain golf recreation opportunity and quality of play sufficient to feasibly support a course.
- Maintain adequate revenue generation from the Lake Valley SRA and Washoe Meadows SP.
- Avoid any increase in flood hazard to private property.
- Avoid any increase in safety hazards to golf course and other recreation users.
- Provide additional opportunities for non-motor vehicle recreation.
- Design with sensitivity to the site's history and cultural heritage.

Five alternatives are being considered and are analyzed at a comparable level of detail in the environmental document. A preferred or proposed alternative has not yet been defined. Following receipt and evaluation of public comments on the draft EIR/EIS/EIS, the lead agencies will determine which alternative or combinations of features from multiple alternatives will become the preferred alternative. A discussion of the decision will be included in the final EIR/EIS/EIS.

A summary description of the alternatives is presented below. The detailed description of each alternative is presented in Chapter 2.

ES.3.2 ALTERNATIVE 1 NO-PROJECT/NO-ACTION: EXISTING RIVER AND 18-HOLE REGULATION GOLF COURSE

For the No Project/No Action Alternative, Alternative 1, river restoration and changes to the golf course would not be implemented. This alternative represents a projection of reasonably foreseeable future conditions that could occur if no project actions were implemented. Under Alternative 1, existing conditions in the study area would continue into the future. The reach of the Upper Truckee River within the study area would not be restored and would continue to erode and transport sediment to Lake Tahoe, with repairs to the river and golf course infrastructure performed only on an emergency or as-needed basis. The 18-hole regulation golf course would remain as it currently exists, with an overall footprint of 133 acres, 56 acres in the 100-year floodplain and 123 acres in the SEZ. Five bridges across the Upper Truckee River and four across Angora Creek would remain. Use of the area occupied by the golf course, including cart paths and bridges, would continue without change. There would be no changes to recreational use (trails) in Washoe Meadows SP as a result of Alternative 1.

Alternative 1 does not involve altering the existing boundaries in the Lake Valley SRA or in the Washoe Meadows SP. Although the Lake Valley SRA General Plan calls for river restoration and Alternative 1 would not implement this provision, it does not preclude consideration of restoration in future. An amendment to the General Plan text would not be required for this alternative, because existing river management approaches and land uses, including golf use would not change.

ES.3.3 ALTERNATIVE 2 RIVER ECOSYSTEM RESTORATION WITH RECONFIGURED 18-HOLE REGULATION GOLF COURSE

Alternative 2 involves full geomorphic and ecosystem restoration of the river with a reconfigured 18-hole regulation golf course. A 13,430 foot long reach of the Upper Truckee River and adjoining floodplain would be

restored. Portions of the existing golf course would be removed from the historic meander belt. This would require several golf course holes to be relocated to an area to the west side of the river. Removing golf course uses adjacent to the river would also reduce the amount of SEZ occupied by the golf course and allow for an increase in the active floodplain. All five existing bridges would be removed from the Upper Truckee River and one new, longer bridge would be constructed. Four bridges would also be removed from Angora Creek. New trails would be constructed on both sides of the river. This alternative includes a restroom on the west side of the river, near hole 9 and paving and lighting the unpaved parking area.

Alternative 2 would involve revising the park unit boundaries, essentially "trading" land between Washoe Meadows SP and Lake Valley SRA, and realigning the boundaries between the two park units. The boundaries of Lake Valley SRA would be adjusted to encompass the reconfigured golf course and to generally place the restored riparian areas along the river in Washoe Meadows SP. Revising the park unit boundaries would involve amendment of the Lake Valley SRA General Plan, including appropriate text changes, such as revised management policies for the Lake Valley SRA. The General Plan amendment would modify, where necessary, the application of Lake Valley SRA river protection goals and policies to the reconfigured golf course.

To manage the reconfigured Washoe Meadows SP in a manner consistent with its purpose and to address existing resources, public access, and use issues of this unit, State Parks would prepare and implement an interim management plan. The plan would address resource protection and management, public access, and trails management to protect the quality of important natural and cultural resources and enhance access to the park unit by the public. Because the reconfigured Washoe Meadows SP would have limited areas of high capability land, it is not anticipated that future development other than trails, trailheads and signage would be implemented.

ES.3.4 ALTERNATIVE 3 RIVER ECOSYSTEM RESTORATION WITH REDUCED-PLAY GOLF COURSE

Alternative 3 would involve full geomorphic and ecosystem restoration of the Upper Truckee River and provision of a reduced-play golf course. A 13,430-foot reach of the Upper Truckee River and adjoining floodplain would be restored. The golf course would be reduced in size to remove golf course from much of the historic meander belt, allowing space for the river restoration. Only a reduced-play golf course, such as an 18-hole executive or 9-hole regulation course, would be feasible within the remaining area outside the river restoration. A portion of the existing golf course would be reconfigured on the southeast side of the river, to allow for a buffer between the river and the golf course. No golf holes would be located on the west side of the river. All five bridges would be removed from the Upper Truckee River and four bridges would be removed from Angora Creek. A new trail would be constructed on the southeast side of the river. No construction would occur on the west side of the river in Washoe Meadows SP under Alternative 3 except river restoration within areas of the historic meander belt.

Alternative 3 would reduce the size of the golf course footprint and increase the area of restored riparian area; therefore, changes in the boundaries between Washoe Meadows SP and Lake Valley SRA would be necessary to adjust the SRA boundary to fit the smaller golf course. In keeping with the respective purposes of Washoe Meadows SP and Lake Valley SRA, the boundary of Washoe Meadows SP would be adjusted (in this case, expanded) to encompass all of the restored river and riparian corridor. The current Lake Valley SRA General Plan calls for an 18-hole regulation golf course. The text of the General Plan would need to be amended to allow for development and management of the reduced-play golf course. An Interim Management Plan would be prepared to address resource protection, public access, and use issues in Washoe Meadows SP, and a future planning effort may be undertaken to allow for recreational development of Washoe Meadows SP.

ES.3.5 ALTERNATIVE 4 RIVER STABILIZATION WITH EXISTING 18-HOLE REGULATION GOLF COURSE

Alternative 4 would use a combination of hard and soft stabilization to keep the river in its present configuration and includes only minor changes to the existing golf course, including the addition of a restroom near hole 5 and paving and lighting of the unpaved parking area. It would involve the systematic and extensive installation of bank protection and grade controls within the present river alignment at the existing elevations. While the streambed and streambank protections would be relatively rigid, biotechnical treatments with native riparian vegetation would be incorporated to the maximum extent possible while still ensuring stabilization of the river to minimize erosion. Use of biotechnical treatments would restore some habitat value to the riparian corridor, but would not improve the floodplain function or restore natural geomorphic processes of the river. Because the river would be stabilized in place, the existing 18-hole regulation golf course would remain largely unchanged. Three of the existing Upper Truckee River bridges would remain in place while the two upstream bridges would be replaced by one longer bridge. No changes to Angora Creek or the unnamed creek bridge or to recreational trails would be implemented.

Alternative 4 would not involve changing the configuration of the existing golf course nor modify its footprint; therefore, no changes in the boundaries between Washoe Meadows SP and Lake Valley SRA would be necessary. The existing Lake Valley SRA General Plan statement of purpose calls for "restoring the natural character and ecological values" of the Upper Truckee River. The General Plan's resource policy states that a river management plan shall be implemented that restores a "more natural channel configuration" and "riparian habitat", among other things, and that gives foremost consideration to minimizing "hard engineering." The approach in Alternative 4 with the river largely stabilized in place would be different than the directives of the General Plan for restoring a more natural channel. The use of biotechnical stabilization techniques would improve some riparian habitat values, but they do not minimize hard engineering nor constitute restoration of a natural channel, as contemplated in the General Plan. As a result, the text of the General Plan would need to be revised under this alternative. An Interim Management Plan would be prepared to address resource protection, public access, and use issues in Washoe Meadows SP, and a future planning effort may be undertaken to allow for recreational development of Washoe Meadows SP.

ES.3.6 ALTERNATIVE 5 RIVER ECOSYSTEM RESTORATION WITH DECOMMISSIONED GOLF COURSE

Alternative 5 involves decommissioning and removing the 18-hole regulation golf course to restore all or a portion of the golf course footprint to meadow and riparian habitat. A 13,430-foot reach of the Upper Truckee River and adjoining floodplain would be restored. All five Upper Truckee bridges and four Angora Creek bridges would be removed. Golf holes would be removed from sensitive lands adjacent to the river and the area further away from the river and all or a portion of the footprint would be restored as native meadow and riparian habitat. The clubhouse facility, parking area, and maintenance yard would remain with the clubhouse available for public use to be determined at a later date.

Alternative 5 would eliminate golf recreation on Lake Valley SRA, which is a primary purpose for the SRA. In light of the decommissioning and removal of golf course facilities, the primary purpose of the SRA would be eliminated. Consequently, State Parks would revoke the existing Lake Valley SRA General Plan and reclassify the former SRA to become part of a single unit with Washoe Meadows SP. All land of the former SRA would be classified as state park. Maintaining the unit in perpetuity as an ecosystem restoration area with no public access or outdoor recreation use would not be feasible, recognizing the unmet demand for outdoor recreation in the state and the mission of State Parks. In time, some form of planning for and implementation of public access and/or development of outdoor recreation facilities would need to occur in keeping with the mission of the department.

If economically feasible, a 9-hole golf course may remain temporarily in use while State Parks evaluates whether to initiate planning for alternative State Park uses. If a reduced-play course remains temporarily, it would be physically configured similar to Alternative 3.

ES.3.7 ALTERNATIVES CONSIDERED AND ELIMINATED FROM DETAILED EVALUATION

Alternatives for river treatment were considered during conceptual planning and preliminary assessment of the project prior to initiating the preparation of this draft EIR/EIS/EIS (SH+G 2004a; SH+G 2004b). Also, alternative locations for the golf course have been evaluated in response to public comments. In both cases, some of the considered alternatives were assessed and found to be infeasible in meeting most of the basic project objectives or in reducing a significant impact of the other alternatives. Therefore, they were eliminated from detailed evaluation.

RIVER ALTERNATIVES

As originally described in source documents (SH+G 2004a; SH+G 2004b), some of the river alternatives considered for restoration would extend further upstream and downstream than the alternatives under detailed evaluation. The river alternatives listed below were screened from further consideration and are somewhat, but not entirely, independent of the golf course alternatives that were considered and eliminated from detailed evaluation.

- The Inset Floodplain and Channel Alternative is characterized as an active approach to improve floodplain processes in the study area.
- The High-Sinuosity Restored Channel River Alternative would implement an active approach to restore and improve river channel and floodplain processes in the study area.
- The Selective Bank Stabilization River Alternative would implement streambank stabilization emphasizing biotechnical measures to selected areas and would focus on measures that could be accomplished without extensive in-channel work or the need for extensive heavy equipment use.
- The Focused Channel Stabilization River Alternative would treat only a short reach of the river that is experiencing the worst erosion, namely the reach centered on golf course holes 6 and 7.
- The Passive Restoration River Alternative would apply a passive approach to ecosystem enhancement along the Upper Truckee River channel in the study area.

ALTERNATIVE LOCATIONS FOR THE GOLF COURSE

A process of map review and agency consultation was conducted to identify potentially feasible alternative locations for the Lake Tahoe Golf Course. The search area for the potential golf course sites was the south shore of Lake Tahoe in California, including the City of South Lake Tahoe and surrounding areas within El Dorado County. Land in the State of Nevada was not included in the search because State Parks only has authority within the State of California.

All potential site locations identified through the map review and consultation process were evaluated to determine each site's ability to meet the project's purpose and need and the siting criteria. To qualify as a feasible alternative location for the golf course in the draft EIR/EIS/EIS, an alternative site must meet the project's purpose and need and most of its basic objectives, and be feasible in light of the siting criteria. The alternative site locations evaluated are listed below.

- Sunset Ranch
- Upper Truckee River Marsh
- Across U.S. 50
- Old Meyers Landfill Area
- Across Sawmill Road
- South of Sawmill Road
- Lake Tahoe Community College
- National Forest Lands North
- National Forest Lands South
- Paradise Park
- Tahoe Paradise Golf Course Area

The comprehensive evaluation of potentially feasible alternative locations for the golf course determined that no feasible alternative location is available. As a result and as directed by the State CEQA Guidelines, more detailed analysis of an alternative location beyond that presented in Chapter 2, "Project Alternatives"is not presented in the draft EIR/EIS/EIS.

ES.4 KEY ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, ISSUES TO BE RESOLVED, AND AREAS OF CONTROVERSY

This draft EIR/EIS/EIS is a full-scope environmental document that evaluates a broad range of potential environmental impacts at a comparable level of detail for all five alternatives. The analysis identifies and addresses several key environmental issues where significant or potentially significant effects on the environment would occur. Where significant or potentially significant impacts are identified, the document describes feasible mitigation measures. The summary of impacts and mitigation measures is presented in Table ES-1 below.

Regarding issues to be resolved and areas of controversy (a requirement of CEQA for the summary), several issues have been the subject of public and/or affected agency interest. These are the key issues for which controversy may arise or that will require resolution during the consideration of a preferred alternative. The issues are summarized, as follows:

- Removal of habitat, including tree removal, within Washoe Meadows SP (Alternative 2)
- Placement of golf facilities in Washoe Meadows SP (Alternative 2)
- Reduction or loss of golf recreation opportunities (Alternatives 3 and 5)
- Short-term risks of erosion, turbidity, and water quality impacts from construction associated with river restoration and maturation period following construction (Alternatives 2, 3, and 5)
- Changes is public access for dispersed recreation in Washoe Meadows SP (Alternatives 2, 3, 4, and 5)
- Potential for noise and scenic impacts to nearby residences from golf facilities relocated to the west side of the river (Alternative 2)

A summary of environmental impacts and mitigation measures for the alternatives addressed in the draft EIR/EIS/EIS is presented in the following table.

