

**UPPER TRUCKEE RIVER RESTORATION AND GOLF COURSE
RECONFIGURATION PROJECT FINDINGS OF FACT AND
STATEMENT OF OVERRIDING CONSIDERATIONS**

Prepared for:

California State Parks Commission

Submitted by:

AECOM

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1 INTRODUCTION

The Upper Truckee River Restoration and Golf Course Reconfiguration Project (project) is a proposal by California State Parks (CSP) as lead agency under the California Environmental Quality Act (CEQA). California State Parks Commission (Commission) is a Responsible Agency under CEQA. These findings are prepared for use by the Commission in taking its actions related to the project.

CSP has proposed 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, 13,430 linear feet of the Upper Truckee River, and includes the southern portion of Washoe Meadows SP, all of Lake Valley SRA, and small portions of US Forest Service (USFS) and California Tahoe Conservancy (Conservancy) lands. 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 and to enhance aquatic and riparian habitat values of the river reach.. The proposed project includes reconfiguration of the Lake Tahoe Golf Course ,which currently occupies Lake Valley SRA,,to allow room for restoration of the river, to reduce the area of Stream Environment Zone (SEZ) occupied by the golf course, relocation of golf facilities onto less sensitive lands ,and establishing a buffer area between the golf course and the river. The project requires adjustment of the classification of land within Lake Valley SRA and Washoe Meadows SP and an amendment to the Lake Valley SRA General Plan to place the land occupied by the reconfigured golf course in the SRA and the restored river and riparian corridor generally in the SP.

The environmental analysis contained in the environmental impact report (EIR) provides a thorough evaluation of significant and potentially significant effects on the environment that would occur as a result of implementing the project, modifying the land classifications, and amending the General Plan.

When approving a project, CEQA and the State CEQA Guidelines provide that:

No public agency shall approve or carry out a project for which an environmental impact report has been certified which identifies one or more significant effects on the environment that would occur if the project is approved or carried out unless both of the following occur:

- (a) The public agency makes one or more of the following findings with respect to each significant effect:*
 - (1) Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment.*
 - (2) Those changes or alterations are within the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that other agency.*
 - (3) Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the environmental impact report.*

(b) With respect to significant effects which were subject to a finding under paragraph (3) of subdivision (a), the public agency finds that specific overriding economic, legal, social, technological, or other benefits of the project outweigh the significant effects on the environment. [Public Resources Code Section 21081]

Because the EIR identified significant effects that would occur as a result of the project and in accordance with the provisions of the State CEQA Guidelines, the Commission hereby adopts these findings as part of the approval of the adjustments in land classification and General Plan Amendment that are conditions of the approval of the proposed project **by the State Parks Director**

The Bureau of Reclamation (Reclamation) is the lead agency under NEPA. Reclamation will complete a Record of Decision (ROD) on the project following approval of the project by CSP. The ROD will describe the Federal action that will be implemented and will discuss all factors leading to the decision.

TRPA is the primary permitting agency and the lead agency under the Compact. The TRPA Governing Board will need to make the following motions to certify the Final EIS and approve the project, based on the EIS, the TRPA staff summary, and the complete administrative record:

A motion to make the Compact Article VII (d) findings for the final EIS.

A motion to certify the final EIS for Upper Truckee River Restoration and Golf Course Reconfiguration Project.

The project would be required to comply with TRPA's Regional Plan and Code of Ordinances to receive permits for construction. 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 implementing a project would result in an exceedance of an identified threshold, mitigation must be imposed to reduce the impact and maintain the threshold. No thresholds have been negatively affected by the project and several components of the project will bring thresholds further in or closer to attainment, including water quality, SEZ, recreation, biological thresholds. Short-term significant and unavoidable water quality impacts described in Sections 5 and 6 below would not cause an effect on water quality thresholds because long-term water quality benefits are what would be appropriately assessed, as threshold are evaluated on a 5-year basis. Under 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.

Permits and approvals issued by responsible agencies, including TRPA will be considered after further design development of the project. They will be scheduled according to the procedures of the approving agencies.

2 DESCRIPTION OF THE PROPOSED PROJECT

The project involves river ecosystem restoration with a reconfigured 18-hole regulation golf course. The current 11,840-foot-long reach of the Upper Truckee River would be restored to 13,430 feet with additional floodplain area. Several golf course holes would be relocated to an area on the west side of the river that contains less sensitive land that is further from the river. Under this conceptual design, the amount of golf course adjacent to the Upper Truckee River would decrease from 6,382 linear feet to 850 linear feet by increasing a natural vegetated buffer width from approximately 75 to 100 feet in most areas. While an additional length of golf course would run

parallel to the Upper Truckee River, it would be outside the active floodplain and more distant from the river. The increase in the extent of the vegetative buffer would increase treatment areas for protection of water quality from associated golf course land use, and adjoining riparian vegetation communities would be restored. This would also reduce the amount of SEZ and 100-year floodplain occupied by the golf. All five existing bridges would be removed from the Upper Truckee River, and one new, longer bridge would be constructed. Treatments are also proposed along the lower portion of Angora Creek and the unnamed creek to reconfigure the confluence with the Upper Truckee River. Four bridges would also be removed from Angora Creek. New trails would be constructed on both sides of the river with connectivity to the Sawmill bike path and Country Club Drive.

The boundaries between Washoe Meadows SP and Lake Valley SRA would be modified so that the SRA would encompass the reconfigured golf course and the restored river would generally become part of Washoe Meadows SP. The southern portion of the South Tahoe Public Utility District (STPUD) access road would also become part of the SRA. The text and maps of the Lake Valley SRA General Plan would be amended to reflect management of the reconfigured golf course.

The restoration approach is designed to reverse the negative trends caused by past channelization, existing infrastructure, and associated land uses. The restoration aspects of the project would increase channel length and elevate the channel bed through a combination of grade control features in the existing channel bed, reconnection of historically cutoff or abandoned meanders, and construction of new channel sections. Meanders that were cut off in the 1940s and 1950s, many of which are still visible on the terrace, would be reincorporated as active channel, and approximately one-half of the existing channel would be retained. The overall approach would decrease erosive force and increase floodplain inundation and duration, thereby reducing sediment supply and providing more opportunity for fine sediment deposition. It would also actively restore riparian habitat adjacent to the river.

The river would have an increased channel length of 13,430 linear feet and an active floodplain of 77 acres, including the constructed inset floodplain of 1.7 acres. Approximately 97 acres of floodplain and meadow would be restored, 23 acres within the 100-year floodplain and 32 acres in the SEZ. Most of the golf course would no longer be adjacent to the river; 850 linear feet (425 feet on each side of the river) would remain, in the vicinity of the proposed replacement bridge. The channel bed would be elevated approximately 2 feet on average throughout the project reach. This design does not rely on or advocate full construction of the envisioned final dimension of the channel form. Rather, it removes infrastructure that prohibits natural processes and provides basic form and grade. Therefore, it anticipates that natural geomorphic processes, such as deposition and active movement of gravel bars, recruitment of woody debris, substrate sorting, and vegetation establishment, would modify the constructed bed and bank features over time to establish a site-specific final channel form.

The reconfigured course is proposed to be environmentally sensitive and sustainable design. The golf course would be integrated into the natural landscape using a site-specific design approach with the intent of minimizing land disturbance. The combination of providing a high quality recreational opportunity, maintaining open space, and preserving visual and functional quality of the landscape are a few of the key design goals. While tree removal would be substantial, the layout was designed to minimize this effect by placement in relatively open and previously disturbed areas that would have minimal impact on the ecosystem while still allowing an 18-hole regulation golf course. The design would incorporate measures to continue Audubon Sanctuary certification

through the Audubon Cooperative Sanctuary Program for Golf Courses with ecologically sound land management and the conservation of natural resources.

The conceptual 18-hole regulation golf course design reconfigures Lake Tahoe Golf Course by relocating up to seven entire and two partial golf course holes to the western side of the Upper Truckee River and upgrading drainage for retained areas of the course. Those existing holes identified for relocation are within the historic meander belt and active floodplain of the Upper Truckee River. They would generally be relocated onto higher capability lands farther from the river to minimize use of SEZ lands, avoid sensitive biological and cultural resources known to exist in Washoe Meadows SP, and maintain a buffer from the river and adjacent residential areas. Where golf course holes would be removed from the river corridor, the riparian/floodplain areas would be restored (as described above).

The reconfigured golf course would have an overall footprint of 155 acres, 64 acres of which would be native vegetation (minimally managed and naturalized landscape), and 91 acres of intensively managed (nonnative vegetation or coverage). The area of golf course in SEZ would be reduced to 96 acres, 34 acres of which would be in the 100-year floodplain. All five existing golf course bridges over the Upper Truckee River would be removed, and one new bridge would be constructed, 850 linear feet of golf course would be adjacent to the river at the replacement bridge to allow for playability; however, golf course design will include safety measures for trail users.

A classic links style golf course is proposed where wider turf areas would be placed only in main landing zones so that turf is narrower near tees. All turf areas (intensively managed) would be buffered using native grasses (minimally managed). The existing golf holes would be modified to match this style. Golf course holes remaining on the east side of the river would be reconfigured and upgraded to improve playability, drainage, turf quality, irrigation efficiency, water collection system and to incorporate current BMP technology. As part of this reconfiguration, the unnamed creek that crosses the center of the golf course and discharges into the Upper Truckee River also would undergo modification (e.g., added setbacks and buffer areas between turf areas and the creek, and native vegetation treatments in those buffer areas). All areas where existing golf facilities are removed within the current golf course footprint and are no longer used as part of the new course would be restored to a native landscape and removed from the Lake Valley SRA. These areas would receive minimal grading to restore natural topography and drainage. They would then be planted with native vegetation and managed only for natural values as part of Washoe Meadows SP.

3 ALTERNATIVES

In accordance with the Section 15126.6 of the State CEQA Guidelines, a range of reasonable alternatives to the project that could feasibly attain the basic project objectives but would avoid or substantially lessen any of the significant effects of the project was addressed in the draft EIR. Preliminary evaluations allowed the identification of potential restoration opportunities and constraints and led to the recommendation of four river treatment options: (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 analyzed in the draft EIR were derived from these original alternatives. The initial definition of alternatives was supplemented by alternatives developed as a result of the public scoping process and early public planning workshops. 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 the golf course and fully restoring Lake Valley SRA to riparian and meadow habitat. The five alternatives addressed in the draft EIR included three golf course reconfiguration concept plans (reduced play, reconfigured 18-hole regulation, and no golf course) combined with two alternative river approaches (restoration and stabilization) and a No Project/No Action Alternative. These alternatives were named for their approach to restoration of the Upper Truckee River, and the associated level of golf course infrastructure.

- ▶ **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

The action alternatives present trade-offs related to overall environmental advantages. Alternatives 2, 3, and 5 include geomorphic restoration of the river, which would create benefits for long-term water quality, amount and quality of aquatic and riparian habitat, and restoration of SEZ. Alternative 4 would stabilize the river in place, and have some water quality and habitat benefits, although less than Alternatives 2, 3, and 5. Implementing the No Project/No Action Alternative would avoid the adverse impacts generated by construction activity and golf course reconfiguration resulting from the action alternatives; however, the water quality and river restoration benefits would not occur. Consequently, the No Project/No Action Alternative is not environmentally superior or environmentally preferred. Of the action alternatives, Alternative 5, River Ecosystem Restoration with Decommissioned Golf Course, is the environmentally superior alternative because it would:

- ▶ reduce the amount of land coverage the most among the alternatives, which would reduce soils, hydrologic, and biological impacts,
- ▶ restore the largest area of SEZ, and
- ▶ provide the long-term water quality and habitat benefits of geomorphic river restoration.
- ▶ While Alternative 5 would be environmentally superior, it includes non-environmental trade-offs. The removal of the golf course would eliminate the revenue stream received by CSPCSP, a small number of existing local jobs, and the contribution of golfing activity to the local economy.

A description of these alternatives is provided below. A summary of the river and golf characteristics of each alternative is presented in Table 1-1.

3.1 ALTERNATIVE 1: (NO-PROJECT/NO-ACTION): EXISTING RIVER AND 18-HOLE REGULATION GOLF COURSE

A comprehensive evaluation of the No-Project Alternative, as required by Section 15126.6(e) of the State CEQA Guidelines, was included in the draft EIR. 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

**Table 1-1
Upper Truckee River Restoration and Golf Course Reconfiguration Alternatives Comparison Table**

	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Preferred Alternative
River Characteristics						
River treatment	None	Restore	Restore	Stabilize	Restore	Restore
Channel length total (feet)	11,840	13,430	13,430	11,840	13,430	13,430
Active (5-year) floodplain (acres)	36	77	77	36	77	77
Inset floodplain (acres)	0	1.7	1.7	0.4	1.7	1.7
Restored SEZ (acres) ¹	0	32	43	0	125 ²	32
Restored 100-year floodplain (acres) ¹	0	20	46	0	54 ²	22
Restored floodplain/meadow (acres)	0	97	112	0	132 ²	97
Anchored high-gradient riffle	NA	Upstream and Downstream ends of project reach				
Boulder steps	NA	1 (water intake)		13–15	0	1 (water intake)
Armored riffles	NA	15–25	15–25	Optional	15–25	15–25
Reconnected historic meander	NA	2,490	2,490	0	2,490	2,490
Constructed new channel	NA	1,700	1,700	0	1,700	1,700
Modified existing channel	NA	5,000	5,000	NA	5,000	5,000
Backfilled existing channel	NA	2,600	2,600	0	2,600	2,600
Rock armor bank protection	NA	200	200	7,500 (outside bends)	200	200
Biotechnical bank treatment	NA	2,400	2,400	7,400 (inside bends)	2,400	2,400
Golf Characteristics						
Golf course type	18-hole regulation	18-hole regulation	9-hole regulation or 18-hole executive	18-hole regulation	None	18-hole regulation
Golf course footprint (acres)	134	156	86	133	3	155
Golf course within SEZ (acres)	128	96	85	128	3	96
Golf course within 100-year floodplain (acres)	56	36	10	56	3	34
Golf course adjacent to the Upper Truckee River (linear feet each bank counted separately)	6,382	850	0	6,382	0	850
Intensively managed turf landscape (acres)	98	85	45	95	0	84
Intensively managed facilities landscape (acres) ⁴	6	7	6	7	3	7

**Table 1-1
Upper Truckee River Restoration and Golf Course Reconfiguration Alternatives Comparison Table**

	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Preferred Alternative
Minimally managed landscape (acres)	23	44	24	24	0	48
Naturalized landscape (acres)	7	20	11	7	0	16
Bridges over Upper Truckee River	5	1	0	4	0	1
Bridges over Angora Creek	4	0	0	4	0	0
Bridges over unnamed creek	4	4	4	4	0	4
Additional restroom	No	Yes	No	Yes	No	Yes
Paving of unpaved parking area	No	Yes	No	Yes	No	Yes
Employment Opportunities						
Total number of jobs	76	80	60–65	80	32	80
Change in number of jobs from existing conditions	0	+4	-11 to -16	+4	-44	+4
Other Restoration						
Quarry wetland enhancement	No	Yes	No	No	No	No
Recreation Characteristics						
Upper Truckee bridges open to public access	No	1	NA ⁴	No	NA ⁴	1
Trail along east side of river with Sawmill Bike Trail connection	No	Yes	Yes	No	No	Yes
Trail to corner of Country Club Drive	No	Yes	Yes	No	No	Yes
Improve/reroute trails on west side of river	No	Yes	No	No	No	Yes
Add minor access enhancement at public right(s)-of-way into Washoe Meadows SP (small parking area)	No	Yes	Yes	Yes	Yes	Yes
General Plan Characteristics						
Lake Valley SRA acreage	173	213	120	173	0	213
Washoe Meadows SP acreage	608	568	661	608	781	568
<p>Note: The overall plan is conceptual, and final design may be modified to satisfy parties involved in the final decision-making process. These modifications would not substantially increase the intensity or severity of an impact or create a new significant impact</p> <p>¹ Represents restored SEZ or floodplain that was formerly golf course, but does not include increase in the SEZ or floodplain due to restoration of improved geomorphic function. Increase in total floodplain area discussed in Section 3.3, "Hydrology and Flooding."</p> <p>² Acreage proposed for full restoration but future planning efforts may allow for other compatible land uses.</p> <p>³ Intensively managed facilities includes buildings, parking lots, and cart paths. Cart paths would be removed under Alternative 5 but not other facilities.</p> <p>⁴ All bridges removed.</p> <p>Source: Compiled by AECOM and CSPCSP 2011</p>						

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, adjacent to the river with an overall footprint of 134 acres, 56 acres in the 100-year floodplain and 128 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 under Alternative 1. Alternative 1 does not involve altering the existing boundaries in the Lake Valley SRA or in Washoe Meadows SP. 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. Because the general plan calls for restoration of the river, this alternative would be inconsistent with the general plan; however, it does not preclude restoration in the future and thus would not require revision.

After a detailed evaluation of Alternative 1, this alternative has not been proposed as the Preferred Alternative for the following reasons:

- ▶ It would not reduce or minimize golf course area within the SEZ.
- ▶ It would not reduce or minimize golf course area within the active floodplain.
- ▶ It would not reduce or minimize golf course area within the historic meander belt of the river.
- ▶ It would not meet the geomorphic criterion.
- ▶ It would not meet the ecosystem criterion.
- ▶ It would not meet the water quality criterion.
- ▶ It would not meet the restoration goals as outlined within the Lake Valley SRA General Plan.

Alternative 1 would continue existing land use practices within the study area. Golf holes and associated undersized bridges would continue to create erosive forces and water quality impacts adjacent to the Upper Truckee River. While economic and recreational goals would continue to be met, Alternative 1 would not meet the goals of improving geomorphic, ecosystem, and water quality targets. This alternative has been rejected from further consideration.

3.2 ALTERNATIVE 2: RIVER ECOSYSTEM RESTORATION WITH RECONFIGURED 18-HOLE REGULATION GOLF COURSE

A slightly modified version of the draft EIR/EIS/EIS Alternative 2 was described in Section 2, “Description of the Proposed Project” above. Changes to the project were made to further address public access issues, such as trail safety, as well as protection of sensitive resources and management considerations. These modifications would not substantially increase the intensity or severity of an impact or create a new significant impact. Differences include slight modifications to the trail, redirected for additional safety measures through the golf course and some minor modifications to the SRA boundary to include the southern portion of the STPUD access road. The quarry wetland pond restoration, as described in the draft EIR/EIS/EIS, is no longer proposed as part of the project because further evaluation concluded that the area is naturally recovering and establishing properly functioning habitat and would not benefit from the further improvements previously described.

3.3 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 restored floodplain. The footprint would be 86 acres, 10 acres in the 100-year floodplain and 80 acres in the SEZ. 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. Except for river restoration in areas of the historic meander belt, no construction would occur on the west side of the river in Washoe Meadows SP under Alternative 3.

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 made 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 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, which would provide for access and resource management of Washoe Meadows SP, would be prepared. It would address resource protection, public access, and use issues in Washoe Meadows SP, and future planning efforts could be undertaken to allow for recreational development of Washoe Meadows SP under a separate project.

After a detailed evaluation of Alternative 3, this alternative has not been proposed as the Preferred Alternative for the following reasons:

- ▶ It would not fully meet the recreational criterion.
- ▶ It would not fully meet the operational criterion.
- ▶ It would not fully meet the State revenue criterion.
- ▶ It would not fulfill the need for an 18-hole regulation golf course as outlined in the Lake Valley SRA General Plan.

Alternative 3 would modify existing land use practices within the study area. Golf holes adjacent to the Upper Truckee River and associated undersized bridges would be removed, improving geomorphic and ecological functions by decreasing erosive forces and water quality impacts, and improving habitat of the Upper Truckee River and the surrounding SEZ. However, economic and recreational goals would not be fully met under Alternative 3. An 18-hole regulation golf course would not be feasible under Alternative 3, eliminating tournaments that currently provide both economic and recreational opportunities that do not exist elsewhere in the Basin at a reasonable cost to the user. Furthermore, as discussed in the draft EIR/EIS/EIS and presented at public

meetings, the economic feasibility to operate a 9-hole or smaller 18-hole course would not be a viable option for potential concessionaires. This alternative has been rejected from further consideration.

3.4 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. The footprint would be 133 acres, 56 acres in the 100-year floodplain and 128 acres in the SEZ. Three of the existing Upper Truckee River bridges would remain in place, but the two upstream bridges would be replaced by one longer bridge. No bridges would be removed along Angora Creek or the unnamed creek, and no recreation trails would be developed.

Alternative 4 would involve only slight configuration changes of the existing golf course related to the bridge replacement and would not involve modifying 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 text of the general plan would need to be revised under this alternative. An interim management plan, which would provide for access and resource management of Washoe Meadows SP, would be prepared, and future planning efforts could be undertaken to allow for recreational development of Washoe Meadows SP under a separate project.

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 from 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 it would not minimize hard engineering or constitute restoration of a natural channel as contemplated in the general plan.

After a detailed evaluation of Alternative 4, this alternative has not been proposed as the Preferred Alternative for the following reasons:

- ▶ It would not reduce or minimize golf course area within the SEZ.
- ▶ It would not reduce or minimize golf course area within the active floodplain.
- ▶ It would not reduce or minimize golf course area within the historic meander belt of the river.
- ▶ It would not meet the geomorphic criterion.
- ▶ It would not meet the ecosystem criterion.

- ▶ It would only partially meet the water quality criterion.
- ▶ It would not meet the restoration goals as outlined within the Lake Valley SRA General Plan.

Alternative 4 would continue existing land use practices within the study area. Because the river would be stabilized in place, the existing 18-hole regulation golf course would remain largely unchanged, allowing recreational and economic goals to continue to be met. While erosive forces and water quality impacts from those forces would decrease, golf course holes (and associated irrigation and fertilizer practices) would remain located in areas adjacent to the Upper Truckee River within the SEZ. Economic and recreational goals would continue to be met; however, Alternative 4 would not meet the goals of improving geomorphic, ecosystem, and habitat targets. This alternative has been rejected from further consideration.

3.5 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 much of the footprint would be restored as native meadow and riparian habitat. The clubhouse facility, parking area, and maintenance yard would remain, and the clubhouse would be available for public use 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, CSPCSP 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 limited public access or outdoor recreation use would not be feasible because of the unmet demand for outdoor recreation in the state and the mission of CSPCSP. In time, some form of public access and/or development of outdoor recreation facilities would need to be implemented, in keeping with the mission of the department.

If economically feasible, a 9-hole golf course may remain temporarily in use while CSPCSP 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.

After a detailed evaluation of Alternative 5, this alternative has not been proposed as the Preferred Alternative for the following reasons:

- ▶ It would not meet the recreational criterion.
- ▶ It would not meet the operational criterion.
- ▶ It would not meet the State revenue criterion.
- ▶ It would not fulfill the need for an 18-hole regulation golf course as outlined in the Lake Valley SRA General Plan.

Alternative 5 would involve modifying existing land use practices within the study area. The 18-hole regulation golf course and associated undersized bridges would be removed, improving geomorphic and ecological functions by decreasing erosive forces and water quality impacts, and improving habitat of the Upper Truckee River and the surrounding SEZ. However, economic and recreational goals would not be fully met under Alternative 5 because it would involve eliminating golf recreation and tournaments that currently provide both economic and recreational opportunities that do not exist at a reasonable rate to the user elsewhere in the Basin. This alternative has been rejected from further consideration.

4 CEQA SECTION 21091 FINDINGS

CSPCSP and the Commission have reviewed the final EIR for the proposed project, consisting of the Responses to Comments on the draft EIR, revised sections of the draft EIR. CSPCSP and the Commission have also reviewed the Monitoring Mitigation and Reporting Program and considered the public record on the project (references provided in Chapter 8, “References Cited,” in the draft EIR and Chapter 6, “References” in the final EIR).

Pursuant to Public Resources Code Section 21081, for each significant effect identified in the draft EIR, CSPCSP must make one or more of the findings. CSPCSP hereby makes the following findings regarding the significant effects of the proposed project, pursuant to Public Resources Code Section 21081 and Section 15091 of the State CEQA Guidelines. Because the project’s effects can be considered indirect impacts of the boundary adjustments and management changes proposed as part of the General Plan Amendment the Commission also adopts these findings.

No Potentially Significant Impacts were identified for the Land Use, Recreation, Noise, or Population and Housing. The General Plan was discussed in the Land Use section, including changes to the boundaries for LVSRA and WMSP to accommodate reconfiguration of the Golf Course. The proposed Project carries out the primary direction of the current Lake Valley General Plan by allowing for restoration of the river and maintenance of an 18 hole golf course and the impact would be less than significant. In the recreation chapter, under "reduction in recreation opportunities", it was acknowledged that there would be short term disruption during construction, and that some existing non-system trails would be removed. However, the project will construct new trails, increase connectivity of the trails and increase river-related recreation access and opportunities, thus the impact would be less than significant

4.1 HYDROLOGY AND FLOODING

Significant Effect: Long-Term Increase in Stormwater Runoff Volumes. (Impact 3.3-1)

Implementing the project would modify the golf course footprint, relocate and modify the type of impervious surfaces (including a new restroom and paving of unpaved parking area), and directly modify the existing channels of the creeks, drainages, and the Upper Truckee River in the study area. Changes to stormwater drainage patterns may occur within the new golf course footprint and in the areas of existing golf course to be restored. Storm drainage systems would be installed and upgraded within the new golf course footprint to locally provide increased detention and infiltration of runoff. At the conceptual level of design, it is uncertain whether storm drainage system features would be sized and located appropriately to prevent an increase in the amount of stormwater runoff released to the river or creeks in the study area. This impact would be **potentially significant**.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effects of the project to a less-than-significant level.

Facts in Support of Finding

CSPCSP and the Commission adopted the following mitigation measure that would reduce to less-than-significant levels the project's impacts from long-term increase in stormwater runoff volumes.

Mitigation Measure 3.3-1: Provide On-Site Storm Drainage Facilities and Accompanying Stormwater Drainage Plan to Prevent Damage from Increased Runoff Discharged to Creek or River Channels.

Stormwater improvements shall be incorporated into the final detailed project design. Before issuance of grading permits, CSPCSP shall submit a detailed stormwater drainage plan to El Dorado County and TRPA for review and approval. The plan shall identify the locations, sizes, and types of facilities used to retain and treat the runoff volumes and peak flows. The detailed design shall meet the following minimum performance criteria:

- ▶ Stormwater facilities shall be installed in the sub-watershed of each existing natural drainages (e.g., swales, seeps, creeks) that will experience project-related changes to topographic, soil, and/or vegetation cover;
- ▶ Peak runoff discharge from the stormwater system to each of the existing natural drainage swales, creeks, or the Upper Truckee River shall be equal or less than pre-project conditions up to the 10-year event;
- ▶ Nuisance perennial discharge of excess irrigation water shall be prevented; and
- ▶ Where rerouting of drainages or point discharges from the stormwater facilities are necessary, those discharges shall be designed to prevent streambed or streambank erosion in the receiving water body.