Table ES-1
Summary of Impacts and Mitigation Measures

Resource Topic/Impact	Alt[1]	Impact Duration[2]	Quantification/Relative Magnitude of Impact[3]	LOS before Mitigation[4]	Mitigation Measure	LOS after Mitigation[5]
Land Use						
3.2-1 Potential to Physically Divide an Established Community.	1	ST & LT	NA	NI	No Mitigation Required	NI
	2 - 5	LT	Similar to Alt. 1 but greater	LTS	No Mitigation Required	LTS
3.2-2 Potential Conflict with Land Use Plans, Policies, or Regulations Intended to Protect the Environment.	1 - 5	LT	Qualitative analysis	LTS	No Mitigation Required	LTS
3.2-3 Potential Conflict with State Parks Plans, Policies, and Regulations.	1 - 5	LT	Qualitative analysis	LTS	No Mitigation Required	LTS
Hydrology and Flooding						
3.3-1 Long-Term Increase in Stormwater Runoff Volumes.	1	LT	NA	NI	No Mitigation Required	NI
	2 & 4	LT	Qualitative analysis, greater than Alt. 1	PS	Provide On-Site Storm Drainage Facilities and Accompanying Stormwater Drainage Plan to Prevent Damage from Increased Runoff Discharged to Creek or River Channels.	LTS
	3 & 5	LT	Qualitative analysis, less than Alt. 1 and Alt. 2	B	No Mitigation Required	B
3.3-2 Long-Term Increase in Peak Flows Generated or Released Downstream.	1 & 4	LT	Little to no change in peak flows	LTS	No Mitigation Required	LTS
	2, 3, & 5	LT	Reduction in peak flows released to downstream Upper Truckee River reaches	B	No Mitigation Required	B

Notes: 1 – Alt = Alternative
2 – NA = not applicable, ST (short-term) = construction-related or otherwise persisting from one to several years, LT (long-term) = persisting for years to decades
3 – LOS = level of significance, NI = No Impact, LTS = Less than significant, PS = Potentially Significant, S = Significant, B= Beneficial, TSMSC = Too Speculative for a Meaningful Significance Conclusion
4 – SU = Significant Unavoidable

Table ES-1
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Resource Topic/Impact	Alt[1]	Impact Duration[2]	Quantification/Relative Magnitude of Impact[3]	LOS before Mitigation[4]	Mitigation Measure	LOS after Mitigation[5]
3.3-3 Long-Term Increase in Overbanking during Small to Moderate Flood Events.	1 & 4	LT	Little to no change in overbanking	LTS	No Mitigation Required	LTS
	2, 3, & 5	LT	Increase in frequency of overbanking	B	No Mitigation Required	B
3.3-4 Long-Term Increase in the 100-Year Flood Hazard Area or Elevation.	1 & 4	LT	Little to no change in streambed elevation	LTS	No Mitigation Required	LTS
	2, 3, & 5	LT	Streambed would be elevated by 2–4 feet in many locations	PS	Prevent Detrimental Increases in the Future Water Surface Elevation or Area of the 100-Year Flood.	LTS
3.3-5 Long-Term Modification of Groundwater Levels and Flow Patterns.	1 & 4	LT	Little to no change in groundwater levels or flow patterns	LTS	No Mitigation Required	LTS
	2, 3, & 5	LT	Raise in groundwater elevations expected	B	No Mitigation Required	B
3.3-6 Long-Term Reduction of Irrigation-Water Demand.	1, 2, & 4	LT	Little to no change in irrigation-water demand	LTS	No Mitigation Required	LTS
	3 & 5	LT	Reduced irrigation-water demand	B	No Mitigation Required	B
Geomorphology and Water Quality						
3.4-1 Stream Channel Erosion within the Study Area.	1	ST & LT	Total fine sediment load 4,320 cubic yards	LTS	No Mitigation Required	LTS

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Table ES-1
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Resource Topic/Impact	Alt[1]	Impact Duration[2]	Quantification/Relative Magnitude of Impact[3]	LOS before Mitigation[4]	Mitigation Measure	LOS after Mitigation[5]
	2, 3, & 5	ST & LT	Total fine sediment load 3,885 cubic yards	PS	A. Provide Bed and Bank Stabilization Measures at and Immediately Upstream and Downstream of Bridge Removal Sites. B. Ensure Bed and Bank Stability Downstream of the Treated Reaches. C. Ensure Bed and Bank Stability in the Lower Reaches of the Two Tributary Creeks.	LTS
	4	ST & LT	Total fine sediment load 3,638	PS	Provide Bed and Bank Stabilization Measures at and Immediately Upstream and Downstream of Bridge Removal Sites.	LTS
3.4-2 Risk of Channel Erosion Damage to Sewer Pipelines.	1 & 4	ST & LT	Qualitative analysis	LTS	No Mitigation Required	LTS
	2, 3, & 5	ST & LT	Qualitative analysis	PS	A. Protect Vulnerable Portions of the Sewer Pipeline up to the 100-Year Flood Event. B. Verify Utility Locations, Coordinate with Utility Providers, Prepare and Implement a Response Plan, and Conduct Worker Training with Respect to Accidental Utility Damage. C. Ensure Bed and Bank Stability in the Lower Reaches of the Two Tributary Creeks.	LTS
3.4-3 Long-Term Increased Surface/Soil Erosion within the Study Area.	1, 3, 4, & 5	LT	Qualitative analysis	LTS	No Mitigation Required	LTS
	2	LT	Qualitative analysis	B	No Mitigation Required	B
3.4-4 Fine Sediment and Nutrient Retention within the Study Area.	1 & 4	ST & LT	36-acre active floodplain	LTS	No Mitigation Required	LTS
	2, 3, & 5	ST & LT	57-acre active floodplain	B	No Mitigation Required	B

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Resource Topic/Impact	Alt[1]	Impact Duration[2]	Quantification/Relative Magnitude of Impact[3]	LOS before Mitigation[4]	Mitigation Measure	LOS after Mitigation[5]
3.4-5 Modifications in Upper Truckee River Coarse Sediment Transport and Delivery Downstream.	1	ST & LT	Qualitative analysis	TSMSC	No Mitigation Required	TSMSC
	2, 3, & 5	ST & LT	Raise streambed profile by up to 1 to 3 feet	PS	Monitor and Supplement Coarse Sediment Delivery Downstream.	LTS
	4	ST & LT	Raise portions streambed profile up to 1.3 feet	LTS	No Mitigation Required	LTS
3.4-6 Short-Term Risk of Surface Water or Groundwater Degradation during Construction.	1	ST	Qualitative analysis	LTS	No Mitigation Required	LTS
	2, 3, 4, & 5	ST	Qualitative analysis	PS	Prepare and Implement Effective Site Management Plans.	SU
3.4-7 Short-Term Risk of Surface Water or Groundwater Degradation Following Construction.	1	ST	Qualitative analysis	LTS	No Mitigation Required	LTS
	2, 3, 4, & 5	ST	Qualitative analysis	PS	A. Minimize Fine Sediment and Organic Material Available for Mobilization. B. Adaptively Manage Potential Flood Damage in the Interim Period after Construction.	SU
3.4-8 Risks of Surface Water and Groundwater Contamination from Golf Course Operations.	1, 3, 4, & 5	ST & LT	Qualitative analysis	LTS	No Mitigation Required	LTS
	2	ST & LT	Qualitative analysis	PS	Prevent Water Quality Degradation from Golf Course Operations.	LTS

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Resource Topic/Impact	Alt[1]	Impact Duration[2]	Quantification/Relative Magnitude of Impact[3]	LOS before Mitigation[4]	Mitigation Measure	LOS after Mitigation[5]
Biological Resources						
3.5-1 Short-Term Degradation of Fish and Aquatic Habitat Resulting from Construction and Initial Channel Response.	1	ST	Qualitative analysis	LTS	No Mitigation Required	LTS
	2, 3, 4, & 5	ST	Qualitative analysis, greater than Alt. 1	S	A. Prepare and Implement Effective Site Management Plans. B. Implement Preconstruction Surveys for Western Pearlshell Mussels. C. Develop and Implement Native-Fish and Mussel Capture and Translocation Plan. D. Limit Potential Localized Channel Erosion in the Upper Truckee River and Tributary Creeks. E. Provide Bed and Bank Stabilization Measures at Bridge Removal Sites. F. Ensure Bed and Bank Stability Downstream of the Treated Reaches. G. Ensure Bed and Bank Stability in the Lower Reaches of the Two Tributary Creeks. H. Monitor and Supplement Coarse-Sediment Delivery Downstream and Monitor Instream Habitat Conditions.	LTS
3.5-2 Long-Term Changes to Fish and Aquatic Habitat.	1	LT	0 acres of floodplain and meadow restored	LTS	No Mitigation Required	LTS
	2, 3, 4, & 5	LT	Alt. 2 - restore approx. 97 acres of floodplain; Alt. 3 – restore 112 acres of floodplain; Alt. 4 – restore 0.4 acre of floodplain; Alt. 5 – restore 131.5 acres of floodplain meadow vegetation	B	No Mitigation Required	B

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3.5-3 Short-Term, Construction-Related Disturbance or Loss of Sensitive Habitats (Jurisdictional Wetlands, Riparian Vegetation, Fens, and SEZ).	1	ST	Qualitative analysis	LTS	No Mitigation Required	LTS
	2, 3, 4, & 5	ST	Filling approx. 2,600 ft of existing channel	S	A. Conduct Delineation of Waters of the United States and Obtain Authorization for Fill and Required Permits. B. Implement Vegetation Protection Measures and Revegetate Disturbed Areas. C. Avoid Effects on the Spring Complexes (Including Fens) through Final Project Design and Implement Protection Measures During Project Construction.	LTS
3.5-4 Short-Term, Construction-Related Disturbance or Removal of Special-Status Plants.	1	ST	Qualitative analysis	LTS	No Mitigation Required	LTS
	2, 3, 4, & 5	ST	Qualitative analysis	PS	Conduct Follow-up, Pre-construction, Protocol-Level Surveys and Avoid, Minimize, or Compensate for Impacts on Special-Status Plants.	LTS
3.5-5 Long-Term Effects on Sensitive Habitats (Jurisdictional Wetlands, Riparian Vegetation, Fens and SEZ) and Special-Status Plant Species.	1	LT	123 acres of SEZ would continue to be occupied by golf course	LTS	No Mitigation Required	LTS
	2, 3, 4, & 5	LT	Alt. 2 - restore approx. 97 acres of floodplain, 37 acres SEZ & 0.5-acre wetlands; Alt. 3 – restore 112 acres of floodplain, 43 acres SEZ, & 0.75-acre wetland; Alt. 4 – restore 0.4 acre of floodplain; Alt. 5 – restore 131.5 acres of floodplain meadow vegetation & 123 acres SEZ	B	No Mitigation Required	B

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3.5-6 Tree Removal and Forest Land Conversion.	1	ST & LT	Qualitative analysis	LTS	No Mitigation Required	LTS
	2, 3, 4, & 5	ST & LT	Alt. 2 – removal of 1,640 native trees over 10 in. dbh; Alt. 3 – removal of 253 trees over 10 in. dbh; Alt. 4 – removal of 555 trees over 10 in. dbh; Alt. 5 – removal of 245 trees over 10 in. dbh	S	Minimize Tree Removal and Develop a Tree Removal and Management Plan.	LTS
3.5-7 Introduction and Spread of Weeds and Aquatic Invasive Species.	1	ST & LT	Qualitative analysis	LTS	No Mitigation Required	LTS
	2, 3, 4, & 5	ST & LT	Qualitative analysis	PS	A. Implement Weed Management Practices during Project Construction. B. Implement Aquatic Invasive Species Management Practices during Project Construction.	LTS
3.5-8 Short-Term, Construction-Related Disturbance or Loss of Special-Status Wildlife Species and Habitats.	1	ST	Golf Course would continue to occupy 123 acres of SEZ	LTS	No Mitigation Required	LTS
	2, 3, 4, & 5	ST	Qualitative analysis	S	A. Conduct Preconstruction Surveys for Nesting Special-Status Birds (Yellow Warbler, Willow Flycatcher, Olive-Sided Flycatcher, Waterfowl, and Long-Eared Owl), and Implement a Limited Operating Period If Necessary. B. Conduct Preconstruction Surveys for Special-Status Bats, Avoid Removal of Important Roosts, and Implement a Limited Operating Period If Necessary.	LTS

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3.5-9 Long-Term Effects on Special-Status and Common Wildlife Species and Habitats.	1	LT	Qualitative analysis	LTS	No Mitigation Required	LTS
	2	LT	97 acres of floodplain & meadow & 37 acres SEZ restored; approx. 60 acres of lodgepole pine forest, Jeffrey pine forest, dry meadow, sagebrush dry meadow, and other vegetation types would be removed	LTS	No Mitigation Required	LTS
	3, 4, & 5	LT	Alt. 3 – 119 acres of floodplain & meadow & 43 acres SEZ restored, 0 acres of habitat removed; Alt. 4 – 0.4-acre floodplain created, 0 acres of habitat removed; Alt. 5 - 123 acres of SEZ, 56 acres floodplain & 133 acres of floodplain/meadow restored, 0 acres of habitat removed	B	No Mitigation Required	B
3.5-10 Effects on Potential Wildlife Movement Corridors.	1	ST & LT	Qualitative analysis	LTS	No Mitigation Required	LTS
	2	ST & LT	Remove/fragment 60 acres of habitat	B/LTS	No Mitigation Required	B/LTS
	3, 4, & 5	ST & LT	0 acres habitat removed/fragmented	B	No Mitigation Required	B