The stormwater designs and drainage plan shall strive to incorporate BMPs where feasible, including but not limited to:

- ▶ pervious pavement or pavers,
- ▶ strategically placed bioswales and vegetated swales,
- ▶ constructed wetlands and detention ponds,
- ▶ rock- or boulder-lined areas to prevent disruption or erosion, and
- ▶ training of maintenance personnel on stormwater pollution prevention measures.

With the measure described above, the stormwater system improvements would incorporate design measures that would prevent damage from increased runoff discharge to creek and river channels. The stormwater system would be expanded, sized, and located appropriately to prevent an increase in the amount of stormwater runoff leaving the property and existing infrastructure will also be improved to meet specific performance requirements,

including irrigation improvements, drainage routing and rerouting, and other BMPs as appropriate. Drainage design plans will be developed by qualified professionals and reviewed by appropriate permitting entities to assure proper design. Therefore, with implementation of Mitigation Measure 3.3-1, Impact 3.3-1 would be less than significant.

Significant Effect: Long-Term Increase in the 100-Year Flood Hazard Area or Elevation (Impact 3.3-4)

Implementing the project would directly modify the size and configuration of the Upper Truckee River channel within the study area, which could allow the water surface elevation for the 100-year flood to increase or the boundary of the 100-year floodplain to expand. The expanded floodplain would be contained within open space areas and not include any residential areas. Nonetheless, because an increase in flood elevation and/or floodplain would occur, this impact would be **potentially significant**.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effects of the project to a less-than-significant level.

Facts in Support of Finding

CSPCSP and the Commission adopted the following mitigation measure that would reduce to less-than-significant levels the project's impacts on increasing the 100-year flood hazard.

Mitigation Measure 3.3-4: Prevent Detrimental Increases in the Future Water Surface Elevation or Area of the 100-Year Flood.

During design development of the project beyond the conceptual planning stage, more precise hydraulic modeling of the proposed channel configuration shall be performed. The hydraulic modeling shall be used iteratively with the detailed design process to identify and incorporate modifications to final design that would achieve the following performance criteria:

- ▶ prevent increases in the future 100-year water surface elevation or inundation area as needed to avoid worsening flood hazards or potential damage to existing structures, residences, or public infrastructure.
- ▶ Examples of design features that could be included in the final design through this iterative modeling/design process include:
 - ▶ lowered final streambed elevation within the downstream transition from the treated reach to the existing unmodified channel;
 - ▶ enlarged channel or overbank capacity within and/or downstream of the treated reach.

With the measure described above, hydraulic modeling would be used throughout the design process to develop and incorporate design features that would prevent any increase in hazards or risk of damage. The increased water surface elevations and enlarged floodplain boundaries for the 100-year event would not affect residential

structures or major infrastructure features because the floodplain boundaries would be within open space and golf course portions of the study area. No changes to the water surface elevation for, or the location of, the 100-year flood event are expected in the vicinity of existing residential structures along Sawmill Road. In addition, detailed hydraulic modeling of the proposed design may indicate that the potential changes would be less substantial than indicated by these initial conservative modeling estimates. Therefore, with implementation of Mitigation Measure 3.3-4, Impact 3.3-4 would be less than significant.

4.2 GEOMORPHOLOGY AND WATER QUALITY

Significant Effect: Stream Channel Erosion within the Study Area (Impact 3.4-1)

The project would involve making direct changes to the channel of the Upper Truckee River and the mouths of Angora Creek and the unnamed creek. The changes would offset past geomorphic response to historic disturbances and the undersized bridges within the study area by lengthening the channel, reactivating and constructing more appropriately sized channel sections, improving floodplain connectivity, and removing bridges. These modifications would prompt improved stream function and reduce overall erosion of the streambed and banks. This would be a substantial long-term benefit overall, but localized erosion could increase at the bridge removal sites, downstream of the treated reaches, and/or in the two tributary creeks. This localized risk of increased erosion would be **potentially significant**.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effects of the project to a less-than-significant level.

Facts in Support of Finding

CSPCSP and the Commission adopted the following mitigation measure that would reduce to less-than-significant levels the project's impacts on stream channel erosion.

Mitigation Measure 3.4-1A: Provide Bed and Bank Stabilization Measures at and Immediately Upstream and Downstream of Bridge Removal Sites.

Final design will include specific streambed stabilization and streambank protection measures at each proposed bridge removal site (and the upstream and downstream directions) that will minimize future erosion under the modified hydraulic conditions, as verified by quantitative modeling that demonstrates stability up to the 20-year peak event. The measures may include grading to modify the channel dimensions (e.g., eliminate existing large scour pool) and the shape of the channel bed and banks, along with installation of rock and/or biologic materials.

Mitigation Measure 3.4-1B: Ensure Bed and Bank Stability Downstream of the Treated Reaches.

Final plans will include design features or specific streambed stabilization and streambank protection measures in the transition zone downstream of the treated reaches (approximately RS 150 to RS 1400), if detailed hydraulic modeling of the 5-year, 10-year, and 100-year peak flows indicates that shear stress changes would increase streambed mobility/erosion, streambank erosion, or overbank erosion in the floodplain.

Mitigation Measure 3.4-1C: Ensure Bed and Bank Stability in the Lower Reaches of the Two Tributary Creeks.

Final design will include specific streambed stabilization and streambank protection measures in the lower reaches of Angora Creek and the unnamed creek, based on detailed hydraulic modeling of the proposed reconfiguration of their alignments and slopes, to protect against increased erosion up to the 20-year peak event or to a higher design standard as needed to protect the sewer pipeline crossings.

Overall, the project will decrease erosion and fine sediment loading from the project area through restoration efforts designed to reverse the negative trends caused by past channelization, existing infrastructure, and associated land uses. The restoration aspects of the project would increase channel length and elevate the channel bed through a combination of grade control features in the existing channel bed, reconnection of historically cut-off or abandoned meanders, and construction of new channel sections. However; localized areas could be affected by proposed modifications. Implementation of mitigation measures described above would reduce impacts associated with potential increases in localized channel erosion to a less-than-significant level because bed and bank stabilization measures would be installed immediately upstream and downstream of the bridge removal sites, downstream of the treated reaches, and in the lower reaches of the two tributary creeks to ensure stability of areas where channel movement should be minimized to avoid future problems related to erosion. Therefore, with implementation of Mitigation Measures 3.4-1A, 3.4-1B, 3.4-1C, Impact 3.4-1 would be less than significant.

Significant Effect: Risk of Channel Erosion Damage to Sewer Pipelines (Impact 3.4-2)

Implementing the project would improve existing protective cover over sewer pipelines crossing the Upper Truckee River, but the new alignment would place the channel within 25 feet of the buried pipeline in two locations. Natural geomorphic adjustments following construction may pose a risk of damage to these portions of the sewer pipelines, as well as the two Angora Creek crossings, potentially releasing untreated wastewater to the river and creek that would eventually reach Lake Tahoe. This impact would be **potentially significant**.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effects of the project to a less-than-significant level.

Facts in Support of Finding

CSP and the Commission adopted the following mitigation measure that would reduce to less-than-significant levels the project's impacts on stream channel erosion to sewer pipelines.

Mitigation Measure 3.4-2A: Protect Vulnerable Portions of the Sewer Pipeline up to the 100-Year Flood Event.

In coordination with STPUD, CSP will design and install protection measures for the buried sewer pipeline north and west of the proposed reconnected meanders on the Upper Truckee River upstream of existing RS 4100 and downstream of RS 7900 or work with STPUD to relocate the vulnerable section of pipeline. Final design will prevent channel adjustments up to the 100-year peak event in areas potentially at risk of exposing/undermining sewer pipelines. Final design schematics will be reviewed and approved by the Engineering Department of STPUD.

Mitigation Measure 3.4-2B: Verify Utility Locations, Coordinate with Utility Providers, Prepare and Implement a Response Plan, and Conduct Worker Training with Respect to Accidental Utility Damage.

- ▶ This mitigation measure is similar to Mitigation Measure 3.13-2A. Before final design schematics are prepared, CSP or its primary representative will consult with STPUD to determine the exact location of underground facilities in the project area, including the public right-of-way, and design the final grading plans to avoid existing utilities where possible. If these utilities cannot be avoided, CSP will coordinate with STPUD to determine the best possible course of action to minimize potential disturbance.
- ▶ Before the start of construction, utility locations will be verified through field surveys and the use of the Underground Service Alert services. Any buried utility lines will be clearly marked in the area of construction on the construction specifications in advance of any earthmoving activities. Before construction begins, CSP will provide advance notification of any needed disturbance to area businesses and residents. STPUD consultation should continue during construction to ensure that facilities are avoided and protected and that service disruptions are minimized as construction proceeds.
- ▶ Before the start of construction, a response plan will be prepared to address potential accidental damage to a utility line. The plan will identify chain-of-command rules for notifying authorities and appropriate actions and responsibilities to ensure the safety of the public and workers. Worker education training in response to such situations will be conducted by the contractor. The response plan will be implemented by CSP and its contractors during construction activities.

Mitigation Measure 3.4-2C: Ensure Bed and Bank Stability in the Lower Reaches of the Two Tributary Creeks.

- ▶ This mitigation measure is identical to Mitigation Measure 3.4-1C.

Overall, the project will decrease erosion from the project area through restoration efforts designed to reverse the negative trends caused by past channelization, existing infrastructure, and associated land uses. The restoration aspects of the project would increase channel length and elevate the channel bed through a combination of grade control features in the existing channel bed, reconnection of historically cut-off or abandoned meanders, and construction of new channel sections. However; localized areas could be affected by proposed modifications, including vulnerable portions of the sewer pipeline. Implementation of mitigation measures described above would reduce impacts associated with construction and geomorphic adjustments within areas known to contain sewer pipelines. With implementation of Mitigation Measures 3.4-2A through 3.4-2C as described above, Impact 3.4-2, the potential increased risk of sewer pipeline damage and water quality degradation, would be less than significant because vulnerable portions of the sewer pipeline would be protected up to the 100-year flood event; utility locations would be verified, utility providers would be consulted, a response plan would be prepared and implemented, and worker training with respect to accidental utility damage would be conducted; and bed and bank stability in the lower reaches of the two tributary creeks would be ensured. These measures would ensure that the exact location of the sewer pipeline is identified so that potential impacts would either be avoided or minimized.

Significant Effect: Modifications in Upper Truckee River Coarse Sediment Transport and Delivery Downstream (Impact 3.4-5)

The project would involve making major modifications to the channel bed profile, bank and bed materials, and hydraulic conditions controlling bedload (i.e., sands and gravel) transport within the study area and into the downstream reaches of the Upper Truckee River. Naturally declining, post-disturbance watershed coarse sediment yield would continue and, potentially, would be worsened, particularly during the initial channel adjustment phase, with possible adverse effects on downstream channel erosion and beach erosion adjacent to the river mouth (e.g., Cove East and Barton Beach). In the long term, climate change effects could either exacerbate or counteract present trends. Over the long term, the potential effects could range from worse than the existing degraded condition to a possible improvement, depending on climate influences. Any determination regarding climate change effects on coarse sediment transport and delivery downstream would be too speculative for a meaningful conclusion. Over the short term, implementing the project would modify coarse sediment transport and deposition within various portions of the study area and likely decrease coarse sediment delivery to downstream reaches. This short-term impact would be **potentially significant**.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effects of the project to a less-than-significant level.

Facts in Support of Finding

CSP and the Commission adopted the following mitigation measure that would reduce to less-than-significant levels the project's impacts on coarse sediment transport and delivery downstream.

Mitigation Measure 3.4-5: Monitor and Supplement Coarse Sediment Delivery Downstream

During the period of channel adjustments following construction and until the streambed profile attains a relatively continuous slope, where bedload deposition within the study area has adjusted and coarse sediment supply net input approximately equals net output from the study area, CSP will monitor coarse sediment supply entering the study area, deposition within the treated reaches, and discharge to downstream reaches (i.e., at the U.S. 50 crossing) at least once a year (make observations of net deposition or scour during low water conditions). If substantial areas and volume of coarse sediment deposition is occurring within the study area and/or coarse sediment discharge to downstream reaches is substantially less than sediment input from upstream sources, CSP will conclude that a project-related effect on coarse sediment delivery may be occurring. Coordinated adaptive management, administered by the Upper Truckee Watershed Advisory Group (UTRWAG) will review and evaluate monitoring data and project conditions and recommend next steps, including continuation or revision of monitoring, corrective actions or interventions, or documentation. If the UTRWAG determines there is a significant worsening coarse sediment impact, CSP, in coordination with land managers of the downstream river reaches (i.e., Conservancy, USFS, City of South Lake Tahoe), will assess whether any adverse channel erosion and water quality effects might result and will recommend a plan to monitor or take corrective action, which may include introduction of supplemental coarse sediment (e.g., gravel,) using washed, sorted materials and methods that minimize temporary risks to water quality, biologic resources, and recreation uses. The quantity and size

classes of any required supplemental coarse sediment introduced downstream would be determined annually in coordination with the land managers downstream along the river.

With implementation of Mitigation Measure 3.4-5, Impact 3.4-5, the potential downstream adverse geomorphic effects and water quality consequences of short-term interruption of coarse sediment delivery, would be less than significant, because CSP will monitor bedload transport into and out of the study area and supplement gravel, as necessary, so that coarse sediment output from the study area would continue to support downstream reaches so not to have a negative effect on downstream river dynamics.

Significant Effect: Short-Term Risk of Surface Water or Groundwater Degradation during Construction (Impact 3.4-6)

Implementing the project would require construction activities along or in the channel of the Upper Truckee River and sections of Angora Creek and the unnamed creek. Although temporary BMPs would be implemented, short-term risks of water quality degradation during construction could occur during each summer construction season or the intervening winters. Implementing the project could result in short-term violations to the Basin Plan water quality standards, including turbidity due to construction implementation. This short-term impact would be **potentially significant**.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effect of the project, but not to a less-than-significant level; this impact would remain significant and unavoidable.

- Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the implementation of other mitigation measures or alternatives that could reduce the impact to a less-than-significant level.

Facts in Support of Finding

CSP and the Commission adopted the following feasible mitigation measure to protect beneficial uses of the Upper Truckee River. However, the potential for violations of narrative or numerical water quality objectives in the Basin Plan at least for short periods of time cannot feasibly be eliminated. This impact would remain significant and unavoidable.

Mitigation Measure 3.4-6: Prepare and Implement Effective Site Management Plans.

CSP will be required to develop and implement several construction phase site management plans as part of various permit and approval requirements, including but not limited to, grading and erosion control plan, Storm Water Pollution Prevention Plan (SWPPP), spill prevention plan, dewatering and channel seasoning plan, winterization plan, and monitoring and oversight plan. The following measures will be implemented by CSP within each of these plans to be developed for specific permits or as independent mitigation measures:

- ▶ Restrict the area and duration of construction disturbance to the absolute minimum necessary to accomplish the work.

- ▶ Design, install, and maintain temporary BMPs to protect disturbed areas and minimize soil erosion, prevent surface runoff interaction with disturbed surfaces, and limit the potential for release of sediment, nutrients, or otherwise contaminated water into surface water bodies or groundwater recharge areas for storm events up to the 20-year precipitation event.
- ▶ Design, install, and maintain internally draining construction area(s) on both sides of the Upper Truckee River, Angora Creek, and the unnamed creek within the study area to prevent discharge of untreated stormwater to these surface water bodies. Anticipate runoff from upslope groundwater seeps west of the Upper Truckee River, and reroute it around the construction zone.
- ▶ Establish specific locations for construction vehicle/equipment refueling, maintenance, and storage that are lined and/or bermed to prevent release of any potential spills into surface water or groundwater.
- ▶ Provide winterization that isolates and protects disturbed areas from high streamflow on the Upper Truckee River and Angora Creek (up to the 50-year event).
- ▶ Protect stockpiled and transported materials or debris from wind or water erosion.
- ▶ Avoid overwinter storage of materials, vehicles, equipment, or debris within the 100-year floodplain.
- ▶ Provide site-specific and reachwide dewatering/bypassing plans that indicate the scheduling approach and or maximum diverted flows to minimize risks from summer thunderstorms, specific diversion/bypass/dewatering methods and equipment, defined work areas and diversion locations, the types and locations of temporary BMPs for the diversions and reintroduction points, measures and options for treating turbid water before release back to the channel, and stated water quality performance standards.
- ▶ Provide wetting flows before activation of new and reconnected river channel sections based on a “channel seasoning” plan that indicates the water source(s), volumes and duration required, phased placement of clean, washed gravels; and the measures and options for treating potentially turbid water.
- ▶ Monitor the status and effectiveness of temporary erosion control, stormwater facilities, and flood flow protection measures throughout the construction area, including each of the internally draining zones that could separately discharge to various surface water bodies. Monitor turbidity in the Upper Truckee River upstream and downstream of the construction zone and, if needed to further describe background, upstream in Angora Creek. Monitoring will be conducted by the engineer or its qualified representative regularly during summer construction and on an event basis when runoff equals or exceeds the BMP design standards. Failures and/or threats of BMP failures will be documented and remedial measures identified for implementation. BMP failures will be repaired within 24 hours of documentation.

With implementation of Mitigation Measure 3.4-6 as described above, Impact 3.4-6, the likelihood and potential magnitude of short-term water quality degradation that could persist and impair beneficial uses, would be minimized because effective site management plans would be prepared and implemented. However, the potential for violations of narrative or numerical water quality objectives in the Basin Plan at least for short periods of time cannot feasibly be eliminated because background turbidity levels on the Upper Truckee River are typically extremely low (i.e., less than 10 NTU), especially during summer construction season; therefore, very small changes from the natural

state (an increase of <1 NTU) could result in a violation of the Basin Plan standard. Potential violations of the narrative turbidity standard at the low end of the NTU range, while considered a significant impact for CEQA/NEPA/TRPA analysis, would not necessarily correspond to an adverse effect on beneficial uses. For example, an effect on aesthetic values under Non-Contact Recreation Use designation in the Basin Plan is considered by Lahontan Regional Water Quality Control Board to be the first indicator of an effect on beneficial uses. If persistent visible turbidity from the project site occurred, particularly during the summer recreation period when flows are low, recreation use is high, and background conditions would exhibit low turbidity, it would potentially impair non-contact recreation beneficial uses. However, the turbidity values that would correlate with this impairment of aesthetics-related beneficial use is expected to be well beyond the <10 percent increase limit in the turbidity standard of the Basin Plan. Summer turbidity levels would also likely need to exceed the minimum aesthetic criterion to have adverse effects on other beneficial uses, including those supporting aquatic organisms. While impairment of beneficial uses would likely require the project to elevate turbidity levels considerably further than 10 percent above background for a larger magnitude and longer duration beyond the more stringent limited area and brief period used as a significance threshold for the EIR, because of the CEQA checklist question regarding violation of “any water quality standard.” the residual impact would remain significant and unavoidable.

Significant Effect: Short-Term Risk of Surface Water or Groundwater Degradation Following Construction (Impact 3.4-7)

Implementing the project would require in-channel construction activities, and the biotechnical streambank treatments and other revegetated areas could be vulnerable during a flood flow within the first few years following construction. Furthermore, the proposed treatments would require a period of channel adjustment following construction to meet final design. Therefore, implementing the project could result in potential short-term turbidity that violates the turbidity water quality standard in the Basin Plan (i.e., within 10 percent above background). This short-term impact would be **potentially significant**.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effect of the project, but not to a less-than-significant level; this impact would remain significant and unavoidable.

- Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the implementation of other mitigation measures or alternatives that could reduce the impact to a less-than-significant level.

Facts in Support of Finding

CSP and the Commission adopted the following feasible mitigation measure to protect beneficial uses of the Upper Truckee River. However, the potential for violations of narrative or numerical water quality objectives in the Basin Plan at least for short periods of time cannot feasibly be eliminated. This impact would remain significant and unavoidable.

Mitigation Measure 3.4-7A: Minimize Fine Sediment and Organic Material Available for Mobilization.

Final project design and revegetation specifications for a reactivated channel and floodplain that has remnant channels with accumulated fine sediment and/or organic materials will include measures to minimize the risk that such materials would become mobilized if a large flood flow occurs during the first few years after construction. The measures would remove and/or stabilize the materials adequately to resist expected erosive forces if a large flood (i.e., 25-year peak flow) occurred within the first 5 years after implementation:

- ▶ Remove loose, unvegetated, or otherwise unstable fine sediment and/or organic material within remnant channel sections to be reactivated (either directly connected to the restored channel or as part of reactivated floodplain) to eliminate the potential pollutant source. The excavated materials could be salvaged for soil amendment and revegetation use in off-channel areas if suitable or will be disposed of properly off-site.
- ▶ Revegetate loose, unvegetated, or otherwise unstable fine sediment and/or organic material within remnant channel sections to be reactivated (either directly connected to the restored channel or as part of reactivated floodplain) to increase roughness and reduce velocities. Revegetation of these areas will meet species, density, planting methods, irrigation, and success criteria similar to streambank plantings.

Mitigation Measure 3.4-7B: Adaptively Manage Potential Flood Damage in the Interim Period after Construction.

CSP will develop and implement a project reach adaptive management plan focused on potential short-term water quality degradation that could result if unexpectedly large flood flows occur within the first 5 years after construction. The plan would identify specific data collection and monitoring protocols, describe decision-making processes and authorities for corrective actions or activities. The performance criteria for the corrective actions would focus on preventing initial flood damage or turbidity effects from becoming a persistent, recurring, or chronic source.

With implementation of Mitigation Measures 3.4-7A and 3.4-7B as described above, Impact 3.4-7, short-term risk of surface water or groundwater degradation following construction, would be minimized, because the amount of fine sediment and organic material available for mobilization would be minimized and potential flood damage in the interim period after construction would be adaptively managed. However, the potential for violations of narrative water quality standard for turbidity, at least for short periods of time, cannot be feasibly eliminated. As described above, criteria used to evaluate a significant water quality impact was exceeding 10 percent of background turbidity, therefore, the project effects must meet or exceed such water quality standards to earn a less-than-significant conclusion, recognizing that any violation of a water quality standard is considered a water quality impact for the EIR analysis without taking in account the extent and duration of that impact, the residual impact would remain significant and unavoidable.

Significant Effect: Risks of Stormwater and Groundwater Contamination from Golf Course Operation (Impact 3.4-8)

The project would involve relocating and slightly expanding the golf course footprint area, but modifying its configuration to reduce areas in SEZ, reduce intensively managed landscaping, and increase buffers along surface water bodies, and upgrading the irrigation and drainage systems. Risks of surface water and groundwater contamination could occur despite some localized improvements and continued water quality protection

regulations, with updated monitoring, reporting, and response requirements under direct oversight of the Lahontan RWQCB. This impact would be **potentially significant**.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effects of the project to a less-than-significant level.

Facts in Support of Finding

CSP and the Commission adopted the following mitigation measure that would reduce to less-than-significant levels the project's impacts stormwater and groundwater contamination from golf course operations.

Mitigation Measure 3.4-8: Prevent Water Quality Degradation from Golf Course Operations.

CSP will incorporate measures within the final stormwater system design that:

1. limit opportunities for irrigation and stormwater that will be in contact with managed golf course landscaping to interact with unaltered runoff from upslope areas within Washoe Meadows SP. This can be accomplished by incorporating buffer strips along downslope sides of intensively managed turf, intercepting and routing flows around landscape areas if needed, allowing natural drainages to continue to convey water from upslope without adding golf course runoff to those drainages by routing the golf course stormwater to other artificial drainages, or similar measures;
2. prevent irrigation and stormwater that will be in contact with managed golf course landscaping from interacting with shallow groundwater and/or surface water in the vicinity of natural seeps within Washoe Meadows SP. The measures required would be determined by site-specific analysis of the surface/groundwater interactions and could include the installation of sheet pile and/or other subsurface barriers; and,
3. minimize potential percolation and/or surface overflow from any new detention and/or storage pond features that will have irrigation or stormwater runoff from the golf course landscaping through inclusion of adequate liners and appropriate sizing.

With implementation of Mitigation Measure 3.4-8, as described above, the risk of possible sediment or chemical pollutant discharges to surface or groundwater would be minimized over the life of golf course operations because this measure would limit opportunities for irrigation water and stormwater to interact with unaltered runoff, shallow groundwater, and/or surface water, and would minimize the potential for percolation of irrigation or stormwater runoff from the golf course. Drainage design plans will be developed by qualified professionals and reviewed by appropriate permitting entities to assure proper design per regulatory requirements. Therefore, Impact 3.4-8 would be less than significant.

4.3 BIOLOGICAL RESOURCES

Significant Effect: Short-Term Degradation of Fish and Aquatic Habitat Resulting from Construction and Initial Channel Response (Impact 3.5-1)

The project construction activities could result in temporary adverse effects on water quality, aquatic habitats, and the aquatic community. Effects could also occur during the initial channel-response period within the study area and in areas downstream. This impact would be **significant**.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effects of the project to a less-than-significant level.

Facts in Support of Finding

CSP and the Commission adopted the following mitigation measure that would reduce to less-than-significant levels the project's short-term impacts to fish and aquatic habitat.

Mitigation Measure 3.5-1A: Prepare and Implement Effective Site Management Plans.

This mitigation measure is identical to Mitigation Measure 3.4-6 in Section 3.4, "Geomorphology and Water Quality."

Mitigation Measure 3.5-1B: Implement Preconstruction Surveys for Western Pearlshell Mussels.

Before the initiation of construction activities, CSP will survey for western pearlshell mussels to determine whether they are present. If it is determined that western pearlshell mussels are present in the study area, then specific measures will be included to address this species in the native-fish and mussel capture and translocation plan described in Mitigation Measure 3.5-1C below.

Mitigation Measure 3.5-1C: Develop and Implement Native-Fish and Mussel Capture and Translocation Plan.

CSP or its representative will develop and implement a measure to prevent the loss of native fish and mussel species occupying habitat within the study area. Before any construction activities that require dewatering commences, a California Department of Fish & Game (CDFG) -approved biologist will conduct native-fish and mussel relocation activities within the construction dewatering area. All captured native fish and mussel species will be immediately released to a suitable habitat near the study area. Future restoration should not be planned for the relocation site within the next few years to allow for reestablishment of habitat and coordination with other agencies (i.e., USFS, Conservancy, City of South Lake Tahoe) should be completed so all relocation is not occurring in one reach of the river. The qualified biologist will place nets with 1/8-inch mesh at the upstream and downstream extents of the area to be dewatered to keep fish out of the area during fish removal activities. After completion of removal activities, the work area will be cleared for dewatering. Fish rescue and relocation will continue until the area is completely dewatered or until it is determined that no fishes remain in the dewatering area. These activities will take place in consultation with CDFG.