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Earth Resources						
3.6-1 Soil Erosion, Sedimentation and Loss of Topsoil.	1	ST & LT	Qualitative analysis	LTS	No Mitigation Required	LTS
	2, 3, 4 & 5	ST & LT	Qualitative analysis	PS	A. Prepare and Implement Effective Site Management Plans B. Provide On-Site Storm Drainage Facilities and Accompanying Stormwater Drainage Plan to Prevent Surface Erosion from Discharging to Creek or River Channels.	LTS
3.6-2 Risks to People and Structures Caused by Strong Seismic Ground Shaking**.**	1, 3, & 5	ST & LT	Qualitative analysis	LTS	No Mitigation Required	LTS
	2 & 4	ST & LT	Qualitative analysis	PS	Prepare a Final Geotechnical Engineering Report, and Implement All Applicable Recommendations.	LTS
3.6-3 Land Coverage Changes.	1	LT	416,353 sf of coverage in LCD 1b, 141,582 sf of coverage within LCD 1c, 56,365 sf of coverage in LCD 3, 122,430 sf of coverage in LCD 5, 0 sf of coverage in LCD 1a, 6, & 7	LTS	No Mitigation Required	LTS
	2	LT	353,250 sf of coverage in LCD 1b, 59,282 sf of coverage in LCD 1c, 56,365 sf of coverage in LCD 3, 142,208 sf of coverage in LCD 5, 0 acres of coverage in LCD 1a, 6, & 7	B	No Mitigation Required	B

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	3	LT	351,094 sf of coverage in LCD 1b, 141,582 sf of coverage in LCD 1c, 56,365 sf in LCD 3, 21,231 sf of coverage in LCD 5, 0 sf of coverage in LCD 1a, 6, & 7	B	No Mitigation Required	B
	4	LT	443,936 sf of coverage in LCD 1b, 180,870 sf of coverage in LCD 1c, 55,810 sf of coverage in LCD 3, 189,574 sf of coverage in LCD 5, 0 sf of coverage in LCD 1a, 6, & 7	LTS	No Mitigation Required	LTS
	5	LT	241,354 sf of coverage in LCD 1b, 141,582 sf of coverage in LCD 1c, 56,365 sf of coverage in LCD 3, 121,431 sf of coverage in LCD 5, 0 sf of coverage in LCD 1a, 6 & 7	B	No Mitigation Required	B
3.6-4 Result in Loss of Availability of Known Mineral Resources.	1 & 2	ST & LT	Qualitative analysis	LTS	No Mitigation Required	LTS
	3, 4, & 5	ST & LT	NA	NI	No Mitigation Required	NI
Scenic Resources						
3.7-1 Potential for Short-Term Degradation of the Existing Visual Character, Existing Visual Quality, or Scenic Quality of Roadway Travel Unit 36B.	1 - 5	ST	Continued river erosion and repairs	LTS	No Mitigation Required	LTS

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3.7-2 Potential for Long-Term Degradation of the Existing Visual Character, Existing Visual Quality, or Scenic Quality of Roadway Travel Unit 36B.	1, 3, 4, & 5	P	Continued river erosion and repairs	LTS	No Mitigation Required	LTS
	2	P	Degraded visual character and quality of the study area	S	Prepare and Implement a Landscaping and Forest Management Plan.	LTS
3.7-3 Potential for Increases in Light or Glare.	1, 3, & 5	ST & LT	NA	NI	No Mitigation Required	NI
	2 & 4	LT	Similar to Alt. 1 but greater	LTS	No Mitigation Required	LTS
Recreation						
3.8-1 Reduction in Recreation Opportunities, Uses, and Experiences Related to Golf.	1, 2, & 4	ST & LT	Beneficial or no change in golf opportunities	LTS	No Mitigation Required	LTS
	3 & 5	ST & LT	Partial or complete elimination of golf course	S	No Mitigation Required	SU
3.8-2 Reduction in Recreation Opportunities, Uses, and Experiences Related to Spring/Summer/Fall Outdoor Recreation.	1 - 5	ST & LT	Alt. 2 - 2.6 miles of volunteer trails removed, 1.4 miles of new designated trail; Alt. 3 - 0.75 miles of volunteer trails removed, 1 mile of new designated trails; Alt. 4 – 0 miles volunteer trails removed, 0 miles of new designated trails; Alt. 5 – 0.75 miles of volunteer trails removed; 0 miles new designated trail	LTS	No Mitigation Required	LTS

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3.8-3 Reduction in Recreation Opportunities, Uses, and Experiences Related to Winter Recreation.	1	ST & LT	NA	NI	No Mitigation Required	NI
	2, 3, 4 & 5	ST & LT	Similar to Alt. 1 but greater with Alternative 5 having the largest reduction by removal of winter snowmobiling on the driving range	LTS	No Mitigation Required	LTS
3.8-4 Increased Use of Recreation Facilities and Demand for Recreation Opportunities in the Study Area.	1, 2, & 4	ST & LT	Recreation opportunities would improve or remain unchanged	LTS	No Mitigation Required	LTS
	3 & 5	ST & LT	Recreation opportunities would be reduced; however, not substantially	LTS	No Mitigation Required	LTS
Cultural Resources						
3.9-1 Damage to or Destruction of Significant Documented Cultural Resources.	1,3,4 & 5	ST	NA	NI	No Mitigation Required	NI
	2	ST	Qualitative analysis, greater than Alt. 1	PS	Avoid Impacts to Documented Significant Cultural Resources (CA-Eld-2158, CA-Eld-2160, and CA-Eld-555) through a Combination of Site Capping, Project Redesign, and Archaeological/Washoe Tribe Monitoring.	LTS
3.9-2 Damage to or Destruction of As-Yet Undiscovered Cultural Resources.	1	ST	NA	NI	No Mitigation Required	NI
	2, 3, 4, & 5	ST	Qualitative analysis, greater than Alt. 1	PS	Stop Work and Implement Measures to Protect Cultural Resources Discovered during Ground-Disturbing Activities.	LTS

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3.9-3 Discovery of Human Remains.	1	ST	NA	NI	No Mitigation Required	NI
	2, 3, 4, & 5	ST	Qualitative analysis, greater than Alt. 1	PS	Stop Work and Comply with Relevant State Laws if Human Remains are Uncovered during Construction.	LTS
Transportation, Parking, and Circulation						
3.10-1 Increased Construction Traffic on the Local and Regional Circulation System.	1	ST	NA	NI	No Mitigation Required	NI
	2 - 5	ST	Alt. 2 - 5,758 total truck trips; Alt. 3 - 4,470 total truck trips; Alt. 4 - 6,868 total truck trips; Alt. 5 - 3,712 total truck trips	LTS	No Mitigation Required	LTS
3.10-2 Contribution to Deterioration of Local Streets.	1	ST & LT	Qualitative analysis	LTS	No Mitigation Required	LTS
	2, 3, 4, & 5	ST & LT	Qualitative analysis	S	Survey Pavement Conditions and Repair Damage.	LTS
3.10-3 Potential for Conflicts between Construction Traffic and Local Traffic, Pedestrians, and Bicycles.	1	ST	Qualitative analysis	LTS	No Mitigation Required	LTS
	2, 3, 4 & 5	ST	Qualitative analysis, greater than Alt. 1	S	Construction Traffic Management Plan.	LTS
3.10-4 Operational Traffic Impacts on the Local and Regional Circulation System.	1, 3, 4 & 5	LT	NA	NI	No Mitigation Required	NI
	2	LT	3-4 additional daily truck trips	LTS	No Mitigation Required	LTS

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Air Quality						
3.11-1 Short-Term Emissions of Criteria Air Pollutants and Precursors during Construction.	1	ST	NA	NI	No Mitigation Required	NI
	2, 3, & 4	ST	Alt. 2 - max of 19 lb/day ROG, 169 lb/day NO_X, and 426 lb/day PM_{10}, Alt. 3 – max of 11 lb/day ROG, 108 lb/day NO_X, and 335 lb/day PM_{10}, Alt. 4 – max of 15 lb/day ROG, 135 lb/day NO_X, and 43 lb/day PM_{10}	S	Reduce the Generation of Construction-Related Emissions of ROG, NO_X, and PM_{10}.	LTS
	5	ST	Max of 10 lb/day ROG, 97 lb/day NO_X, and 417 lb/day PM_{10}	S	Reduce the Generation of Construction-Related Emissions of ROG, NO_X, and PM_{10}.	LTS
3.11-2 Long-Term Operational (Regional) Emissions of Criteria Air Pollutants and Precursors.	1	LT	NA	NI	No Mitigation Required	NI
	2, 3, 4, & 5	LT	Less than 1 lb/day of ROG, NO_X, PM_{10}, and SO_X, 3 lb/day of CO	LTS	No Mitigation Required	LTS
3.11-3 Long-Term Operational (Local) Emissions of Carbon Monoxide by Mobile Sources	1	LT	NA	NI	No Mitigation Required	NI
	2, 3, 4, & 5	LT	Would not reduce the LOS at any intersections	LTS	No Mitigation Required	LTS
3.11-4 Exposure of Sensitive Receptors to Odors	1	ST & LT	NA	NI	No Mitigation Required	NI
	2, 3, 4, & 5	ST & LT	Qualitative analysis	LTS	No Mitigation Required	LTS
3.11-5 Exposure of Sensitive Receptors to Emissions of Hazardous Air Pollutants	1	ST & LT	NA	NI	No Mitigation Required	NI
	2, 3, 4, & 5	ST & LT	12 lb/day of diesel PM exhaust	LTS	No Mitigation Required	LTS

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Noise						
3.12-1 Short-Term Project Construction Noise Levels Exceeding Applicable Standards.	1	ST	NA	NI	No Mitigation Required	NI
	2, 3, 4, & 5	ST	77 to 101 dBA L_{max} at 50 feet without feasible noise controls	LTS	No Mitigation Required	LTS
3.12-2 Long-Term Project-Related Generation of Stationary- and Area-Source Noise.	1	LT	NA	NI	No Mitigation Required	NI
	2, 3, 4, & 5	LT	Maximum increase of approx. 1.3 dBA CNEL above existing noise levels	LTS	No Mitigation Required	LTS
3.12-3 Long-Term Generation of Project-Related Traffic Noise.	1	LT	NA	NI	No Mitigation Required	NI
	2, 3, 4, & 5	LT	Similar to Alt. 1 but slightly greater	LTS	No Mitigation Required	LTS
3.12-4 Land Use Compatibility of Study Area Noise Levels and Surrounding Land Uses.	1	LT	NA	NI	No Mitigation Required	NI
	2, 3, 4, & 5	LT	Similar to Alt. 1	LTS	No Mitigation Required	LTS
3.12-5 Short- and Long-Term Increases in Groundborne Vibration Levels.	1	ST & LT	NA	NI	No Mitigation Required	NI
	2, 3, 4, & 5	ST & LT	Approx. 0.01 in/sec PPV and 70 VdB would occur at 600 feet	LTS	No Mitigation Required	LTS
Public Services and Utilities						
3.13-1 Temporary Disruption of Public Services during Construction.	1	ST	NA	NI	No Mitigation Required	NI
	2, 3, 4, & 5	ST	Qualitative analysis, greater than Alt. 1	PS	Incorporate Public Service and Emergency Access Provisions in the Construction Traffic Management Plan.	LTS

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3.13-2 Temporary Disruption or Damage of Utility Services during Construction and Risk of Damage to Sewer Pipelines.	1	ST	Qualitative analysis	LTS	No Mitigation Required	LTS
	2, 3, 4, & 5	ST	Qualitative analysis, greater than Alt. 1	PS	A. Verify Utility Locations, Coordinate with Utility Providers, Prepare and Implement a Response Plan, and Conduct Worker Training with Respect to Accidental Utility Damage. B. Protect Vulnerable Portions of the Sewer Pipeline from the 100-Year Flood Event.	LTS
3.13-3 Increased Demand for Electrical and Wastewater Service and Water Supply, Treatment, Distribution, and Storage.	1	LT	NA	NI	No Mitigation Required	NI
	2 & 4	LT	Small increase in water & electrical demand	LTS	No Mitigation Required	LTS
	3 & 5	LT	Decrease in water & electrical demand	LTS	No Mitigation Required	LTS
Human Health and Risk of Upset						
3.14-1 Use of Hazardous Materials.	1	ST & LT	NA	NI	No Mitigation Required	NI
	2, 3, 4, & 5	ST & LT	Qualitative analysis, greater than Alt. 1	LTS	No Mitigation Required	LTS
3.14-2 Potential Human Health Hazards from Exposure to Existing On-Site Hazardous Materials.	1	ST & LT	Qualitative analysis	LTS	No Mitigation Required	LTS
	2, 3, 4, & 5	ST & LT	Qualitative analysis, greater than Alt. 1	PS	Implement Measures to Reduce the Risk of Health Hazards Associated with Potential Exposure to Hazardous Substances.	LTS
3.14-3 Potential for Hazardous Emissions or Handling of Hazardous or Acutely Hazardous Materials, Substances, or Waste within One-Quarter Mile of an Existing or Proposed School.	1	ST & LT	In proximity to one school.	LTS	No Mitigation Required	LTS
	2, 3, 4, & 5	ST & LT	In proximity to one school. Greater than Alt. 1	PS	Notify Applicable School District with Jurisdiction over Schools within One-Quarter Mile of Project Construction Activities.	LTS

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3.14-4 Increased Exposure to Wildland Fire Hazard.	1	LT	NA	NI	No Mitigation Required	NI
	2, 3, 4, & 5	LT	Qualitative analysis	LTS	No Mitigation Required	LTS
3.14-5 Potential to Result in More Frequent Collisions between Aircraft and Wildlife at Lake Tahoe Airport.	1 - 5	LT	Qualitative analysis	LTS	No Mitigation Required	LTS
3.14-6 Potential Increase in Public Health Hazards from Mosquitoes Resulting from Increased Floodplain Inundation.	1	LT	NA	NI	No Mitigation Required	NI
	2, 3, & 5	LT	Increasing floodplain by 21 acres	PS	Establish and Implement a Management Agreement with the El Dorado County Vector Control District.	LTS
	4	LT	Increasing floodplain by 0.4 acre	LTS	No Mitigation Required	LTS
Population and Housing, Socioeconomics, and Environmental Justice						
3.15-1 Population, Employment, and Housing.	1	ST & LT	NA	NI	No Mitigation Required	NI
	2 & 4	ST & LT	0 – 4 additional employees	LTS	No Mitigation Required	LTS
	3 & 5	ST & LT	29 – 70 jobs lost	LTS	No Mitigation Required	LTS
3.15-2 Economic Impact on the Community.	1 & 4	ST & LT	NA	NI	No Mitigation Required	NI
	2	ST & LT	Revenue increase by $20,000	B	No Mitigation Required	B
	3 & 5	ST & LT	Revenue reduced between $900,000 and $8.0 million	Adverse	No Mitigation Required	Adverse
3.15-3 Environmental Justice.	1 - 5	ST & LT	NA	NI	No Mitigation Required	NI
3.15-4 Fiscal Impact on State Parks.	1 & 4	ST & LT	NA	NI	No Mitigation Required	NI
	2	ST & LT	Approx. $6,000 increased revenue	No Adverse Effect	No Mitigation Required	No Adverse Effect