Mitigation Measure 3.5-1D: Limit Potential Localized Channel Erosion in the Upper Truckee River and Tributary Creeks.

This mitigation measure is identical to Mitigation Measure 3.4-1A in Section 3.4, “Geomorphology and Water Quality.”

Mitigation Measure 3.5-1E: Provide Bed and Bank Stabilization Measures at and Immediately Upstream and Downstream of Bridge Removal Sites.

This mitigation measure is identical to Mitigation Measure 3.4-1B in Section 3.4, “Geomorphology and Water Quality.”

Mitigation Measure 3.5-1F: Ensure Bed and Bank Stability Downstream of the Treated Reaches.

This mitigation measure is identical to Mitigation Measure 3.4-1C in Section 3.4, “Geomorphology and Water Quality.”

Mitigation Measure 3.5-1G: Ensure Bed and Bank Stability in the Lower Reaches of the Two Tributary Creeks.

This mitigation measure is identical to Mitigation Measure 3.4-1D in Section 3.4, “Geomorphology and Water Quality.”

Mitigation Measure 3.5-1H: Monitor and Supplement Coarse-Sediment Delivery Downstream and Monitor Instream Habitat Conditions.

CSP will implement Mitigation Measure 3.4-5 in Section 3.4, “Geomorphology and Water Quality.” In addition, CSP will monitor instream habitat conditions for potential geomorphic response–related effects. Specifically, if sediment deposition is occurring within the study area that results in the loss of surface water connectivity and/or creates an impediment to fish movement in the low flow channel, CSP will conclude that a project effect on fish movement/migration is occurring. In response, CSP will regrade portions of the instream area to create a low-flow channel that restores surface water connectivity and fish movement/migration. CSP will use BMPs similar to those described for the project alternatives and implement Mitigation Measures 3.5-1A through 3.5-1C to ensure that any subsequent adverse effects on fish habitat would be avoided and/or minimized.

With implementation of Mitigation Measures 3.5-1A through 3.5-1H as described above, potential short-term adverse effects on fish habitat, related to dewatering, turbidity, downstream sedimentation, and exposure to construction related equipment and contaminants would be avoided and/or minimized, or corrective actions would be implemented. These measures would reduce Impact 3.5-1 to a less-than-significant level by ensuring aquatic species are relocated prior to construction, and minimizing temporary increases in turbidity to the maximum extent possible, as not to impact beneficial uses, including those related to aquatic species, and monitoring coarse sediment supply through the project reach.

Significant Effect: Short-Term, Construction-Related Disturbance or Loss of Sensitive Habitats (Jurisdictional Wetlands, Riparian Vegetation, Fens, and SEZ) (Impact 3.5-3)

Implementing the project would result in the removal of riparian and meadow vegetation along the Upper Truckee River and placement of fill into the active channel for geomorphic restoration of the river. The project also includes golf course construction in the vicinity of a spring in Washoe Meadows SP and the verified fen, and could potentially directly or indirectly affect either directly or by changing local hydrology. The locations of these features are well-documented and the project proposes to avoid these areas. However, because of the close proximity of the current conceptual design of golf course reconfiguration these features could be directly or indirectly affected by final project design, construction, and operation without more specific design parameters and measures to avoid direct or indirect effects on these sensitive resources. Because the likelihood and potential magnitude of these effects are presently unknown and the project would result in disturbance within SEZ and jurisdictional wetlands this impact is considered **significant**.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effects of the project to a less-than-significant level.

Facts in Support of Finding

CSP and the Commission adopted the following mitigation measure that would reduce to less-than-significant levels the project's impacts short-term construction related disturbance or loss of sensitive habitats.

Mitigation Measure 3.5-3A: Conduct Delineation of Waters of the United States and Obtain Authorization for Fill and Required Permits.

Before approval of detailed design used for project construction, a delineation of waters of the United States, including wetlands that would be affected by project implementation, will be conducted by a qualified biologist through the formal Section 404 wetland delineation process. The delineation will be submitted to and verified by the Sacramento District of USACE. Authorization for fill or reconstruction of jurisdictional waters of the United States, including wetlands, will be secured from the Sacramento District of USACE through the Section 404 permitting process. Section 404 permitting through either a nationwide or individual permit that will likely require the following terms:

- ▶ a determination of the volume and types of material to be placed into waters of the United States;
- ▶ a determination of the total area of waters of the United States to be directly and indirectly affected;
- ▶ a wetland delineation in accordance with the 1987 *Wetland Delineation Manual* and the *Western Mountain Regional Supplement* (USACE 2008) when wetlands are proposed for impacts;
- ▶ a description of habitat, including plant communities, located in the study area;
- ▶ a description of any environmental impacts that are expected to occur, including methods to avoid, minimize, or mitigate adverse impacts on water quality or aquatic functions at the study area;

- ▶ any other information pertinent to the wetland, stream or water body involved;
- ▶ for projects involving the restoration of greater than 3 acres of wetlands, evidence that USFWS has been provided with a courtesy copy of the project notification; and
- ▶ a copy of the 401 water quality certification or waiver issued for the project.

CSP will coordinate with USACE as appropriate and obtain coverage through Section 404 permitting for the construction of all aspects of the project. All general terms required for permit compliance will be implemented.

In addition, implementation of the project would require a streambed alteration agreement from CDFG for work on the bed and banks of the Upper Truckee River. CSP will obtain the streambed alteration agreement from CDFG and implement all terms required for permit compliance.

Mitigation Measure 3.5-3C: Avoid Effects on the Verified Fen, Unverified Fen, Lodgepole Pine Wet, and Wet Meadow through Final Project Design and Implement Protection Measures During Project Construction.

To avoid potential adverse effects of golf course relocation and operation on the spring (mapped as lodgepole pine wet type and wet meadow, west of the Upper Truckee River the following mitigation measures will be implemented.

1. CSP will develop and implement specific parameters and measures in accordance with Mitigation Measure 3.4-8 to ensure that the final design, operation, and management of golf course holes 9, 10, 11, and 12 avoids potential direct and indirect impacts to the spring in Washoe Meadows SP.
2. Before construction, a qualified biologist will clearly identify the boundaries of the spring in the field with flagging and protective fencing will be placed around the features to protect them from project-related effects. No construction-related activities will be allowed within areas fenced for avoidance, and construction personnel will be briefed about the presence of this sensitive resource and the need to avoid impacts to it.
3. The edges of the spring will be further protected from indirect effects of the managed turf by the “naturalized landscape” and “minimally managed landscape” buffer areas that are part of the project design. The latter, which will function as the ultimate buffer between the golf course and the adjacent native vegetation, will be areas of native vegetation within the golf course that are generally not mowed, irrigated, or fertilized. Vegetation height and structure may be managed (trim, thin, etc.) to enhance course playability, but in general these areas will serve to buffer the spring from indirect effects of the golf course management.

With the measures described above, the locations of sensitive habitats would be identified, and the project would minimize effects of project construction and compensate for loss of sensitive habitats (jurisdictional wetlands, riparian vegetation, and SEZ). The increased area and improved ecosystem functions of SEZ, floodplain, and wetland communities proposed as part of the restoration would be beneficial because they would result in a long-term net increase in the acreage of sensitive habitats. Potential impacts to the spring as a result of golf course relocation and operation would be avoided through final project stormwater BMPs designed to avoid impacts to this area as part of design of the golf course. Furthermore, construction avoidance measures include protective fencing and training of construction crews on how to avoid effects on identified sensitive habitats. USFWS has been sent a copy of the EIR for review and comment to facilitate consultation on fish and wildlife issues they

have determined that no formal consultation is necessary for the project. All permit requirements, which are protective of sensitive habitats would be addressed prior to, during, and following construction. Therefore, with implementation of Mitigation Measures 3.5-3A, 3.5-3B, and 3.5-3C, Impact 3.5-3 would be less than significant.

Significant Effect: Short-Term, Construction-Related Disturbance or Removal of Special-Status Plants (Impact 3.5-4)

The project would involve temporary disturbance and removal of plant communities that provide suitable habitat for several special-status plant species known to occur in the vicinity of the study area. While surveys to date have not detected these species in proposed construction areas, pre-construction, focused surveys would be conducted to confirm absence during the permitting phase. Because suitable habitat exists where ground disturbance is planned, if special-status plant species are found in follow-up, pre-construction surveys, then implementing the project could result in their removal or disturbance. This impact would be **potentially significant**.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effects of the project to a less-than-significant level.

Facts in Support of Finding

CSP and the Commission adopted the following mitigation measure that would reduce to less-than-significant levels the project's impacts to short-term construction related disturbance or removal of special-status plants.

Mitigation Measure 3.5-4: Conduct Follow-up, Pre-construction, Focused Surveys and Avoid, Minimize, or Compensate for Impacts on Special-Status Plants.

To avoid, minimize, or compensate for possible adverse effects on special-status plant species resulting from the proposed restoration of the Upper Truckee River or golf course reconfiguration, the following management requirements would be implemented in the following order:

1. A qualified botanist familiar with the vegetation of the Tahoe Basin will conduct a focused preconstruction survey for special-status plants (e.g., marsh skullcap, Oregon fireweed, Bolander's candle moss) along all portions of the Upper Truckee River where construction (e.g., geomorphic restoration, bridge construction) is proposed. Preconstruction surveys will also be conducted for special-status plants that could occur adjacent to the spring (e.g., three-ranked hump-moss, shore sedge, Bolander's candle moss, marsh skullcap, and other special-status plants associated with mesic conditions). Surveys will be conducted between June and September when target species are clearly identifiable and will follow CDFG's *Guidelines for Assessing the Effects of Proposed Development on Rare, Threatened, and Endangered Plants and Plant Communities* (CDFG 2000).
2. If no special-status plants are found during the survey, the results of the survey will be documented in a letter report to the lead agencies that would become part of the project environmental record, and no further actions will be required.

3. If occurrences of special-status plants are documented during the survey, they will be clearly identified in the field and protected from impacts associated with construction activities. Protective measures will include flagging and fencing of known plant locations and avoidance where possible. No construction-related activities will be allowed within areas fenced for avoidance, and construction personnel will be briefed about the presence of the plants and need to avoid effects on the populations.
4. If avoidance is not possible, a mitigation plan to reduce impacts on special-status plants to a less-than-significant level will be developed in coordination with the lead agencies, CDFG (for CNPS List 2 species), and USFS (for forest sensitive species), depending on the species affected. The mitigation plan will include provisions for minimizing impacts on special-status plant populations during construction and for relocation and establishment of plants at new protected locations in the study area. The mitigation plan will also include provisions for follow-up monitoring to determine mitigation success, and remedial measures should the initial efforts to mitigate fail. The plan will be adopted and implemented by CSP.

With the measures described above, any special-status plants that may be present within areas of ground disturbance would be identified before construction and the project would avoid, minimize, and compensate for potential construction-related impacts on those species. The increased area and improved ecosystem functions of SEZ, floodplain, and wetland communities proposed as part of the restoration would be beneficial because they would result in a long-term net increase in the acreage of sensitive habitats. Potential impacts to the spring as a result of golf course relocation and operation would be avoided through final project stormwater BMPs designed to avoid impacts to this area as part of design of the golf course. Furthermore, construction avoidance measures include protective fencing and training of construction crews on how to avoid effects on identified sensitive habitats. USFWS has been sent a copy of the EIR for review and comment to facilitate consultation on fish and wildlife issues they have determined that no formal consultation is necessary for the project. All permit requirements, which are protective of special status plants would be addressed prior to, during, and following construction. . Therefore, with implementation of Mitigation Measure 3.5-4, Impact 3.5-4 would be less than significant.

Significant Effect: Tree Removal and Forest Land Conversion (Impact 3.5-6)

Implementing the project would result in the loss of an estimated 1,640 native trees greater than 10 inches DBH, including 1,395 trees in the area proposed for golf course relocation, 120 trees for geomorphic restoration, and 125 trees for access road construction. The relocation of a portion of the golf course to the west side of the river would involve conversion of forest to non-forest use (approximately 45 acres). This preliminary estimate of trees removed includes three trees greater than 30 inches DBH. The final acres, number, and stand condition of trees removed will be determined in cooperation with TRPA prior to construction. The magnitude of proposed tree removal in the study area is considered “substantial” as defined in the TRPA Code of Ordinances. However, tree removal will not affect any old growth forests. Implementing the project would require a tree removal and management plan developed with TRPA. Substantial tree removal and the loss of trees greater than 30 inches DBH would be a **significant** impact.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effects of the project to a less-than-significant level.

Facts in Support of Finding

CSP and the Commission adopted the following mitigation measure that would reduce to less-than-significant levels the project's impacts from tree removal and forest land conversion.

Mitigation Measure 3.5-6: Minimize Tree Removal and Develop a Tree Removal and Management Plan.

Where feasible, the project will avoid and minimize the removal of trees, especially those 30 inches in DBH or larger. This avoidance and minimization will be achieved through project design to the greatest extent feasible. Tree removal that cannot be avoided will be mitigated with the following measures.

In accordance with Chapter 71, Section 71.3.B of the TRPA Code of Ordinances, a tree removal and management plan will be prepared by a qualified environmental professional (i.e., a restoration specialist, registered professional forester [RPF], or certified arborist with restoration qualifications, or similar qualified professional), and will be submitted to a TRPA RPF or other qualified TRPA professional for review and approval. TRPA approval of the plan will be obtained before project approval. Alternatively, if a timber harvesting plan is required to be submitted to California Department of Forestry and Fire Protection and meets the requirements described in this mitigation measure, the timber harvesting plan may be submitted to TRPA for review and approval in lieu of a separate tree removal and management plan.