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	3 & 5	ST & LT	Decrease in revenue between $23,000 and $881,000	Adverse	No Mitigation Required	Adverse
Cumulative Impacts						
3.16-1 Cumulative Land Use — Potential to Physically Divide an Established Community or Conflict with Land Use Plans, Policies, and Regulations.	1 – 5	ST & LT	Qualitative analysis	LTS	No Mitigation Required	LTS
3.16-2 Cumulative Hydrology and Flooding – Long-Term Increased Stormwater Runoff Volumes and Long-Term Increased Peak Flows Generated or Released Downstream.	1 – 5	LT	Qualitative analysis	LTS	No Mitigation Required	LTS
3.16-3 Cumulative Hydrology and Flooding – Long-Term Increased Overbanking during Small to Moderate Flood Events.	1 – 5	LT	Qualitative analysis	LTS	No Mitigation Required	LTS
3.16-4 Cumulative Hydrology and Flooding – Long-Term Increased 100-Year Flood Hazard Area or Elevation.	1 – 5	LT	Qualitative analysis	LTS	No Mitigation Required	LTS
3.16-5 Cumulative Hydrology and Flooding – Long-Term Modified Groundwater Levels and Flow Patterns.	1 – 5	LT	Qualitative analysis	B	No Mitigation Required	B
3.16-6 Cumulative Geomorphology and Water Quality – Long-Term Stream Channel Erosion.	1 – 5	LT	Qualitative analysis	B	No Mitigation Required	B

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3 – LOS = level of significance, NI = No Impact, LTS = Less than significant, PS = Potentially Significant, S = Significant, B= Beneficial, TSMSC = Too Speculative for a Meaningful Significance Conclusion
4 – SU = Significant Unavoidable

Table ES-1
Summary of Impacts and Mitigation Measures

Resource Topic/Impact	Alt[1]	Impact Duration[2]	Quantification/Relative Magnitude of Impact[3]	LOS before Mitigation[4]	Mitigation Measure	LOS after Mitigation[5]
3.16-7 Cumulative Geomorphology and Water Quality – Long-Term Fine Sediment and Nutrient Retention.	1 – 5	LT	Qualitative analysis	B	No Mitigation Required	B
3.16-8 Cumulative Geomorphology and Water Quality – Long-Term Modifications in Upper Truckee River Coarse Sediment Transport and Delivery Downstream.	1 – 5	LT	Qualitative analysis	TSMSC	No Mitigation Required	TSMSC
3.16-9 Cumulative Geomorphology and Water Quality – Short-Term Risk of Surface Water or Groundwater Degradation during Construction.	1 – 5	ST	Qualitative analysis	PS	All feasible mitigation has been incorporated into the individual restoration project plans and construction BMPs for specific projects. Additional feasible cumulative impact mitigation is not available.	SU
3.16-10 Cumulative Geomorphology and Water Quality – Short-Term Risk of Surface Water or Groundwater Degradation Following Construction.	1 – 5	ST	Qualitative analysis	PS	A. Implement Alternative-Specific Measures to Minimize or Correct Temporary Water Quality Effects Following Construction. B. Implement an Interim Adaptive Management Plan on the Upper Truckee River.	SU
3.16-11 Cumulative Biological Resources – Short-Term Effects on Fisheries and Aquatic Resources.	1 - 5	ST	Qualitative analysis	PS	A. Implement Alternative-Specific Measures to Minimize or Correct Temporary Water Quality Effects after Construction. B. Implement an Interim Adaptive Management Plan on the Upper Truckee River.	LTS
3.16-12 Cumulative Biological Resources – Long-Term Effects on Fisheries and Aquatic Resources.	1 – 5	LT	Qualitative analysis	B	No Mitigation Required	B

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Resource Topic/Impact	Alt[1]	Impact Duration[2]	Quantification/Relative Magnitude of Impact[3]	LOS before Mitigation[4]	Mitigation Measure	LOS after Mitigation[5]
3.16-13 Cumulative Biological Resources Vegetation and Wildlife – Effects on Introduction and Spread of Invasives.	1 – 5	ST & LT	Qualitative analysis	LTS	No Mitigation Required	LTS
3.16-14 Cumulative Biological Resources – Effects on Special-Status Plants and Sensitive Habitats (Jurisdictional Wetlands, Riparian Vegetation, and SEZ).	1 – 5	ST & LT	Qualitative analysis	B/TSMSC	No Mitigation Required	B/TSMSC
3.16-15 Cumulative Biological Resources – Tree Removal and Forest Land Conversion.	1 - 5	LT	Alt. 2 - remove 45 acres of conifer forest; Alts. 1, 3, 4, & 5 less impact than Alt. 2, acres removed unknown	LTS	No Mitigation Required	LTS
3.16-16 Cumulative Biological Resources – Effects on Common or Special-Status Wildlife Resources.	1 – 5	LT	Qualitative analysis	B	No Mitigation Required	B
3.16-17 Cumulative Earth Resources – Soil Erosion, Sedimentation, and Loss of Topsoil.	1 – 5	ST & LT	Qualitative analysis	LTS	No Mitigation Required	LTS
3.16-18 Cumulative Earth Resources – Land Coverage Changes.	1 – 5	LT	Alts. 2, 3, & 5 - decrease coverage in LCD 1b; Alt. 4 - slight increase in coverage within LCD 1b	LTS	No Mitigation Required	LTS
3.16-19 Cumulative Scenic Resources — Short-Term and Long-Term Impacts on the Existing Visual Character.	1 – 5	ST & LT	Qualitative analysis	LTS	No Mitigation Required	LTS
3.16-20 Cumulative Scenic Resources — Potential for Increase of Light and Glare.	1 – 5	ST & LT	Qualitative analysis	LTS	No Mitigation Required	LTS

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Resource Topic/Impact	Alt[1]	Impact Duration[2]	Quantification/Relative Magnitude of Impact[3]	LOS before Mitigation[4]	Mitigation Measure	LOS after Mitigation[5]
3.16-21 Cumulative Recreation Resources — Short-Term and Long-Term Reductions in Golf and Spring, Summer, Fall, and Winter Outdoor Recreation Opportunities.	1 – 5	ST & LT	Qualitative analysis	LTS	No Mitigation Required	LTS
3.16-22 Cumulative Cultural Resources – Damage to or Destruction of Significant Documented Cultural Resources, As-Yet Undiscovered Cultural Resources, or Human Remains.	1 – 5	ST & LT	Qualitative analysis	LTS	No Mitigation Required	LTS
3.16-23 Cumulative Transportation, Parking, and Circulation – Construction and Operation Impacts on the Local and Regional Circulation System.	1 - 5	ST	Qualitative analysis	LTS	No Mitigation Required	LTS
3.16-24 Cumulative Air Quality — Generation of Short-Term Construction-Related Emissions of Criteria Air Pollutants and Precursors.	1 - 5	ST & LT	Qualitative analysis	LTS	No Mitigation Required	LTS
3.16-25 Cumulative Air Quality — Generation of Long-Term Operation-Related (Regional and Local) Emissions of Criteria Air Pollutants and Precursors.	1 - 5	ST	Qualitative analysis	LTS	No Mitigation Required	LTS
3.16-26 Cumulative Air Quality — Exposure of Sensitive Receptors to Emissions of Hazardous Air Pollutants.	1 - 5	LT	Alts. 1-5 – less than 1 lb/day of ROG, NO_X, PM_{10}, CO, and SO_X	LTS	No Mitigation Required	LTS

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Resource Topic/Impact	Alt[1]	Impact Duration[2]	Quantification/Relative Magnitude of Impact[3]	LOS before Mitigation[4]	Mitigation Measure	LOS after Mitigation[5]
3.16-27 Cumulative Air Quality — Exposure of Sensitive Receptors to Odors.	1 - 5	LT	Qualitative analysis	LTS	No Mitigation Required	LTS
3.16-28 Cumulative Air Quality — Generation of Greenhouse Gases.	1 - 5	LT	Alt. 2 - 11.8 annual mass CO_2 emissions; Alts. 1, 3, 4, & 5 – less CO_2 emissions than Alt. 2	LTS	Develop and Implement a Carbon Sequestering Plan for Project Related Tree Removal	LTS
3.16-29 Cumulative Noise – Short-Term or Long-Term Noise and Vibration Impacts.	1 - 5	ST & LT	Alt. 2 - 44.6 dBA CNEL; Alts. 1, 3, 4, & 5 – smaller increase in CNEL than Alt. 2	LTS	No Mitigation Required	LTS
3.16-30 Cumulative Public Services and Utilities – Increased Demand for and Interference of Public Services and Utilities.	1 - 5	ST & LT	Qualitative analysis	LTS	No Mitigation Required	LTS
3.16-31 Cumulative Public Health/Risk of Upset – Potential Human Health Hazards from Exposure to Hazardous Materials, Wildland Fire Hazards, Mosquitoes Resulting from Increased Floodplain, and Increased Hazards to Aviation.	1 - 5	ST & LT	Qualitative analysis	LTS	No Mitigation Required	LTS
3.16-32 Cumulative Population, Employment, and Housing – Potential Adverse Effects on Population, Employment, or Housing.	1 - 5	ST & LT	Qualitative analysis	LTS	No Mitigation Required	LTS
3.16-33 Cumulative Socioeconomics – Potential Adverse Effects on Environmental Justice.	1 - 5	ST & LT	Qualitative analysis	LTS	No Mitigation Required	LTS
	1 – 5	ST & LT	Qualitative analysis	LTS	No Mitigation Required	LTS

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1 INTRODUCTION AND STATEMENT OF PURPOSE AND NEED

This document is a joint draft environmental impact report, environmental impact statement, and environmental impact statement (draft EIR/EIS/EIS) prepared for the Upper Truckee River Restoration and Golf Course Reconfiguration Project in compliance with the California Environmental Quality Act (CEQA), National Environmental Policy Act (NEPA), and Tahoe Regional Planning Agency (TRPA) Compact and Code of Ordinances. This draft EIR/EIS/EIS has been prepared by the California Department of Parks and Recreation (State Parks) as lead agency under CEQA, the U.S. Department of the Interior Bureau of Reclamation (Reclamation) as federal lead agency under NEPA, and the TRPA as lead agency in accordance with the Compact and Code of Ordinances.

The relevant statutes, regulations, and ordinances guiding the preparation of the draft EIR/EIS/EIS include:

- California Public Resources Code (PRC) Sections 21000 et seq., which is CEQA;
- California Code of Regulations (CCR), Title 14, Division 6, Chapter 3 (State CEQA Guidelines), including Section 15222 ("Preparation of Joint Documents");
- The National Environmental Policy Act of 1969, as amended (Pub. L. 91-190, 42 United States Code [USC] 4321-4347, January 1, 1970, as amended by Pub. L. 94-52, July 3, 1975, Pub. L. 94-83, August 9, 1975, and Pub. L. 97-258, Section 4(b), September 13, 1982);
- Council on Environmental Quality's (CEQ's) regulations for implementing the procedural provisions of NEPA - Code of Federal Regulations (CFR), Title 40, Sections 1500 et seq., including Sections 1502.25, 1506.2, and 1506.4 (authority for combining federal and state environmental documents);
- U.S. Department of the Interior, Departmental Manual (DM) Part 516, Chapters 1-7, 14;
- Article VII of the TRPA Compact (Public Law 96-551, as revised in 1980);
- Chapters 5 and 6 of the TRPA Code of Ordinances; and
- Article VI of the TRPA Rules of Procedure.

This draft EIR/EIS/EIS evaluates the potential significant, adverse and beneficial impacts on the human and physical environment resulting from implementation of the proposed Upper Truckee River Restoration and Golf Course Reconfiguration Project, hereinafter referred to as "the project." It also serves as the "proposed action" under NEPA and the "proposed project" under CEQA and the TRPA code of ordinances. Chapter 2, "Project Alternatives" provides detailed descriptions of the alternatives considered for implementing the proposed project. Chapter 3, "Affected Environment and Environmental Consequences" discusses the regulatory environment, existing conditions, environmental impacts, and mitigation measures for each alternative. Following public review of the draft EIR/EIS/EIS, a final environmental impact report/environmental impact statement/environmental impact statement (final EIR/EIS/EIS) will be prepared, in which the joint lead agencies will provide responses to comments relating to the environmental analysis provided in the draft EIR/EIS/EIS. A preferred alternative will be selected in the final EIR/EIS/EIS.

This chapter of the draft EIR/EIS/EIS provides introductory information to orient the reader to the project and the environmental analysis.

1.1 PROJECT REQUIRING ENVIRONMENTAL ANALYSIS

1.1.1 BACKGROUND

CLARITY AND WATER QUALITY OF LAKE TAHOE

Lake Tahoe is a designated Outstanding National Resource Water (ONRW), renowned worldwide for its clarity and purity (LRWQCB 1995). However, Lake Tahoe's clarity has declined by nearly 30 percent since 1968 (USGS 2010). Studies over the last three decades suggest that the reduction in water clarity of Lake Tahoe is correlated with the delivery of fine sediments from various watersheds in the Lake Tahoe Basin (Basin) and increased phytoplankton productivity, which in turn, has been attributed to an increase in nutrients, especially nitrogen and phosphorus (Goldman 1974, SWRCB and NDEP 2007). The increase in sediment and nutrient load is a direct result of urbanization and other human activities in the Basin.