The tree removal and management plan will adhere to the provisions in Chapter 71 of the TRPA Code of Ordinances, including the preservation of trees larger than 30 inches DBH (Section 71.2.A). The plan will include protection measures for snags and coarse woody debris. In accordance with the TRPA criteria *Standards for Common Vegetation*, the plan will maintain relative species richness, relative abundance, and relative age class, as appropriate and feasible, to contribute to the attainment of the regionwide threshold standard.

Permanent disturbance (i.e., disturbance after project construction caused by the proposed land use changes) and temporary disturbance (i.e., disturbance from construction activities) of all trees to be preserved will be minimized. This will include minimizing cuts, fills, grade changes, paving or other coverage, soil compaction, and landscaping effects within the critical root zone of all trees, as determined by a qualified environmental professional. Creation of detailed site plans and construction documents will be coordinated with a qualified environmental professional to minimize permanent and temporary disturbance. The tree removal and management plan will demonstrate how site development design will minimize the permanent disturbance of all trees to be preserved, and how construction planning will minimize temporary disturbance of all trees to be preserved.

To minimize temporary disturbance, the tree removal and management plan will provide for vegetation protection during construction in accordance with Chapters 65 and 30 of the TRPA Code of Ordinances. Protection measures will include the following, at a minimum:

- ▶ Sturdy high-visibility protective fencing will be installed at the limits of construction (including all grading, road improvements, underground utilities, staging, storage, parking, or other development activity), and outside of the critical root zone of all trees to be preserved that have critical root zones in the limits of construction. The critical root zone is defined here as the area 5 times the diameter of the tree. This fencing will be included on all site plans (e.g., staging, grading, drainage, and utility plans) and will be depicted in the tree removal and management plan.
- ▶ If grading, trenching, or transplanting is necessary within the root zone of trees to be preserved, the work will be supervised by a qualified environmental professional, a RPF, or another qualified biologist, and the following measures will be implemented:
 - Soil will be removed in lines radial to, rather than tangential to, the tree to avoid excessive ripping and shattering of roots.
 - If root cutting cannot be avoided, roots will be cut cleanly at a 90-degree angle.
 - A minimum of 6 inches of soil or sand will be placed over exposed cuts and roots to reduce soil desiccation until the area is backfilled.
 - Native soil will be used to backfill all cuts.
- ▶ All necessary pruning will be performed under the supervision of a certified arborist or RPF or similar qualified specialist.

All tree protection obligations required in the tree removal and management plan will be incorporated into construction contracts. Tree protection measures will be installed, and will be inspected by staff from TRPA before issuance of a grading permit.

As part of the tree removal and management plan, a tree replacement plan may be prepared by a qualified environmental professional, in accordance with Chapters 30 and 77 of the TRPA Code of Ordinances. Tree replacement needs and specifications will be determined in cooperation with TRPA during development of the tree removal and management plan. Determining whether tree replacement is appropriate, and the amount of project-related tree removal subject to mitigation by tree replacement, should be based on several considerations related to local and Basin-wide vegetation and fuels management goals and opportunities. These considerations include: (1) the condition, stocking level, and encroachment potential of stands where trees would be removed relative to vegetation/fuels management objectives, desired ecological conditions, and relevant TRPA thresholds for those areas (e.g., stands proposed for removal that are presently overstocked, encroaching into other native vegetation types, or otherwise undesirable may not warrant full replacement); (2) whether on- or off-site tree replacement, which could increase tree density and cover at replanting sites, would either contribute to or conflict with fuels/vegetation and forest health goals for those locations or Basin-wide; and (3) how tree replacement may affect attainment of TRPA thresholds for vegetation. If a tree replacement plan is required, it would be submitted to and approved by a TRPA RPF or other qualified TRPA professional before tree removal or the issuance of a grading permit. Tree replacement will only be implemented in a manner that is also consistent with fire fuel management objectives for the replanted properties.

If tree replacement is required, the following provisions shall be incorporated into the tree replacement plan.

- ▶ The tree replacement plan will include a plant list, a description of appropriate planting stock for new trees, a planting plan, planting and maintenance techniques, and measures to control the introduction or spread of invasive plants. Transplanting will follow the International Society of Arboriculture's standard digging and transplanting techniques to ensure proper handling and successful transplanting of trees and vegetation.
- ▶ All trees planted to offset project impacts will be monitored for a period of at least 5 years, in conjunction with the monitoring program described below. Any tree that does not survive will be replaced on a 1:1 basis, and likewise monitored for a period of 5 years.
- ▶ Tree replacement may occur on-site if remaining undeveloped project areas can support additional trees, as determined by a qualified environmental professional and consistent with fire fuel management objectives. If the remaining undeveloped project areas cannot support sufficient plantings, off-site replacement will be required. Off-site replacement will occur in areas in need of additional trees, will be located as close to the study area as possible, and will be preserved in perpetuity by a conservation easement, deed restriction, or other similar mechanism.
- ▶ A certified arborist, a RPF, or qualified biologist will inspect the results of construction activities to document which trees were removed by grading and construction, and to document disturbance of preserved trees. This documentation will be provided to TRPA, and the total number of trees to be replanted, as described in the tree replacement plan, will be modified as necessary to reflect the actual tree removal and disturbance that occurs during construction.
- ▶ A vegetation monitoring approach will be developed and included as part of the tree replacement plan. Monitoring will be implemented by a certified arborist, a RPF, or another qualified biologist, for areas to be revegetated as mitigation. This approach will include monitoring protocols, including the protocol for evaluating tree health and vigor. A monitoring report detailing vegetation success will be submitted annually to TRPA through the monitoring period, for a minimum period of 5 years. The mitigation and monitoring of a replaced tree will continue until the tree satisfies the criteria for a successfully established sapling, dies, or is otherwise no longer part of a mitigation effort. Criteria for successful establishment will include survivorship for a period of at least 5 years, with at least 2 years without supplemental watering.

With the measure described above, the project would minimize tree removal and compensate, as needed, for the loss of trees. For additional clarification and support of the original findings that the removal of common habitat, such as the primarily second and third growth trees proposed for the project would not constitute a substantial change for or significant impact on wildlife species or wildlife corridors, as described in the final EIR, CSP conducted an additional habitat analysis using the broad CWHR GIS-based maps. CSP analyzed the proposed golf course footprint, both Washoe Meadows SP and Lake Valley SRA, and the area surrounding the park (a 1.5-mile buffer) to evaluate proposed golf course reconfiguration area as it relates to the surrounding habitat and found that more than 50% (5,046 acres) of Washoe Meadows SP and the 1.5-mile buffer area analyzed is composed of Jeffrey Pine and Montane Chaparral, making up slightly more than 20% of this same area. These two vegetation communities make up nearly three-quarters of the entire area used for the analysis. A visual assessment of the CWHR map for the region shows these vegetation types appear to be consistently common throughout the entire Tahoe Basin. For areas on the west side of the river proposed golf course reconfiguration

would primarily affect vegetation classified as Montane Chaparral, which makes up nearly 40% of the area within the conceptual footprint. Roughly 4 acres of Jeffrey Pine habitat would be affected, which is approximately 2% of the total Jeffrey Pine habitat in the park units. Thus, this common habitat types would primarily be used for golf relocation in order to restore less common, more critical habitat types (SEZ), which make up only 5% of the Tahoe Basin. Because CSP will coordinate with TRPA and prepare a tree removal and management plan in accordance with the TRPA Code of Ordinances, and replace trees per TRPA requirements consistent with fire management plans and , with implementation of Mitigation Measure 3.5-6, Impact 3.5-6 would be less than significant.

Significant Effect: Introduction and Spread of Weeds and Aquatic Invasive Species (Impact 3.5-7)

Implementing the project has the potential to introduce and spread invasive weeds and aquatic invasive species during project construction and revegetation periods. The introduction and spread of invasive weeds or aquatic invasive species would degrade plant and wildlife habitat, including habitats of special significance (riparian) within the study area. In the long term, the new golf course area on the west side of the Upper Truckee River could provide a new source of nonnative plant and invasive weed populations that could colonize native vegetation nearby. However, implementation of the golf course’s existing weed management plan would continue and would sufficiently prevent the spread of nonnative plants within areas of native vegetation during operation of the golf course. Introduction and spread of invasive weeds and aquatic invasive species during construction and revegetation would be a **potentially significant** impact.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effects of the project to a less-than-significant level.

Facts in Support of Finding

CSP and the Commission adopted the following mitigation measure that would reduce to less-than-significant levels the project’s impacts from introduction and spread of weeds and aquatic invasive species.

Mitigation Measure 3.5-7A: Implement Weed Management Practices during Project Construction.

In consultation with TRPA, CSP or its representative will implement appropriate weed management practices during project construction. Recommended practices include the following:

- ▶ A qualified biologist with experience in the Tahoe Basin will conduct a preconstruction survey to determine whether any populations of invasive/noxious weeds are present within areas proposed for ground-disturbing activities. This could be conducted in coordination with the focused special-status plant survey recommended above under Mitigation Measure 3.5-4, “Conduct Follow-up, Pre-construction, Focused Surveys and Avoid, Minimize, or Compensate for Impacts on Special-Status Plants.” If noxious weed species are documented, they will be removed or their spread otherwise prevented before the start of construction. Control measures may include herbicide application, hand removal, or other means of mechanical control. This would help eliminate the threat of spreading the species throughout the study area and adjacent areas.

- ▶ All equipment entering the study area from weed-infested areas or areas of unknown weed status will be cleaned of all attached soil or plant parts before being allowed into the study area.
- ▶ To ensure that fill material and seeds imported to the study area are free of invasive/noxious weeds, the project will use on-site sources of fill and seeds whenever available. Fill and seed materials that need to be imported to the study area will be certified weed-free. In addition, only certified weed-free imported materials (or rice straw in upland areas) will be used for erosion control.

After project construction, the study area will be monitored on an annual basis for infestations of invasive weeds until the restored vegetation has become fully established. If new populations of invasive weeds are documented during monitoring, they will be treated and eradicated to prevent further spread. Emphasis in monitoring will be given to those areas designated as “minimally managed landscape” and “naturalized landscape” that serve as a buffer between the newly created golf course holes west of the Upper Truckee river and adjacent forest and riparian vegetation to ensure that these areas do not act as source points for infestations of weeds.

Mitigation Measure 3.5-7B: Implement Aquatic Invasive Species Management Practices during Project Construction.

In consultation with TRPA, CSP or its representative will implement appropriate aquatic invasive species management practices during project construction. Recommended practices include the following:

- ▶ All equipment, including individual equipment such as waders, wading boots, etc., entering the study area that will be used in or around the Upper Truckee River, or new aquatic golf course features will be decontaminated using recommended methods (USACE 2009) before being allowed into the study area.

With the measures described above, weed and aquatic invasive species management practices would be implemented during project construction and the inadvertent introduction and spread of weeds or aquatic invasive species from project construction would be prevented. The project area will be monitored on an annual basis for infestations of invasive weeds until the restored vegetation has become fully established and invasive weeds will be treated and eradicated. Furthermore, after development of the golf course on the west side of the river, implementing the golf course’s existing weed management plan is expected to sufficiently prevent the spread of nonnative plants within the intensively managed and minimally managed landscaped areas into adjacent areas of native vegetation. The weed management plan implemented by the golf course as part of its routine maintenance would prevent the spread of weeds from areas within the golf course. Therefore, with implementation of Mitigation Measure 3.5-7A and 3.5-7B, Impact 3.5-7 would be less than significant.

Significant Effect: Short-Term, Construction-Related Disturbance or Loss of Special-Status Wildlife Species and Habitats (Impact 3.5-8)

Under the project, restoration activities along the Upper Truckee River and reconfiguration of the golf course could result in the loss of individuals or nests, or disruptions to nesting attempts, of six special-status bird species (yellow warbler, olive-sided flycatcher, osprey, long-eared owl, yellow-headed blackbird, and waterfowl species); potential disturbance of future nesting by willow flycatcher; and removal of active roost sites for, or injury to, western red bat. This impact would be **potentially significant** for species known to be present and for willow flycatcher and western red bat, if the species nests or roosts, respectively, in the study area in the future where construction would occur.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effects of the project to a less-than-significant level.

Facts in Support of Finding

CSP and the Commission adopted the following mitigation measure that would reduce to less-than-significant levels the project's impacts from short-term, construction-related disturbance or loss of special-status wildlife species and habitats.

Mitigation Measure 3.5-8A: Conduct Preconstruction Surveys for Nesting Special-Status Birds (Yellow Warbler, Willow Flycatcher, Olive-Sided Flycatcher, Yellow-Headed Blackbird, Waterfowl, and Long-Eared Owl), and Implement a Limited Operating Period If Necessary.

For construction activities that would occur in suitable habitat during the nesting season (generally April 1–August 31, depending on species and weather), a qualified wildlife biologist will conduct focused surveys for active nest sites of special-status birds. The biologist should be able to identify Sierra Nevada bird species audibly and visually. The following provides general guidelines for conducting surveys for yellow warbler, olive-sided flycatcher, willow flycatcher, waterfowl, and long-eared owl.

Yellow Warbler, Olive-Sided Flycatcher, Yellow-Headed Blackbird, Waterfowl, Long-Eared Owl

Focused surveys for yellow warbler, olive-sided flycatcher, yellow-headed blackbird, waterfowl, and long-eared owl nests will be conducted by a qualified wildlife biologist within 14 days before construction activities are initiated each construction season. The preconstruction survey for yellow warbler, olive-sided flycatcher, yellow-headed blackbird, waterfowl, and long-eared owl nests will be conducted using a nest-searching technique appropriate for the species. For example, for yellow warbler, an appropriate technique involves first conducting point counts in suitable riparian habitat to determine occupancy, followed by nest searching if the species is present. For long-eared owl, surveys typically involve tape playbacks of recorded long-eared owl calls.