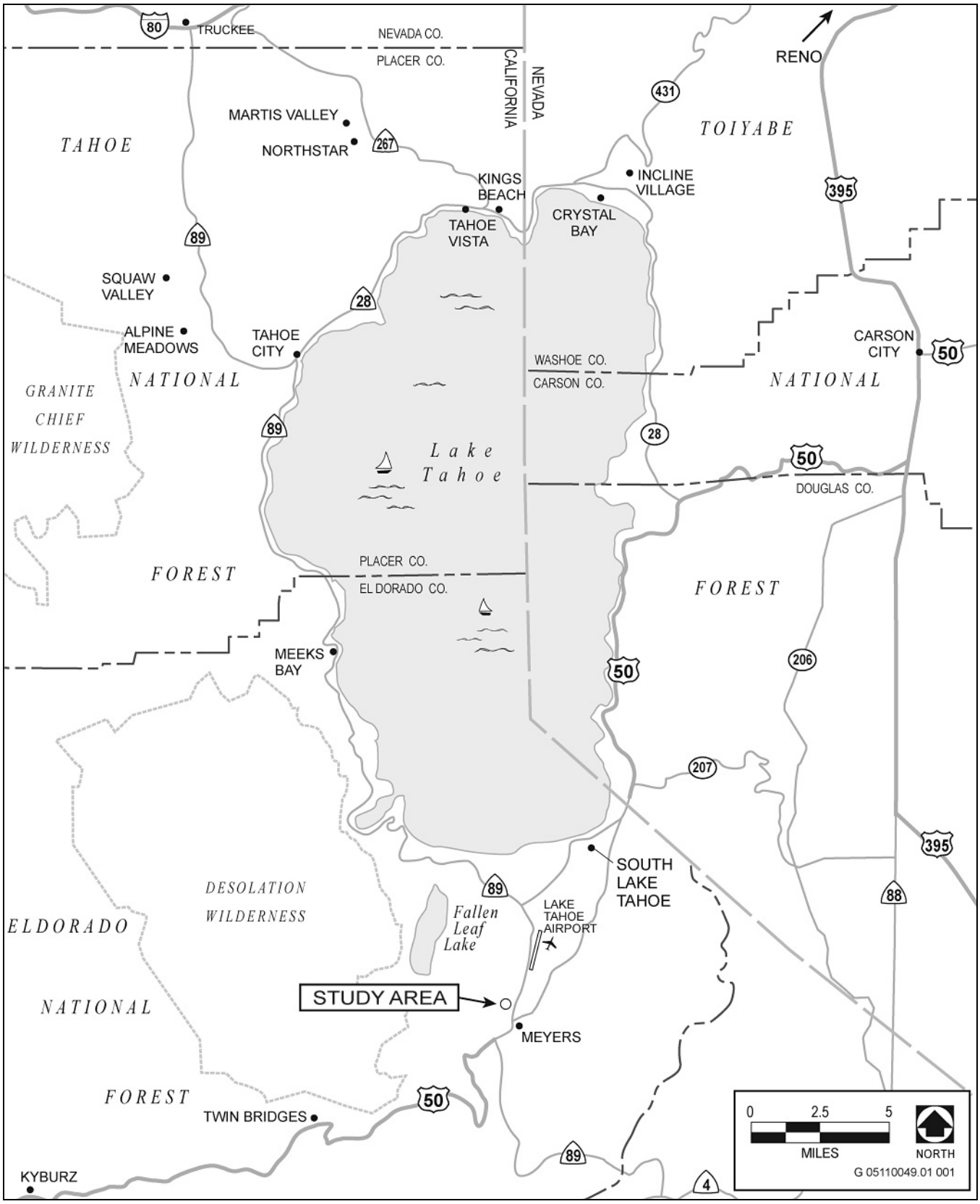
The Upper Truckee River, which drains the largest watershed in the Basin, has been substantially altered by land practices during the past 150 years (Exhibit 1-1). Throughout its watershed, the river has experienced ecosystem degradation typical of what has occurred elsewhere in the Basin. It has been modified from its original conditions by human activities, such as logging; livestock grazing; roads; fire suppression; golf courses; quarries, an airport; and residential, commercial and industrial developments. In many locations the channel was straightened and enlarged; native vegetation was replaced by turf; and untreated stormwater was directed into the river and its tributaries. The channel has incised and is experiencing accelerated rates of bed and bank erosion. These human activities have resulted in reduced habitat quality for plant, wildlife, and fish species in the watershed and increased sediment and nutrient loads discharging into Lake Tahoe from the river, contributing to the declining clarity of the lake.

These alterations have affected water quality by disconnecting the river from its floodplains and wetlands where vegetation can adhere fine sediment and uptake nutrients from stream flows and runoff. Nutrients, such as nitrogen and phosphorus, can be removed by plant absorption and volatilization by denitrification under certain anaerobic conditions. The nutrients are converted to gaseous or organic forms, fixed into the soil, or simply stored within the soil solution. Floodplains also remove sediment and other suspended particles by slowing the velocity of moving water, decreasing peak flows, and allowing the sediment to settle. Thus, the water quality of the lake can be protected and improved by restoring the natural functions of the rivers and streams in Lake Tahoe's watershed.

UPPER TRUCKEE RIVER WITHIN THE STUDY AREA

Channel straightening, grazing, logging and recreational uses have affected the reach of the river within the study area where accelerated levels of bed and bank erosion and habitat degradation now exist. The stream responded to a decrease in sinuosity due to past land uses by incising the channel in order to increase the slope to make up for the shortened river channel. This incision has caused a decrease in flooding of the active floodplain, which is now floods less frequently, which allows a decrease in the velocity of moving water, decreasing peak flows, and allowing the sediment to settle, as described above. Since the floodwaters do not release onto a floodplain, the depth of water in the channel is deeper during events which would normally overflow the channel, creating elevated stress is on the bed and banks, resulting in increased erosive forces. The stream continues to adjust to past disturbance, has high rates of instability, and in-stream and riparian corridor habitat continue to be degraded.

The layout of the golf course is also a concern to geomorphic function and water quality. The golf course was constructed on the meadow and floodplain in the late 1950s. Several undersized bridges constrict flow and accelerate velocities leading to erosion downstream. The golf course occupies the former meander belt and wet meadow area along the river. Which historically served as valuable habitat areas prior to human disturbance. Also in many areas of the golf course non-native landscaping is adjacent to the river, with no riparian buffer zone or habitat corridor, and golf course infrastructure, essentially locks the river into this modified alignment.



Source: EDAW (now AECOM) 2006

Regional Location **Exhibit 1-1**

Rapidly eroding, over-heightened fine-grained banks that support limited vegetation or riparian habitat characterize this reach. The banks generate sediment that is introduced directly to the river and eventually into Lake Tahoe. This situation causes not only damage to the golf course infrastructure, but also deterioration of riparian habitat and degradation of water quality. There is also no riparian buffer zone to separate the areas where fertilizer is applied to turf from the river or provide a habitat corridor.

RESTORATION OF THE UPPER TRUCKEE RIVER

Public agencies responsible for the resources of the Basin have been planning and implementing ecosystem restoration and erosion control projects in the Upper Truckee River watershed for many years. Previous restoration efforts in the watershed have included projects along Angora Creek and Trout Creek, both tributaries to the river; Lower West Side Wetland Restoration Project, located adjacent to the main channel of the Upper Truckee River, near its entry into Lake Tahoe; and a reach of the main stem of the river next to the South Lake Tahoe Airport. Several other restoration projects are in the planning stage, including the proposed project.

With this draft EIR/EIS/EIS, State Parks is pursuing a restoration project along the reach of the Upper Truckee River that extends from near its upstream entry point near the southern boundary of Washoe Meadows State Park (SP) to the point just west of U.S. Highway 50 (U.S. 50) where the river exits Lake Valley State Recreation Area (SRA). The "study area" for the project is approximately 520 acres, 13430 linear feet of the Upper Truckee River, and includes the southern portion of Washoe Meadows SP, Lake Valley SRA, and small portions of US Forest Service (USFS) and California Tahoe Conservancy (Conservancy) lands (Exhibit 1-2). The primary purpose of the project is to restore natural geomorphic and ecological processes along this reach of river and to reduce the river's suspended sediment discharge to Lake Tahoe. The proposed restoration project may include reconfiguration of the Lake Tahoe Golf Course to allow for restoration of the river, to reduce the area of Stream Environment Zone (SEZ) occupied by the golf course, and to allow for establishment of a buffer area between the golf course and the river.

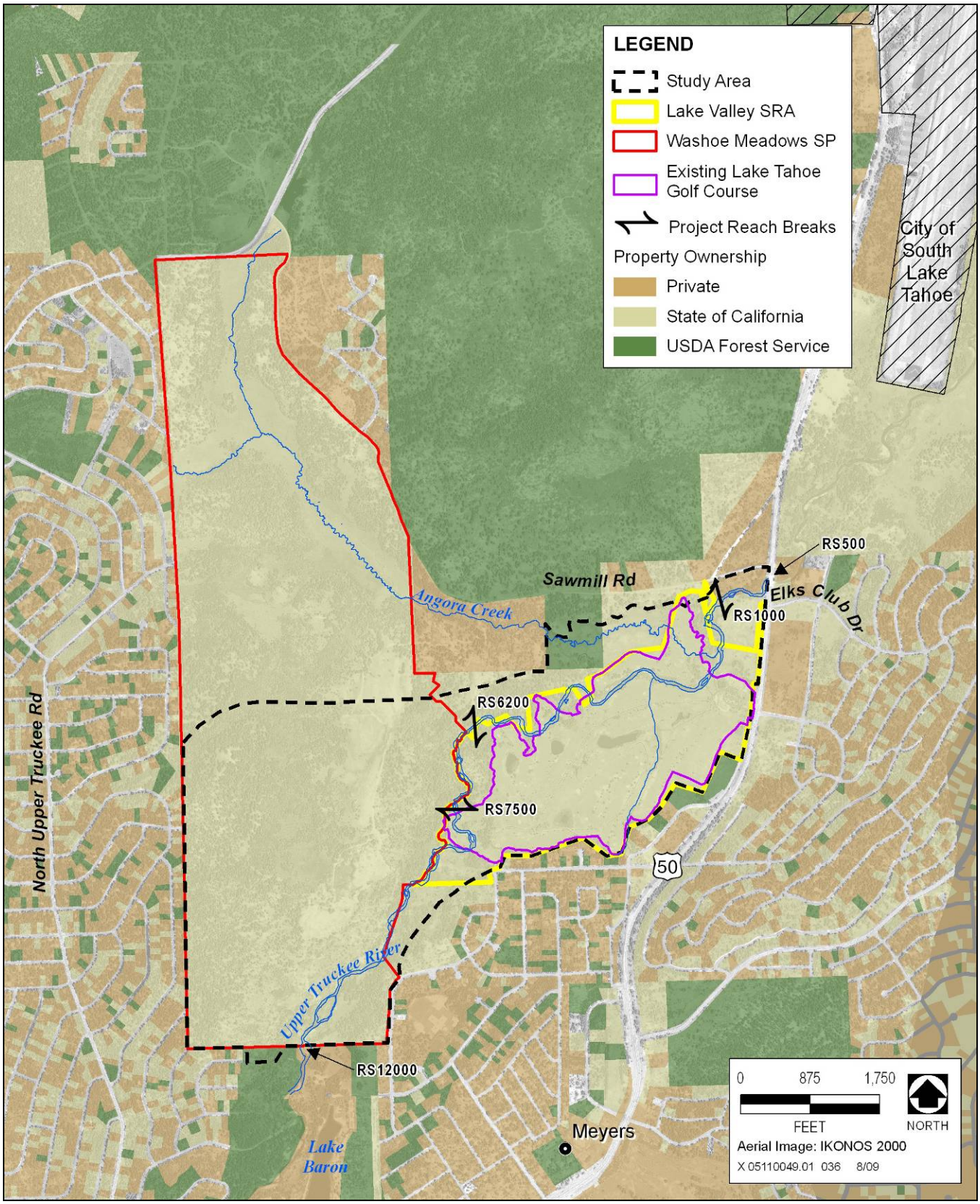
The Upper Truckee River Restoration and Golf Course Reconfiguration Project is identified in TRPA's Environmental Improvement Program (EIP) as a project that is necessary to restore and maintain environmental thresholds for the Basin. EIP projects are designed to achieve and maintain environmental carrying capacity thresholds (thresholds) that protect Tahoe's unique and valued resources. An extensive evaluation and restoration planning process has been conducted to identify potentially feasible approaches for restoration of the river. As a result of that process, the following five alternatives, including four action alternatives and a No Project/No Action Alternative, have been evaluated in this draft EIR/EIS/EIS.

- **Alternative 1** – No-Project/No-Action: Existing River and 18-Hole Regulation Golf Course
- **Alternative 2** – River Ecosystem Restoration with Reconfigured 18-Hole Regulation Golf Course
- **Alternative 3** – River Ecosystem Restoration with Reduced-Play Golf Course
- **Alternative 4** – River Stabilization with Existing 18-Hole Regulation Golf Course
- **Alternative 5** – River Ecosystem Restoration with Decommissioned Golf Course

These alternatives are named for their approach to restoration of the Upper Truckee River, and the associated level of golf course infrastructure. For a detailed discussion of these four action alternatives and the No Project/No Action alternative see Chapter 2, "Project Alternatives".

1.2 PROJECT HISTORY AND PLANNING CONTEXT

State Parks began restoration studies and planning for the Upper Truckee River Restoration and Golf Course Reconfiguration Project in 2003. This reach of the Upper Truckee River was identified as the greatest opportunity for rehabilitation among all the river reaches in the "Upper Truckee River Upper Reach Environmental Assessment Report" prepared for Reclamation and the Tahoe Resource Conservation District (TRCD), because it



Source: EDAW (now AECOM) 2009

Study Area/Property Boundaries **Exhibit 1-2**

presents an opportunity for full restoration of a larger reach and is in public ownership by State Parks (SH+G 2003). Comprehensive evaluations of the study area existing conditions were conducted in 2003 and 2006 (Swanson Hydrology + Geomorphology 2003 and River Run Consulting 2006). These preliminary evaluations enabled the identification of potential restoration opportunities and constraints. The Environmental Assessment Report recommended four river treatment options including: 1) no action, 2) hard engineering or engineered stabilization, 3) creation of an inset floodplain and, 4) full geomorphic restoration. Three of the five alternatives to be analyzed in this draft EIR/EIS/EIS were derived from these original alternatives. The inset floodplain alternative, as a focused treatment approach, was removed from further consideration as a full alternative because it required extensive excavation immediately adjacent to the active channel while providing limited ecological benefits. Elements of this alternative have been incorporated into other alternatives. The selection process is discussed in Section 2.2.2 Alternatives Considered but Eliminated from Detailed Evaluation.

The effort to prepare the range of alternatives involved presentations, meetings and consultation with agencies and the public. Outreach efforts for the draft EIR/EIS/EIS have included public noticing and meetings, two public recreation planning workshops in 2007, public tours of the study area in 2008, as well as numerous other outreach efforts throughout the life of the project.

The initial definition of alternatives was supplemented as a result of the public scoping process and early public planning workshops to consider options for the golf course. Two alternative considerations came out of this public input: evaluation of alternative locations for golf course development and addition of an action alternative that involves decommissioning of the golf course and full restoration of Lake Valley SRA to riparian and meadow habitat.

This resulted in three alternative golf course reconfiguration concept plans (reduced play, reconfigured 18-hole regulation and no golf course), combined with 2 alternative river approaches (restoration and stabilization) and a No Project/No Action alternative, were combined into the 5 alternatives addressed in this document. These alternatives were formulated to represent a reasonable range of restoration approaches, golf course facility levels, and public access. A preferred alternative has not yet been identified. The lead agencies will select a preferred alternative after public review of the five alternatives and receipt of public comments on the draft EIR/EIS/EIS. The preferred alternative may be one of the five evaluated or it may involve a new combination of features presented in those alternatives.

1.3 PURPOSE AND NEED, AND PROJECT OBJECTIVES

NEPA regulations (40 CFR 1502.13) require that an EIS contain a statement of the purpose and need that "briefly specif[ies] the underlying purpose and need to which the agency is responding in proposing the alternatives, including the proposed action." State CEQA Guidelines Section 15124(b) requires that the project description contain a clear statement of the project objectives, including the underlying purpose of the project. There are no requirements specifically addressing the description of a project's purpose and need in the TRPA Compact or Code of Ordinances. This section is intended to fulfill the requirements of both NEPA and CEQA.

1.3.1 PURPOSE AND NEED

The fundamental need for restoration of the study area's reach of the Upper Truckee River stems from its contribution of fine sediment to the river and Lake Tahoe through accelerated bank and bed erosion, the impaired natural geomorphic processes and ecological functions, and the diminished quality of the habitat in the riparian corridor caused by prior human alterations, as described above. The purpose of the project is, therefore, to improve geomorphic processes, ecological functions, and habitat values of the Upper Truckee River within the study area, helping to reduce the river's discharge of nutrients and sediment that diminish Lake Tahoe's clarity while providing access to public recreation opportunities in the State Park and SRA. Its implementation is an important component of the integrated objectives of State Parks, Reclamation, and TRPA to improve environmental quality in the Basin.

1.3.2 PROJECT OBJECTIVES

Consistent with the purpose and need, the following basic objectives of the project were developed during the early planning and public scoping phases of the project.

- Restore, to the extent feasible, natural geomorphic processes that sustain channel and floodplain morphology.
- Restore, to the extent feasible, ecosystem function in terms of ecological processes and aquatic and riparian habitat quality.
- Create a more continuous riparian habitat corridor.
- Reduce erosion and improve water quality including reduction of the State Parks reach's contribution of suspended sediment and nutrient loading in the Upper Truckee River and Lake Tahoe.
- Minimize and mitigate short-term water quality and other environmental impacts during construction.
- Reduce the environmental impact of the golf course on the river's water quality and riparian habitat by integrating environmentally sensitive design concepts.
- In the SEZ, reduce the area occupied by golf course and improve the quality and increase the extent of riparian and meadow habitat.
- Maintain public golf recreation opportunity and quality of play to feasibly support a course.
- Maintain adequate revenue generation from the Lake Valley SRA and/or Washoe Meadows SP.
- Avoid increase in flood hazard to private property.
- Avoid increase in safety hazards to golf course and other recreation users.
- Provide additional opportunities for non-motor vehicle recreation (hiking biking, skiing, etc).
- Design with sensitivity to the site's history and cultural heritage.

1.4 INTENDED USES AND TYPE OF EIR (CEQA)/EIS (NEPA)/EIS (TRPA)

State Parks, Reclamation, and TRPA will use this EIR/EIS/EIS to consider the environmental effects, mitigation measures, and alternatives when reviewing the alternatives. The EIR/EIS/EIS will serve as the State's CEQA compliance document, as Reclamation's NEPA compliance document, and as TRPA's compliance document with respect to its Compact and Chapter 5 of the TRPA Code of Ordinances. State responsible and trustee agencies and federal cooperating agencies may also use this draft EIR/EIS/EIS, as needed, for subsequent discretionary actions. Agencies with jurisdiction over the project are described below in Section 1.7, Agency Roles and Responsibilities.

1.4.1 CALIFORNIA ENVIRONMENTAL QUALITY ACT

According to the State CEQA Guidelines (14 CCR Section 15064[f][1]), preparation of an EIR is required whenever a project may result in a significant environmental impact. An EIR is an informational document used to inform public agency decision-makers and the general public of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project that could feasibly attain most of the basic objectives of the project while substantially lessening or

avoiding any of the significant environmental impacts. Public agencies are required to consider the information presented in the EIR when determining whether to approve a project.

CEQA requires that state and local government agencies consider the environmental effects of projects over which they have discretionary authority before taking action on those projects (Public Resources Code Section 21000 et seq.). CEQA also requires that each public agency avoid or mitigate to less-than-significant levels, wherever feasible, the significant environmental effects of projects it approves or implements. If a project would result in significant and unavoidable environmental impacts that cannot be feasibly mitigated to less-than-significant levels, the project can still be approved, but the lead agency's decision-makers must issue a "statement of overriding considerations" explaining in writing the specific economic, social, or other considerations that they believe make those significant effects acceptable.

1.4.2 NATIONAL ENVIRONMENTAL POLICY ACT

NEPA provides an interdisciplinary framework for federal agencies to develop information that will help them to take environmental factors into account in their decision-making (42 USC 4321, 40 CFR 1500.1). According to NEPA, an EIS is required whenever a proposed major federal action (e.g., a proposal for legislation or an activity financed, assisted, conducted, or approved by a federal agency) would significantly affect the human environment. The principle objective of NEPA and the CEQ regulations is for the federal government, and those regulated by federal agencies, to design, locate, and operate projects in ways that reduce adverse and increase beneficial environmental impacts for existing and succeeding generations.

The project has received federal funding from Reclamation for the planning phase and may receive funding for implementation. It is also dependent upon federal action because the proposed project would require federal permits for one or more of the following activities: (i) discharges of fill material into waters of the United States, and (ii) activities affecting plant or animal species protected by the Endangered Species Act (ESA) (16 USC 1531 et seq.). An EIS is an informational document used by federal agencies in making decisions. An EIS is intended to provide full and open disclosure of environmental consequences prior to agency action; an interdisciplinary approach to project evaluation; objective consideration of all reasonable alternatives; application of measures to avoid or reduce adverse impacts; and an avenue for public and agency participation in decision-making (40 CFR 1502.1). NEPA defines mitigation as avoiding, minimizing, rectifying, reducing, or compensating for significant effects of the proposed action (40 CFR 1508.20).

NEPA requires that a lead agency "include (in an EIS) appropriate mitigation measures not already included in the proposed action or alternatives" (40 CFR 1502.14[f]). An EIS shall also include discussions of "means to mitigate adverse environmental impacts (if not fully covered under Section 1502.14[f])." In preparing a record of decision under 40 CFR 1505.2, a lead agency is required to "[s]tate *whether* all practicable means to avoid or minimize environmental harm from the alternative selected have been adopted, and if not, why they were not. A monitoring and enforcement program shall be adopted and summarized where applicable for *any* mitigation." (Italics added.)

1.4.3 TAHOE REGIONAL PLANNING COMPACT (COMPACT) AND THE TRPA CODE OF ORDINANCES

TRPA is the primary permitting agency and the lead agency under the Compact. TRPA is a bi-state regional planning agency created in 1969 by federal law to oversee development on both the California and Nevada sides of Lake Tahoe. Under the Compact of TRPA, an EIS is an informational document used in the planning and decision-making process for a proposed project. The purpose of this draft EIR/EIS/EIS is not to recommend either approval or denial of the project, but to disclose objective information that can be used in the development of a preferred alternative to the project/action for evaluation in the EIR/EIS/EIS.

Article VII of the Compact presents important TRPA policies relevant to the preparation and use of an EIS. Key provisions of the article are presented below:

- Article VII (a) (2) states that when acting upon matters that have a significant effect on the environment, TRPA shall "prepare and consider a detailed environmental impact statement before deciding to approve or carry out any project."

- Article VII (a) (3) states that the EIS shall "study, develop and describe appropriate alternatives to recommended courses of action for any project which involves unresolved conflicts concerning alternative uses of available resources."

- Article VII (a) (4) requires that TRPA "make available to states, counties, municipalities, institutions and individuals, advice and information useful in restoring, maintaining and enhancing the quality of the region's environment."

- Article VII (a) (5) requires TRPA to "initiate and utilize ecological information in the planning and development of resource-oriented projects."

1.5 SCOPE AND FOCUS OF THE EIR/EIS/EIS

Pursuant to CEQA and NEPA, the discussion of potential effects on the environment is focused on those impacts that the lead agencies have determined may be potentially significant. Pursuant to TRPA Code of Ordinances the discussion emphasizes environmental effects that could influence attainment of environmental threshold carrying capacities of the Lake Tahoe Regional Plan. (CEQA, NEPA, and TRPA allow a lead agency to limit the detail of discussion of the environmental effects that are not considered potentially significant.)

On August 28, 2006, State Parks and TRPA issued a Notice of Preparation (NOP) (Appendix A) to inform agencies and the general public that a joint EIR/EIS/EIS was being prepared and invited comments on the scope and content of the document and participation at a public scoping meeting. The NOP was published in the California and Nevada State Clearinghouse and distributed to cooperating and other Federal agencies, responsible and trustee agencies, interested parties and organizations, affected property owners (within 300 feet of the study area boundaries). It was also posted on the Upper Truckee River Restoration and Golf Course Reconfiguration website (http://www.restoreuppertruckee.net/), as well as throughout the study area. The NOP was circulated through October 20, 2006, beyond the 30-day circulation period mandated by CEQA. A specific circulation period is not defined in the TRPA Code of Ordinances, but the 30-day period is a regular practice for TRPA EISs.

Reclamation issued a Notice of Intent (NOI) (Appendix A) to inform agencies and the general public that a joint EIR/EIS/EIS was being prepared and invited comments on the scope and content of the EIS. The NOI was published in the *Federal Register*, Vol. 71, No. 171, on September 5, 2006. The NOI was also posted on the Upper Truckee River Restoration and Golf Course Reconfiguration website. At that time Reclamation announced that it had developed a public-involvement program allowing opportunities for public participation and involvement in the NEPA process. The NOI also provided information on the dates and times of public scoping meetings. There is no mandated time limit to receive written comments in response to the NOI under NEPA.

State Parks, Reclamation, and TRPA jointly held public scoping meetings on September 26, 2006, at 12:00 and 6:00 pm, presented at a TRPA Governing Board meeting on September 27, 2006, and a TRPA Advisory Planning Commission meeting on September 13, 2006 to solicit input from the community and public agencies to be considered in project design, alternatives selection, and on the scope and content of the draft EIR/EIS/EIS.

Appendix A of this draft EIR/EIS/EIS contains the Scoping Summary Report with a table listing the substantive comments on the NOP and NOI as well as copies of the comment letters. Public input during scoping meetings asked for additional information and studies on economics, off-site relocation, recreation, and the addition of a

"no golf course" alternative. These studies required additional time to complete, delaying the release of the draft EIR/EIS/EIS. State Parks hosted two public workshops in 2007, three field walks in 2008, and has issued and three newsletters in the interim to keep the public informed.

This draft EIR/EIS/EIS includes an evaluation of 14 environmental resource areas and other NEPA- and CEQA-mandated issues (e.g., cumulative impacts, growth-inducing impacts, relationship between short-term uses of the environment and the maintenance and enhancement of long-term productivity). Global climate change is discussed within relevant resource areas. The 14 environmental issue areas are as follows:

- Land Use
- Hydrology and Flooding
- Geomorphology and Water Quality
- Biological Resources (Fisheries and Aquatic Resources, Vegetation and Wildlife)
- Geology and Soils, Mineral Resources, and Land Capability and Coverage
- Scenic Resources
- Recreation
- Cultural Resources
- Transportation, Parking, and Circulation
- Air Quality
- Noise
- Public Services and Utilities
- Human Health and Risk of Upset
- Socioeconomics, Environmental Justice, and Public Housing

The Compact, Public Law 96-551, as revised in 1980, provides TRPA the authority to adopt environmental quality standards, called "environmental threshold carrying capacities" (thresholds), and to enforce ordinances designed to achieve the thresholds, which were adopted by the TRPA Governing Board in 1982. This draft EIR/EIS/EIS also includes an evaluation of the project alternatives related to attaining and maintaining TRPA's environmental thresholds to protect the unique values of the Basin. The nine resource areas for which thresholds were adopted by TRPA in 1982 are:

- water quality
- air quality
- scenic resources
- soil conservation
- fish habitat
- vegetation
- wildlife habitat
- noise
- recreation

1.6 EFFECTS FOUND NOT TO BE SIGNIFICANT

An NOP and NOI were prepared and circulated for the project and concluded all resource areas would be further evaluated given the resource conditions of the study area (e.g., clearly, relevant resources could be substantially affected by the project). All of the environmental resources are analyzed in Chapters 3 and 4 of this draft EIR/EIS/EIS. The analysis in this document determines that the project alternatives would not result in a significant effect on agricultural use, demand on schools, and Indian trust assets.