Willow Flycatcher

For construction activities initiated in suitable breeding habitat for willow flycatcher after May 31, a preconstruction survey for nesting willow flycatchers will be conducted each construction season. The survey will follow *A Willow Flycatcher Survey Protocol for California* (Bombay et al. 2003). The protocol requires a minimum of two survey visits to determine presence or absence of willow flycatcher: one visit during survey period 2 (June 15–25) and one during either survey period 1 (June 1–14) or period 3 (June 26–July 15).

If an active special-status bird nest is located during the preconstruction surveys, the biologist will notify TRPA and CDFG. If necessary, modifications to the project design to avoid removal of occupied habitat while still achieving project objectives will be evaluated, and implemented to the extent feasible. If avoidance is not feasible or conflicts with project objectives, the following limited operating periods will apply to avoid disturbances during the sensitive nesting season. If a yellow warbler, willow flycatcher, yellow-headed blackbird, or waterfowl nest is located, construction will be prohibited within a minimum of 500 feet (or at a distance directed by the

appropriate regulatory agency) of the nest to avoid disturbance until the nest is no longer active. If an active long-eared owl nest is located, construction within 0.25 mile of the nest site will be delayed until the site is no longer active. These recommended buffer areas may be reduced through consultation with TRPA or CDFG.

Mitigation Measure 3.5-8B: Conduct Preconstruction Surveys for Special-Status Bats, Avoid Removal of Important Roosts, and Implement a Limited Operating Period If Necessary.

Bat surveys will be conducted by a qualified wildlife biologist within 14 days before any tree removal or clearing each construction season. Locations of vegetation and tree removal or excavation will be examined for potential bat roosts. Potential roost sites identified will be monitored on two separate occasions for bat activity, using bat detectors to help identify species. Monitoring will begin 30 minutes before sunset and will last up to 2 hours at any potential roost identified. Removal of any significant roost locations discovered will be avoided to the extent feasible. If avoidance is not feasible, roost sites will not be disturbed by project activities until September 1 or later, when juveniles at maternity roosts would be volant (i.e., able to fly).

With the measures above, the project would avoid the loss of individuals, nests, or roost sites of special-status wildlife species during construction. In addition, if any nests or roost sites are identified during surveys, construction would be delayed or buffers would be established around the sites. Monitoring will be used, if needed to ensure special-status species are not being adversely affected by construction. Therefore, with implementation of Mitigation Measures 3.5-8A and 3.5-8B, Impact 3.5-8 would be less than significant.

4.4 EARTH RESOURCES

Significant Effect: Soil Erosion, Sedimentation, and Loss of Topsoil (Impact 3.6-1)

The topography, soils, vegetation, and drainage within Washoe Meadows SP would be modified under the project by incorporating disturbed areas into the reconfigured golf course, offsetting the existing erosion caused by prior surface disturbances. Undersized bridges and golf course uses adjacent to the Upper Truckee River and Angora Creek within the SRA would be removed. Conditions related to erosion, sedimentation, and loss of top soil would be improved; however, project-related construction, grading, and stockpile storage associated with implementation of the project would result in exposure of soil to potential wind and water erosion until the project site is effectively stabilized and revegetated. This impact would be **potentially significant**.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effects of the project to a less-than-significant level.

Facts in Support of Finding

CSP and the Commission adopted the following mitigation measure that would reduce to less-than-significant levels the project's impacts from soil erosion, sedimentation, and loss of topsoil.

Mitigation Measure 3.6-1A: Prepare and Implement Effective Site Management Plans.

This mitigation measure is similar to Mitigation Measure 3.4-6. The project is expected to be required to develop and implement several construction phase site management plans as part of various permit and approval requirements, including but not limited to a grading and erosion control plan, a dewatering and channel seasoning plan, a winterization plan, and a monitoring and oversight plan. The following measures will be implemented by CSP within each of these plans to be developed for specific permits or as independent mitigation measures;

- ▶ Restrict the area and duration of construction disturbance to the absolute minimum necessary to accomplish work.
- ▶ Protect existing vegetation outside construction area and salvage and re-use riparian or plant new vegetation in disturbed areas.
- ▶ Design, install, and maintain temporary BMPs to protect disturbed areas and minimize soil erosion, prevent surface runoff interaction with disturbed surfaces, and limit the potential for release of sediment to surface water bodies for storm events up to the 20-year precipitation event.
- ▶ Design, install, and maintain internally draining construction area(s) on either side of each of the Upper Truckee River, Angora Creek, and the unnamed creek within the study area to prevent discharge of untreated stormwater into these surface water bodies. Anticipate runoff from upslope groundwater seeps west of the Upper Truckee River, and reroute it around the construction zone.
- ▶ Salvage topsoil to be reused on-site during project-related grading.
- ▶ Provide winterization that isolates and protects disturbed areas from high streamflow on the Upper Truckee River and Angora Creek (up to the 50-year event).
- ▶ Secure a source of transportation and a location for deposition and/or storage of all excavated and imported materials at the project site. Protect stockpiled and transported materials or debris from wind or water erosion. Store soil and other loose material at least 100 feet from the active channel during the construction season.
- ▶ Avoid overwinter storage of materials, vehicles, equipment, or debris within the 100-year floodplain.
- ▶ Provide site-specific and reachwide dewatering/bypassing plans that indicate the scheduling approach and or maximum diverted flows to minimize risks from summer thunderstorms, specific diversion/bypass/dewatering methods and equipment, defined work areas and diversion locations, the types and locations of temporary BMPs for the diversions and reintroduction points, measures and options for treating turbid water before release back to the channel, and stated water quality performance standards.
- ▶ Provide wetting flows before activation of new and reconnected river channel sections based on a "channel seasoning" plan that indicates the water source(s); volumes and duration required; phased placement of clean, washed gravels; and the measures and options for treating potentially turbid water.
- ▶ Monitor the status and effectiveness of temporary erosion control, stormwater facilities, and flood flow protections throughout the construction area, including each of the internally draining zones that could

separately discharge to various surface water bodies. Monitor turbidity in the Upper Truckee River upstream and downstream of the construction zone and, if needed, to further describe background, upstream in Angora Creek. Monitoring shall be conducted by the engineer or its qualified representative on a regular basis during summer construction and on an event basis when runoff equals or exceeds the BMP design standards.

Document failures and/or threats of BMP failures, and identify remedial measures implementation. Repair BMP failures within 24 hours of documentation.

Mitigation Measure 3.6-1B: Provide On-Site Storm Drainage Facilities and Accompanying Stormwater Drainage Plan to Prevent Surface Erosion from Discharging to Creek or River Channels.

This mitigation measure is similar to Mitigation Measure 3.3-1. Stormwater improvements shall be incorporated into the final detailed project design. Before issuance of grading permits, CSP shall submit a detailed stormwater drainage plan to El Dorado County and TRPA for review and approval. The plan shall identify the locations, sizes, and types of facilities used to retain and treat project related runoff. The detailed design shall meet the following minimum performance criteria:

- ▶ Stormwater facilities shall be installed in the sub-watershed of each existing natural drainages (e.g., swales, seeps, creeks) that will experience project-related changes to topographic, soil, and/or vegetation cover;
- ▶ Peak runoff discharge from the stormwater system to each of the existing natural drainage swales, creeks, or the Upper Truckee River shall be equal or less than pre-project conditions up to the 10-year event;
- ▶ Nuisance perennial discharge of excess irrigation water shall be prevented; and
- ▶ Where rerouting of drainages or point discharges from the stormwater facilities are necessary, those discharges shall be designed to prevent streambed or streambank erosion in the receiving water body.

The stormwater designs and drainage plan shall strive to incorporate BMPs where feasible, including but not limited to:

- ▶ pervious pavement or pavers,
- ▶ strategically placed bioswales and vegetated swales,
- ▶ constructed wetlands and detention ponds,
- ▶ rock- or boulder-lined areas to prevent disruption or erosion, and
- ▶ training of maintenance personnel on stormwater pollution prevention measures.

While Impact 3.4-6, discussed above, will remain significant and unavoidable due to the strict water quality criteria with implementation of Mitigation Measure 3.6-1A and 3.6-1B, the likelihood of erosion, sedimentation, and loss of topsoil would be minimized by design measures and BMPs with performance requirements as appropriate. In addition, long-term conditions related to erosion, sedimentation, and loss of top soil would be improved and short-term construction-related erosion, sedimentation, and loss of top soil would be fully mitigated by the measures described in the site management plan and on-site storm drainage facilities described above. Therefore, Impact 3.6-1 would be less than significant.

Significant Effect: Risks to People and Structures Caused by Strong Seismic Ground Shaking (Impact 3.6-2)

Fault activity in the project vicinity could subject people and structures within the study area to damage or other risks associated with strong seismic ground shaking. This impact would be **potentially significant**.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effects of the project to a less-than-significant level.

Facts in Support of Finding

CSP and the Commission adopted the following mitigation measure that would reduce to less-than-significant levels the project's impacts from risks to people and structures caused by strong seismic ground shaking.

Mitigation Measure 3.6-2: Prepare a Final Geotechnical Engineering Report, and Implement All Applicable Recommendations.

Before construction begins, CSP will obtain the services of a licensed geotechnical engineer to prepare a final engineering report for the proposed project. The final engineering report shall address and make recommendations on the following:

- ▶ structural/seismic design of bridges;
- ▶ site preparation, including tree removal;
- ▶ appropriate sources and types of fill;
- ▶ potential need for soil amendments;
- ▶ access roads, pavement, asphalt, and parking areas;
- ▶ shallow groundwater table; and
- ▶ soil and slope stability.

All recommendations contained in the final engineering report shall be implemented by CSP. Special recommendations contained in the engineering report shall be noted on the grading plans and implemented as appropriate before construction begins. Design and construction of all phases of the project shall be in accordance with the 2007 or subsequently adopted CBC.

With implementation of Mitigation Measure 3.6-2 as described above, the potentially significant impact of seismically induced risks to people and structures would be minimized by requiring that the design recommendations of a geotechnical engineer in accordance with the 2007 or subsequently adopted CBC be incorporated into infrastructure. Implementation of this measure would ensure that any structures or design features constructed as part of the project would be designed to minimize seismic risk to people and potential damage or failure to the extent possible. Therefore, Impact 3.6-2 would be less than significant.

4.5 SCENIC

Significant Effect: Potential for Long-Term Degradation of the Existing Visual Character, Existing Visual Quality, or Scenic Quality of Roadway Travel Unit 36B (Impact 3.7-2)

There would be long-term changes in views of the golf course in the current Washoe Meadows SP and unpaved parking area. The unpaved parking area changes would be visible from U.S. 50 under the project. The project would include removal of trees and reconfiguration of golf course holes that would change views for trail users within Washoe Meadows SP and for residents south and west of Washoe Meadows SP. Although changes in views from U.S. 50 would be minor and would not degrade long-term views, changes in views from surrounding neighborhoods and trails could be substantial. Therefore, this impact would be **significant**.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effects of the project to a less-than-significant level.

Facts in Support of Finding

CSP and the Commission adopted the following mitigation measure that would reduce to less-than-significant levels the project's impacts to long-term degradation of the existing visual character, existing visual quality, or scenic quality of roadway travel unit 36B.

Mitigation Measure 3.7-2: Prepare and Implement a Landscaping and Forest Management Plan.

To address the degradation of visual quality resulting from tree removal and construction of the golf course in Washoe Meadows SP, CSP will prepare and implement a landscaping and forest management plan to maximize visual screening of the golf course, while balancing vegetation management with other resource objectives, including habitat quality and fire fuel management. CSP will plant native vegetation that contributes to visual screening around the perimeter of the golf course footprint consistent with the surrounding natural landscape. Plantings will be undertaken between May 1 and October 15 and will include regular watering in the growing season of the first three years to ensure adequate initial growth. The plantings will provide screening to mitigate the increased visibility of the golf course from surrounding neighborhoods and trails.

The plan will include information on species used for plantings, implementation approach and timing, irrigation, monitoring, and adaptive management. The plan will also require that trees be removed in a staggered pattern to the extent feasible to maximize the visual screening by the remaining trees. The buffer landscape will also be managed to maintain a minimum depth of 200 feet between residential properties and the golf course. The forest vegetation in the buffer will be managed to maintain an effective visual screen, appropriate fire fuel control, and wildlife habitat qualities. The plan will be prepared in conjunction with detailed golf course design so that precise areas of disturbance are known and the landscaping and forest management process can be coordinated with golf course construction.

Implementation of this mitigation measure would reduce impacts associated with the long-term degradation of the visual character, existing visual quality, or scenic quality affecting residences adjacent to Washoe Meadows SP because preparation and implementation of a landscaping and forest management plan would provide effective visual screening of the golf course. A buffer landscape would be managed to maintain a minimum depth of 200 feet between residential properties and the golf course. The forest vegetation in the buffer would be managed to maintain an effective visual screen, appropriate fire fuel control, and wildlife habitat qualities. Because the landscaping and forest management plan would help screen views of the course, reduce the visibility of the course to neighbors, and retain the overall forest landscape character outside of the golf course, this impact would be less than significant.