1.6.1 AGRICULTURE

The study area is located on State property not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program (California Department of Conservation, Division of Land Resource Protection 2006), and are not under Williamson Act contracts. Therefore, the project would not result in conversion of farmland to non-agricultural use, conflict with existing zoning for agriculture, nor conflict with Williamson Act contracts. The proposed project would have no impact on agricultural resources. This issue will not be analyzed further in the draft EIR/EIS/EIS.

1.6.2 SCHOOLS

The project would not include the construction of housing and therefore would not generate additional students or increased demands on schools. Therefore, the proposed projects would have no impact on schools and this issue will not be analyzed further in the draft EIR/EIS/EIS.

1.6.3 INDIAN TRUST ASSETS

The project would not have an effect on Indian Trust Assets (ITAs). ITAs are legal interests in property held in trust by the United States for Native American tribes or individuals. The Secretary of the Interior, acting as the trustee, holds many assets in trust. Examples of trust assets include lands, minerals, hunting and fishing rights, and water rights. While most ITAs are situated on Indian reservations, they may also be found off reservations. The United States has an Indian trust responsibility to protect and maintain rights reserved by or granted to Native American tribes or individuals by treaties, statutes, and executive orders. These are sometimes further interpreted through court decisions and regulations. Tribal lands ITAs consist of lands that have been deeded to tribes or upon which tribes have a historical legal claim. However, there are no such lands within or in the immediate vicinity of the study area. The proposed project would have no impact on ITAs. This issue will not be analyzed further in the draft EIR/EIS/EIS. Impacts on Cultural Resources within the study area are discussed in Section 3.9, "Cultural Resources."

1.7 AGENCY ROLES AND RESPONSIBILITIES

1.7.1 LEAD AGENCIES

CALIFORNIA DEPARTMENT OF PARKS AND RECREATION

California State Parks is a State Agency as defined by the California Environmental Quality Act (CEQA Section 21082.1 and a Trustee Agency as used by CEQA, its Guidelines, and as defined by CCR Section 15386 for the resources affected by this project within units of the State Park System. State Parks mission is to provide for the health, inspiration, and education of the people of California by helping preserve the state's extraordinary biodiversity, protecting its most valued natural and cultural resources, and creating opportunities for high quality outdoor recreation. State Parks 1.4 million-acre System is currently made up of 278 classified units and several major unclassified properties. For this project, State Parks is the lead agency under CEQA and the proponent of the project.

This draft EIR/EIS/EIS has been prepared in accordance with Public Resources Code [PRC] Section 21000 et seq. and the State CEQA Guidelines (California Code of Regulations Section 15000 et seq.). CEQA requires lead agencies to consider potential environmental effects that may occur with implementation of a project and to avoid or substantially lessen significant effects to the environment when feasible. When a project may have a significant effect on the environment, the agency with primary responsibility for carrying out or approving the project (the lead agency) is required to prepare an EIR.

CEQA, in PRC Section 21002.1, presents important state policy relevant to use of an EIR. Key provisions of PRC Section 21002.1 are presented below:

- PRC Section 21002.1(a) states that the purpose of an EIR is to "... identify the significant effects on the environment of a project, to identify alternatives to the project, and to indicate the manner in which those significant effects can be mitigated or avoided."

- PRC Section 21002.1(b) states that "[e]ach public agency shall mitigate or avoid the significant effects on the environment of projects that it carries out or approves whenever it is feasible to do so."

- PRC Section 21002.1(c) provides that "[i]f economic, social, or other conditions make it infeasible to mitigate one or more significant effects on the environment of a project, the project may nonetheless be carried out or approved at the discretion of a public agency if the project is otherwise permissible under applicable laws and regulations."

1.7.2 TAHOE REGIONAL PLANNING AGENCY

TRPA is the primary permitting agency and the lead agency under the Compact. The project would be required to comply with the Regional Plan and Code of Ordinances to receive permits for construction. TRPA permitting requirements include a Conditional Permit for stream restoration and Land Capability and Coverage Verifications. TRPA is a bi-state regional planning agency created in 1969 by federal law to oversee development on both the California and Nevada sides of Lake Tahoe. TRPA's mission is to "lead the cooperative effort to preserve, restore, and enhance the unique natural and human environment of the Lake Tahoe Region."

In addition, in accordance with the Code of Ordinances, TRPA may not approve a project if it would cause any of the nine TRPA thresholds to be exceeded. If a project would result in an exceedance of an identified threshold, mitigation must be imposed to reduce the impact and maintain the threshold. Pursuant to Chapter 6 of the TRPA Code of Ordinances, findings must be made in writing regarding all significant environmental impacts and their associated mitigation measures, with substantial evidence provided in the record of review before final project approval. Specific findings TRPA must make to approve a project are as follows:

> (1) The project is consistent with, and will not adversely affect implementation of the Regional Plan, including all applicable Goals and Policies, plan area statements and maps, the Code, and other TRPA plans and programs.
>
> (2) The project will not cause the environmental threshold carrying capacities to be exceeded; and
>
> (3) Wherever federal, state or local air and water quality standards applicable for the region, whichever are more strict, must be attained and maintained pursuant to Article V(d) of the Tahoe Regional Planning Compact, the project meets or exceeds such standards.

1.7.3 BUREAU OF RECLAMATION

Reclamation is the lead agency under NEPA. This draft EIR/EIS/EIS has been prepared in accordance with the National Environmental Policy Act of 1969 (42 United States Code [USC] 4321, et seq.), CEQ's Regulations for Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] Parts 1500-1508), and the Department of the Interior Manual (DM) 516 DM 1-7, 14. Reclamation is a federal agency created in 1902 to provide water for 17 western states. Reclamation's mission is "The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American Public."

NEPA requires federal agencies to consider environmental effects that include, among others, impacts on social, cultural, and natural resources. When a proposed action may have a significant effect on the environment, the federal agency with primary responsibility for carrying out or approving the action (the lead agency) is required to prepare an EIS.

1.7.4 TRUSTEE, RESPONSIBLE, AND COOPERATING AGENCIES

Other federal, state, and local agencies are involved in the review and approval of the proposed action, including trustee and responsible agencies under CEQA and cooperating federal agencies under NEPA. Under CEQA, a trustee agency is a state agency that has jurisdiction by law over natural resources that are held in trust for the people of the State of California. Also, under CEQA, a responsible agency is an agency other than the lead agency that has legal responsibility for carrying out or approving a project or elements of a project (Public Resources Code Section 21069).

Under NEPA, a Cooperating Agency can be any other federal agency that has jurisdiction by law, or other federal agency that has special expertise with respect to any environmental impact involved in an action. Cooperating agencies are designated by agreement between the NEPA lead agency and the cooperating agency. Cooperating agencies are encouraged to actively participate in the NEPA process of the lead agency, review and comment on the NEPA document, and use the document when making decisions on the project. Responsible and trustee agencies are consulted by the CEQA lead agency to ensure the opportunity for input and also review and comment on the draft document. Responsible agencies also use the CEQA document in their decision-making. Several agencies other than the State Parks, Reclamation, and TRPA have jurisdiction over the implementation of the elements of the project, as identified below.

FEDERAL COOPERATING AGENCIES

- None

STATE RESPONSIBLE AGENCIES

- Lahontan Regional Water Quality Control Board
- California Tahoe Conservancy

STATE RESPONSIBLE AND TRUSTEE AGENCY

- California Department of Fish and Game

OTHER INTERESTED AGENCIES

- South Tahoe Public Utilities District
- El Dorado County
- California Department of Water Resources
- Tahoe Resource Conservation District
- California State Lands Commission
- California Air Resources Board
- California Department of Transportation
- State Historic Preservation Officer
- Washoe Tribe of California and Nevada
- U.S. Army Corps of Engineers
- U.S. Environmental Protection Agency
- U.S. Fish and Wildlife Service

- U.S. Forest Service, LTBMU
- U.S. Department of Transportation, Federal Aviation Administration

1.7.5 REGULATORY REQUIREMENTS, PERMITS, AND APPROVALS

The following list identifies permits and other approval actions from federal, state, regional, and local agencies for which this draft EIR/EIS/EIS may be used during these agencies' decision-making processes. The following may be under the purview of regulatory agencies other than the lead agencies.

FEDERAL ACTIONS/PERMITS

- **U.S. Army Corps of Engineers:** Department of the Army permit under Section 404 of the Clean Water Act for discharges of dredge or fill material into waters of the United States (Regional General Permit 16 and/or individual permit).

- **U.S. Environmental Protection Agency:** reviewing the EIR/EIS/EIS, filing, and noticing; concurrence with Section 401 Clean Water Act permit.

- **U.S. Fish and Wildlife Service:** Fish and Wildlife Coordination Act review; if take of a listed species were anticipated, ESA consultation and issuance of incidental-take authorization for the take (however, no take of federally listed species is anticipated).

STATE ACTIONS/PERMITS

- **California Department of Fish and Game, North Central Sierra Region:** Streambed alteration agreement (Fish and Game Code Section 1602), and protection of raptors (Fish and Game Code Section 3503.5). If take of a state-listed species were expected, California Endangered Species Act (CESA) consultation and issuance of take authorization (Fish and Game Code Section 2081), (However, a state-listed species take is not anticipated.)

- **California Department of Transportation:** possible encroachment permits.

- **Lahontan Regional Water Quality Control Board (Region 6):** National Pollutant Discharge Elimination System (NPDES) construction stormwater permit (NOI to proceed under General Construction Permit) for disturbance of more than 1 acre, discharge permit for stormwater, general order for dewatering, and Section 401 Clean Water Act certification or waste discharge requirements.

- **California Air Resource Board:** authority to construct (for devices that emit air pollutants), health risk assessment, and Air Quality Management Plan consistency determination.

1.8 PUBLIC PARTICIPATION AND ADDITIONAL STEPS IN THE CEQA/NEPA/TRPA REVIEW PROCESS

This draft EIR/EIS/EIS is being distributed to interested agencies, stakeholder organizations, and individuals. This distribution ensures that interested parties have an opportunity to express their views regarding the environmental effects of the project, and to ensure that information pertinent to permits and approvals is provided to decision makers for the lead agencies, CEQA, NEPA, and TRPA responsible agencies. This document is available for review by the public during normal business hours at the following locations:

State Parks' Administrative office at Sugarpine Point State Park
7360 West Lake Blvd
Tahoma, Ca 96142

State Parks' Northern Service Center
One Capitol Mall, Suite 410
Sacramento, CA 95814

TRPA front desk
128 Market Street
Stateline, NV 89449

Reclamation
Mid-Pacific Regional Library,
2800 Cottage Way
Sacramento, CA 95825

South Lake Tahoe Library front desk
1000 Rufus Allen Blvd.
South Lake Tahoe, CA 96150

Posted electronically at:

http://www.restoreuppertruckee.net/index.htm
http://www.parks.ca.gov/?page_id=981 (click on El Dorado County)
www.trpa.org
http://www.usbr.gov/mp/nepa/nepa_projdetails.cfm?Project_ID=5760

Hard copies can be printed for purchase at:

Staples
2061 Lake Tahoe Boulevard
South Lake Tahoe, CA 96150

CDs are also available upon request from State Parks. Please submit request to: utproject@parks.ca.gov.

All comments will be combined and addressed in the final EIR/EIS/EIS. It is only necessary to send comments to one agency. Written comments can be sent to the following address:

State of California Department of Parks and Recreation
Sierra District
Cyndie Walck
P.O. Box 16
Tahoe City, CA 96145

If comments are provided via email, please utilize the following format:

Email to: utproject@parks.ca.gov
Subject Line: River-Golf Course EIR/EIS/EIS
Directions:

(1) Attach comments in an MS Word document
(2) Include commenter's U.S. Postal Service mailing address in MS Word.

A public meeting on the draft EIR/EIS/EIS will be conducted by State Parks, Reclamation, and TRPA. It is not necessary to provide testimony during the public hearing; comments on the draft EIR/EIS/EIS will be accepted throughout the meeting and will be recorded at the public comment table. Comments may also be submitted

throughout the comment period as described above. Once all comments have been assembled and reviewed, responses will be prepared to address significant environmental issues that have been raised in the comments.

Please refer to notices of the release of this draft EIR/EIS/EIS for the specific dates of public meetings and the due date for public comments.

Following the close of the public comment period for the draft EIR/EIS/EIS, a final EIR/EIS/EIS will be prepared and circulated in accordance with CEQA, NEPA, and TRPA requirements that will include responses to all comments and selection of a preferred alternative. The lead agencies will circulate the final EIR/EIS/EIS for 60 days before taking action on the preferred alternative. Following the 60-day circulation period and lead agency consideration of all comments received during public review of the draft EIR/EIS/EIS and circulation of the final EIR/EIS/EIS each of the lead agencies (State Parks, Reclamation, and TRPA) would follow their respective agency processes to complete the environmental review process.

Reclamation would prepare a Record of Decision that identifies Reclamation's decision regarding the alternatives considered and addresses substantive comments received on the final EIR/EIS/EIS.

State Parks will hold a public meeting to consider certification of the final EIR/EIS/EIS and to decide whether or not to approve a preferred alternative. The date of which will be selected after review of public comments on the draft EIR/EIS/EIS. A notice of determination documenting the decision will then be issued. To support a decision on the proposed action, State Parks must prepare and adopt written findings of fact for each significant environmental impact identified in the draft EIR/EIS/EIS, a statement of overriding considerations, if needed; and a mitigation monitoring and reporting program to ensure implementation of the mitigation measures and project revisions, if any, identified in the draft EIR/EIS/EIS.

TRPA Governing Board would use the final EIR/EIS/EIS when considering approval of the proposed project or an alternative to the proposed project. Before consideration of the final EIR/EIS/EIS by the TRPA Governing Board, the Advisory Planning Commission must review and make a recommendation to the Board regarding certification. Before action by the Board on the project, the Board shall certify the final EIR/EIS/EIS. The TRPA Governing Board would hold a public hearing to consider certification of the final EIR/EIS/EIS and to decide whether or not to approve the proposed alternative.

1.9 ORGANIZATION OF THIS EIR/ EIS /EIS

The draft EIR/EIS/EIS is organized into the following chapters so that the reader can easily obtain information about the project and its specific environmental issues.

1.9.1 VOLUME I

- The cover sheet identifies the lead agencies, contact information, contact persons, the title of the proposed project and its location, a brief description of the project, a brief abstract, and comment submission information.

- The **Executive Summary** presents an overview of the project and alternatives and associated environmental impacts/consequences; a listing of significant environmental impacts/consequences and mitigation measures; and impact conclusions regarding known areas of controversy and issues to be resolved.

- **Chapter 1, "Introduction and Purpose and Need,"** explains the CEQA, NEPA, and TRPA processes; lists the lead, cooperating, responsible, and trustee agencies that may have discretionary authority or other jurisdiction related to the project; specifies the underlying purpose and need, and project objectives to which the lead agencies are responding in considering the alternatives; outlines the organization of the document; and provides information on public participation.

- **Chapter 2, "Project Alternatives,"** presents the five alternatives. This chapter provides the detailed description of the four action alternatives and one no action alternative, along with alternatives considered but eliminated from further consideration.

1.9.2 VOLUME II

- **Chapter 3, "Affected Environment and Environmental Consequences,"** is divided into 14 sections by topic. Each section describes the affected environment (i.e., regulatory setting and environmental setting), presents the assumptions used in the environmental analysis and defines the types of environmental effects, then provides an analysis of impacts at an equal level of detail for all alternatives, including the No Project/No Action alternative and mitigation measures that would avoid or eliminate adverse impacts or reduce them to a less-than-significant level when possible. This chapter also identifies the cumulative effects of implementing the alternatives, against a backdrop of past, present, and reasonably foreseeable future projects.

- **Chapter 4, "Other Required Sections,"** is divided in to six sections that evaluate the alternatives based on significant environmental effects that cannot be avoided; irreversible and irretrievable commitment of resources; relationship between short-term uses of the environment and the maintenance and enhancement of long-term productivity; growth-inducing impacts; environmentally superior alternative; and consequences for environmental threshold carrying capacities.

- **Chapter 5, "Compliance with Applicable Federal Laws and Executive Orders and State Laws and Regulations,"** discusses project compliance with applicable laws and executive orders and state laws and regulations. Additional resource area discussions of applicable laws, orders, and regulations can be found in each resource topic section.

- **Chapter 6, "List of EIR/EIS/EIS Preparers,"** identifies individuals who were involved in preparing this draft EIR/EIS/EIS.

- **Chapter 7, "EIR/EIS/EIS Distribution list,"** provides a list of the various elected officials, government departments and agencies, organizations, and individuals that the draft EIR/EIS/EIS or notification of its availability has been distributed to.

- **Chapter 8, "References Cited,"** provides a bibliography of sources cited in the draft EIR/EIS/EIS.

- **Chapter 9, "Index,"** contains the NEPA-required index for easy reference of topics and issues.

1.9.3 VOLUME III

Technical appendices contain the background information that supports the draft EIR/EIS/EIS.

A Public Scoping Report
B Proposed River and Floodplain Treatments by Alternative
C Conceptual Treatment Descriptions and Typical Sketches
D Upper Truckee LVSRA WMSP Bridge Report
E Lake Tahoe Golf Course Economic Feasibility Analysis
F Water Quality Data Tables
G Aquatic Resources Technical Memorandum
H Native American Contacts
I Air Quality Modeling Data
J Noise Modeling Data

1.10 STANDARD TERMINOLOGY, ACRONYMS, AND ABBREVIATIONS

1.10.1 STANDARD TERMINOLOGY

The following standard terminology refers to elements of the projects used in this draft EIR/EIS/EIS.

- **Project Vicinity** refers to the Study Area and the nearby land surrounding it.
- **Study Area** refers to all of the Lake Valley SRA and the southern portion of the Washoe Meadows SP within which all alternatives of the Upper Truckee River Restoration and Golf Course Reconfiguration are located.
- **Project Site** refers to the area within the Study Area where State Parks would be carrying out active construction under that alternative.

Additional terminology related to golf is provided in Section 2.3.2, "Golf Land Management Terminology". Terminology related to river existing conditions and proposed treatments within specific locations by Alternative are provided in Appendix B. Standardized conceptual descriptions and sketches of each treatment type, regardless of which alternative they are proposed for, are included in Appendix C.

1.10.2 ACRONYMS AND ABBREVIATIONS

The following acronyms and abbreviations are used in this draft EIR/EIS/EIS.

Table 1-1
Acronyms and Other Abbreviations

µin/sec	microinch per second
ºF	degrees Fahrenheit
208 Plan	Section 208 of the CWA
AB	Assembly Bill
ACSP	Audubon Cooperative Sanctuary Program for Golf Courses
ADA	Americans with Disabilities Act
ADT	Average Daily Traffic
ALUC	airport land use commission
American Golf	American Golf Corporation
APCD	air pollution control districts
APS	Alternative Planning Strategy
AQMD	air quality management districts
ARB	California Air Resources Board
Basin Plan	*Water Quality Control Plan for the Lahontan Region*
bgs	below ground surface
BLM	U.S. Bureau of Land Management
BMP	best management practice
CAA	Federal Clean Air Act
CAAA	Federal Clean Air Act Amendments of 1990
Cal/EPA	California Environmental Protection Agency

Table 1-1 Acronyms and Other Abbreviations	
CAL FIRE	California Department of Forestry and Fire Protection
Cal/OSHA	California Occupational Safety and Health Administration
Caltrans	California Department of Transportation
Cal Vet	California Department of Veterans Affairs
CBC	California Building Code
CCAA	California Clean Air Act
CCAT	Climate Action Team
CDFG	California Department of Fish and Game
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
cfs	cubic feet per second
CH_4	Methane
CHABA	Committee of Hearing, Bio Acoustics, and Bio Mechanics
CHP	California Highway Patrol
CHRIS	California Historical Resources Information System
CLOMR	conditional letter of map revision
CLUP	*Lake Tahoe Airport Comprehensive Land Use Plan*
CLUP	Comprehensive Land Use Plan
CNDDB	California Natural Diversity Database
CNEL	community noise equivalent level
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
County	El Dorado County
CSLC	California State Lands Commission
CSLT	City of South Lake Tahoe
CTC	California Tahoe Conservancy
CTLFC	Carson & Tahoe Lumber and Fluming Company
CWA	Clean Water Act
CWPP	Community Wildfire Prevention Plan
dB	decibels
dBA	A-weighted decibels
dbh	diameter at breast height
DEM	digital elevation model
DO	dissolved oxygen
DOT	U.S. Department of Transportation

Table 1-1 Acronyms and Other Abbreviations	
DTSC	California Department of Toxic Substances Control
DWR	California Department of Water Resources
EA	Environmental Assessment
EDCAQMD	El Dorado County Air Quality Management District
EDCDEM	El Dorado County Department of Environmental Management
EDCVCD	El Dorado County Vector Control District
EIP	Environmental Improvement Program
EIR	environmental impact report
EIS	environmental impact statement
EPA	U.S. Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act of 1986
EPT	Ephemeroptera [mayfly], Plecoptera [stonefly], and Trichoptera [caddisfly] insect orders
ESA	federal Endangered Species Act
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulations
FEMA	Federal Emergency Management Agency
FHA	Federal Housing Administration
FHWA	Federal Highway Administration's
FIRM	Flood Insurance Rate Map
Forest Plan	*Land and Resource Management Plan Lake Tahoe Basin Management Unit*
FR	Federal Register
FRFRP	Fuel Reduction and Forest Restoration Plan
ft	Feet
FTA	Federal Transit Administration
FWCA	Fish and Wildlife Coordination Act
GHG	atmospheric greenhouse gases
GIS	geographic information systems
GP16	Regional General Permit 16
gpm	gallons per minute
GPS	global positioning system
HAPs	hazardous air pollutants
HEC	Hanford Economic Consulting
HFCs	Hydrofluorocarbons
HUD	U.S. Department of Housing and Urban Development
in/hr	inches per hour
IPES	individual parcel evaluation system
ITAs	Indian Trust Assets
Lahontan RWQCB	Lahontan Regional Water Quality Control Board

Table 1-1 Acronyms and Other Abbreviations	
LCD	land capability districts
L_{dn}	day-night noise level
L_{eq}	equivalent noise level
L_{max}	maximum noise level (the maximum instantaneous noise level during a specific period)
L_{min}	minimum noise level (the minimum instantaneous noise level during a specific period)
LOS	level of service
LTAB	Lake Tahoe Air Basin
LTBMU	Lake Tahoe Basin Management Unit
LTS	less than significant
LTS(m)	less than significant with mitigation
LVFPD	Lake Valley Fire Protection District
LWS	Lower West Side
M	Magnitudes
MBTA	Migratory Bird Treaty Act
MCL	maximum contaminant level
mgd	million gallons per day
mg/L	milligrams per liter
mg/L-N	milligrams per liter of nitrate
mg/L-P	milligrams per liter of phosphorous
m^2/km/year	square meters per kilometer per year
mL	Milliliter
MLD	Most Likely Descendant
mLft	milliliter feet
MMP	Mitigation Monitoring Plan
MMRP	Mitigation Monitoring and Reporting Plan
mph	miles per hour
MPOs	Metropolitan Planning Organizations
MRZ	mineral resource zone
MSDS	Material Safety Data Sheet
MSL	mean sea level
NA	not available, not applicable
NAAQS	national ambient air quality standards
NAHC	Native American Heritage Commission
NAVD	North American Vertical Datum
NDEP	Nevada Department of Environmental Protection
NEHRP	National Earthquake Hazards Reduction Program
NEHRPA	National Earthquake Hazards Reduction Program Act
NEPA	National Environmental Policy Act

Table 1-1 Acronyms and Other Abbreviations	
NESHAP	National Emissions Standards for hazardous air pollutants
NFFL	National Forest Fire Laboratory
NFIP	National Flood Insurance Program
NGVD	National Geodetic Vertical Datum
NHPA	National Historic Preservation Act
NI	no impact
N_2O	nitrous oxide
NO	nitric oxide
NO_2	nitrogen dioxide
NOI	notice of intent
NOP	notice of preparation
NO_X	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NRC	Noise Reduction Coefficient
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NVE	NV Energy
NWP	nationwide permit
O&M	Operations and Maintenance
ONRW	Outstanding National Resource Water
O_3	Ozone
OEHHA	Office of Environmental Health Hazard Assessment
OHP	Office of Historic Preservation
OPR	California Governor's Office of Planning and Research
OSHA	Occupational Safety and Health Administration
PAOT	persons at one time
PCE	Passenger Car Equivalents
PCT	Pacific Crest Trail
PAS	plan area statement
PFCs	Perflurorocarbons
PG&E	Pacific Gas and Electric Company
$PM_{2.5}$	respirable and fine particulate matter
PM_{10}	respirable and fine particulate matter
ppm	parts per million
PS	potentially significant
psi	pounds per square inch
QU	Holocene-age surficial deposits

Table 1-1 Acronyms and Other Abbreviations	
R1	Recreation Threshold Indicator 1
R2	Recreation Threshold Indicator 2
RCRA	Resource Conservation and Recovery Act of 1976
Reclamation	U.S. Department of the Interior, Bureau of Reclamation
Regional Plan	*Regional Plan for the Lake Tahoe Basin*
Report	*The Emergency California-Nevada Tahoe Basin Fire Commission Report*
RESD	Real Estate Services Division, Department of General Services
ROG	reactive organic gases
RS	River Station
RTP	Regional Transportation Plan
RTP-AQP	*Regional Transportation Plan–Air Quality Plan for the Lake Tahoe Region*
RWQCB	Regional Water Quality Control Board
SARA	Superfund Amendments and Reauthorization Act
SAT	Science Advisory Team
SCS	Sustainable Communities Strategy
SCH	State Clearinghouse
SDWA	Safe Drinking Water Act
SEL	sound exposure level
SENEL	single-event noise exposure level
SENL	single-event [impulsive] noise level
SEZ	Stream Environment Zone
sf	square feet
SH&G	Swanson Hydrology + Geomorphology
SHPO	State Historic Preservation Officer
SIP	State implementation plan
SMARA	California Surface Mining and Reclamation Act
SO_2	sulfur dioxide
spp.	species (plural)
SQIP	Stormwater Quality Improvement Plan
SQIP	Scenic Quality Improvement Plan
SR	State Route
SR 89	State Route 89
SRA	State Recreational Area
State Parks	California Department of Parks and Recreation
STR	South Tahoe Refuse
STUPD	South Tahoe Public Utility District
SU	significant and unavoidable
SWC	Sound Watershed Consulting

Table 1-1 Acronyms and Other Abbreviations	
SWPPP	storm water pollution prevention plan
SWRCB	State Water Resources Control Board
TACs	toxic air contaminants
TAF	thousand acre-feet
TBFSC	Tahoe Basin Fire Safe Council
TCR	*U.S. 50 Transportation Concept Report*
THPO	Tribal Historic Preservation Officer
TKN	total Kjeldahl nitrogen
TMDL	Total Maximum Daily Load
tpd	tons per day
diesel	TPDd
TPY	tons per year
TRPA	Tahoe Regional Planning Agency
TRPA Code	TRPA Code of Ordinances
TSM	Transportation System Management
TSMSC	Too Speculative for a Meaningful Significance Conclusion
TSS	total suspended sediment
TYC	Tahoe yellow cress
U.S. 50	U.S. Highway 50
UBC	Uniform Building Code
USACE	U.S. Army Corps of Engineers
USC	United States Code
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VdB	velocity decibels
VMT	vehicle miles traveled
WDR	waste discharge requirement