4.6 CULTURAL RESOURCES

Significant Effect: Damage to or Destruction of Significant Documented Cultural Resources (Impact 3.9-1)

Research has documented four prehistoric cultural resources recommended eligible for listing on the National Register of Historic Places (NRHP)/California Register of Historical Resources (CRHR) within and in the immediate vicinity of the project. If these resources were to be damaged or destroyed, this impact would be **potentially significant**.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effects of the project to a less-than-significant level.

Facts in Support of Finding

CSP and the Commission adopted the following mitigation measure that would reduce to less-than-significant levels the project's impacts from damage or destruction of significant documented cultural resources.

Mitigation Measure 3.9-1: Avoid Impacts to Documented Significant Cultural Resources (CA-Eld-2156, CA-Eld-2158, CA-Eld-2160, and CA-Eld-555) through a Combination of Site Capping, Project Design Revision, and Archaeological/Washoe Tribe Monitoring.

CSP will employ one or a combination of three mitigation techniques that can be used to protect sites CA Eld-2156, CA-Eld-2158, CA-Eld-2160, and CA-Eld-555 as determined during development of more detailed design. To the extent feasible, CSP will design the project to avoid disturbance of the identified resources. If avoidance is not feasible, CSP will cap the site locations over which the golf course and/or other related facilities would be constructed. The site capping method has been employed in recent years and, assuming certain qualities of fill and capping methodology, has been endorsed by the Advisory Council on Historic Preservation. Using either technique protects the resource from damage. Based on the layout of the project, capping a large area encompassing the easternmost portion of CA-Eld-2158 ("Locus B," the NRHP-eligible portion of the site) and CA-Eld-2160 and CA-Eld-2156 may be the most effective approach. During the design development, CSP will consult with the Washoe Tribe to confirm that design revisions and/or capping are acceptable approaches to protect the resources. CA-Eld-2156, which is bisected by an existing road and experiencing erosion would also be capped.

Mitigation Technique (a): Site Capping. Capping of these sites is consistent with preservation methods described in the archaeological literature. Mathewson and Gonzalez (1988); Mathewson, Gonzalez, and Eblen (1992:10–12); and Mathewson (1989) all concur that burial and capping of an archaeological site, when performed appropriately, preserves the deposit in place. Their reasons are described as follows:

- ▶ Burial of an archeological site, unlike excavation, maintains the archaeological resource in place.
- ▶ An archaeological site is continually changing and decaying with time; hence, the goal of preservation is not to prevent change but to reduce the natural process of decay by shielding a site from adverse human and natural effects.
- ▶ Capping a site with soils of comparable or greater pH value than the pH of the on-site deposit can slow down decay of the organic constituents of an archaeological deposit.
- ▶ Capping the sites will make them less permeable to infiltration of surface water and will thus reduce the frequency and severity of cycles of inundation and drying that expedite the decay of organic remains.

Given these conditions and measures, the best method of preservation is to cap the sites with an initial lift of material that has a pH value that is equal to or greater than that currently located at the site locations. This material will be placed on the site so as to avoid direct ground disturbance of surface layers and to avoid compaction of on-site soils and cultural strata.

The potential for compaction decreases with depth; therefore, it is critical that potential stress from compaction be minimized during the initial placement of sediments covering the site. To meet this objective, an initial 1-foot-thick lift of uncompacted soil equal to or higher in pH than soils on-site will be placed directly over the cultural site by mechanized equipment. Working from outside the cultural site, the initial lift will be placed over the cultural site with a Caterpillar D6 LGP (low-ground-pressure) dozer or equivalent low-ground-pressure equipment. Within the cultural site boundaries, this initial lift will be placed in such a manner that the dozer travels only on previously placed material and never directly on the original ground surface.

Mitigation Technique (b): Project Revised Design to Avoid the Resource. If necessary to account for continued access to CA-Eld-555 in its present condition, CSP will revise the final design of the southernmost proposed portion of the golf course. The final layout would leave an area within which the site is located completely undeveloped and designated as an Environmentally Sensitive Area. The boundaries of this area will be clearly marked and/or restricted with construction cyclone fencing or other suitable materials. No ground-disturbing activities will be permitted within this Environmentally Sensitive Area, nor will it be used for equipment or materials staging, or transit for vehicles or persons while golf course construction is ongoing.

Mitigation Technique (c): Archaeological/Washoe Tribe Monitoring. While the project will be designed to avoid these four sites to the extent feasible and/or other adequate measures will be developed to protect them during project construction and future golf course operation and maintenance activities, data recovery would be necessary at these sites, if complete protection is not feasible. Construction, and if necessary, data recovery would be monitored by a qualified member of the Washoe Tribe. Washoe and archaeological monitors will evaluate subsequent project-related ground-disturbing activities within and in the immediate vicinity of these site locations. If data recovery is necessary, findings of effect and one or more historic property treatment plans will be prepared

and approved by the State Historic Preservation Officer, the lead Federal agency, and the Washoe Tribe THPO. Following data recovery investigations, a data recovery report will be prepared in accordance with the Secretary of the Interior's guidelines and guidance provided by the California Office of Historic Preservation and the THPO.

Implementation of Mitigation Measure 3.9-1 would reduce effects on sites CA-Eld-555, CA-Eld-2156, and CA-Eld-2160 if portions of the project could be designed to avoid these sites and/or if NRHP-eligible portions of CA-Eld-2158 (Locus B), CA-Eld-2156, and CA-Eld-2160 are capped in accordance with established precedent. Archaeological/Washoe monitoring of ground-disturbing activities will also be implemented, along with data recovery, if complete protection is not feasible. Implementation of Mitigation Measure 3.9-1 would reduce this impact to a less-than-significant level by protecting the sites from project-related disturbances and potential impacts from ongoing and future golf course use and maintenance. Previously un-recorded cultural materials potentially discovered during monitoring would be protected through their identification and subsequent protection or through further investigation that would recover important scientific data suitable for addressing regional prehistoric or historic-era research issues.

Significant Effect: Damage to or Destruction of as-yet Undiscovered Cultural Resources (Impact 3.9-2)

Subsurface disturbances could potentially destroy or damage of as-yet undiscovered prehistoric or historic-era cultural resources. If these were to represent significant cultural resources per CRHR, TRPA, and/or NRHP criteria, this impact would be **potentially significant**.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effects of the project to a less-than-significant level.

Facts in Support of Finding

CSP and the Commission adopted the following mitigation measure that would reduce to less-than-significant levels the project's impacts from damage or destruction of as-yet undiscovered cultural resources.

Mitigation Measure 3.9-2: Stop Work and Implement Measures to Protect Cultural Resources Discovered during Ground-Disturbing Activities.

If unrecorded cultural resources are encountered during project-related ground-disturbing activities, a qualified cultural resources specialist will be contacted to assess the potential significance of the find.

If an inadvertent discovery of cultural materials (e.g., unusual amounts of shell, animal bone, glass, ceramics, structure/building remains) is made during project-related construction activities, such as repairs to the river or golf course, ground disturbances in the area of the find will be halted and a qualified professional archaeologist and the Washoe Tribe's THPO will be notified regarding the discovery. The archaeologist, in cooperation with the THPO, will determine whether the resource is potentially significant per CRHR, TRPA, and/or NRHP criteria and will develop appropriate mitigation to protect the integrity of the resource and ensure that no additional

resources are affected. Mitigation could include but is not necessarily limited to preservation in place, archival research, subsurface testing, or contiguous block unit excavation and data recovery.

Implementation of Mitigation Measure 3.9-2 would reduce this impact to a less-than-significant level by identifying previously-undocumented cultural resources prior to their destruction, having a qualified cultural resources specialist assess the potential significance of the find, and providing an opportunity for their preservation in-place or for further investigation and the recovery of potential important scientific data that could be used to address regional prehistoric and historic-era research issues.

Significant Effect: Discovery of Human Remains during Construction (Impact 3.9-3)

Although no evidence exists to suggest that buried human remains would be encountered during project construction, the potential nonetheless exists for buried human remains to be encountered. Construction activities could thus result in damage to or destruction of such remains. This impact would be **potentially significant**.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effects of the project to a less-than-significant level.

Facts in Support of Finding

CSP and the Commission adopted the following mitigation measure that would reduce to less-than-significant levels the project's impacts on discovery of human remains during construction.

Mitigation Measure 3.9-3: Stop Work and Comply with Relevant State Laws if Human Remains are Uncovered during Construction.

In accordance with the California Health and Safety Code, if human remains are uncovered during ground-disturbing activities, potentially damaging excavation in the area of the burial will be halted and the El Dorado County Coroner and a professional archaeologist will be contacted to determine the nature and extent of the remains.

The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (Health and Safety Code, Section 7050.5[b]). If the coroner determines that the remains are those of a Native American, he or she must contact the Native American Heritage Commission (NAHC) by phone within 24 hours of making that determination (Health and Safety Code, Section 7050[c]).

Following the coroner's findings, CSP or its authorized representative, an archaeologist, and the NAHC-designated Most Likely Descendant (MLD) will determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments are not disturbed. The responsibilities for acting upon notification of a discovery of Native American human remains are identified in Section 5097.9 of the California Public Resources Code.

The landowner will ensure that the immediate vicinity (according to generally accepted cultural or archaeological standards and practices) is not damaged or disturbed by further development activity until consultation with the

MLD has taken place. The MLD will have 48 hours to complete a site inspection and make recommendations after being granted access to the site. A range of possible treatments for the remains may be discussed, including nondestructive removal and analysis, preservation in place, relinquishment of the remains and associated items to the descendants, or other culturally appropriate treatment. Assembly Bill [AB] 2641 (Chapter 863, Statutes of 2006) suggests that the concerned parties may extend discussions beyond the initial 48 hours to allow for the discovery of additional remains. AB 2641 includes a list of site protection measures and states that the landowner will comply with one or more of the following requirements:

- ▶ record the site with the NAHC or the appropriate Information Center,
- ▶ utilize an open-space or conservation zoning designation or easement, and/or
- ▶ record a document with the county in which the property is located.

CSP or its authorized representative will rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance if the NAHC is unable to identify a MLD or if the MLD fails to make a recommendation within 48 hours after being granted access to the site. CSP or its authorized representative may also reinter the remains in a location not subject to further disturbance if it rejects the recommendation of the MLD, and mediation by the NAHC fails to provide measures acceptable to CSP.

Implementation of Mitigation Measure 3.9-3 would reduce potential impact to human remains by adhering to these procedures and other provisions of the California Health and Safety Code and AB 2641(e). By preserving the human remains in-place, reaching an agreement between the property owner and the MLD, or resulting in the repatriation and/or re-interment of the remains in accordance with the wishes of the MLD, potential impacts to human remains would be reduced to a less-than-significant level.

4.7 TRANSPORTATION, PARKING, AND CIRCULATION

Significant Effect: Contribution to Deterioration of Local Streets (Impact 3.10-2)

Construction under the project would add truck traffic on local roads and across bicycle trails in the project vicinity. This traffic has the potential to contribute to the accelerated deterioration of pavement sections on streets and bicycle trails. This impact would be **significant**.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effects of the project to a less-than-significant level.

Facts in Support of Finding

CSP and the Commission adopted the following mitigation measure that would reduce to less-than-significant levels the project's impacts from road deterioration.

Mitigation Measure 3.10-2: Survey Pavement Conditions and Repair Damage.

CSP will prepare a baseline survey of pavement conditions along roads and bicycle trails on potential haul routes prior to initiating construction. The survey will include all local roads between the project and U.S. 50, where effects on pavement would be expected. This information shall be used as the basis for indentifying and repairing any damage caused by project related large truck traffic at the end of the project. CSP will also monitor pavement conditions each year and make improvements, as needed, to ensure the safety of motorists, pedestrians, and bicyclists.

Because CSP will complete a baseline survey of the haul routes before the start of construction, monitor pavement conditions during construction, and repair road damage caused by project related traffic during and after construction,, Impact 3.10-2 would be less than significant.

Significant Effect: Potential for Conflicts between Construction Traffic and Local Traffic, Pedestrians, and Bicycles (Impact 3.10-3)

Construction under the project would add short-term truck traffic on local roads in the project vicinity. This traffic has the potential to create conflicts with local traffic, pedestrians, and bicyclists. This impact would be **significant**.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effects of the project to a less-than-significant level.

Facts in Support of Finding

CSP and the Commission adopted the following mitigation measure that would reduce to less-than-significant levels the project's impacts from conflicts between construction traffic and local traffic, pedestrians, and bicycles.

Mitigation Measure 3.10-3: Construction Traffic Management Plan

CSP will implement a Construction Traffic Management Plan to ensure the safety of local traffic, pedestrians, and bicyclists. The plan will be prepared sufficiently in advance of project construction for adequate review, comment, and concurrence by the El Dorado County Department of Public Works. The plan will include advance public advisories, construction-period signage, flag personnel, and other special traffic-control actions. Specific measures contained in the plan include the following.

- ▶ Distribute or mail flyers to residents in the nearby Upper Truckee North and Meyers neighborhoods advising about upcoming project traffic prior to the initiation of construction.
- ▶ Place advisory signs along construction routes in advance of construction to alert traffic, pedestrian, and bicyclists about the upcoming construction traffic activity.
- ▶ Install construction area signage on designated haul routes to inform the public of the presence of trucks. These signs shall identify the construction truck crossing on the Sawmill Road bike trail.

- ▶ Provide flag personnel at the Sawmill Road crossing when truck activity at this location is heavy (i.e., more than 10 trucks per hour).
- ▶ Provide flag personnel at the Chilicothe Street/Cholula Street and San Bernardino Street/Cholula Street intersections to separate opposing vehicles, pedestrians, and cyclists when these large trucks use the route (i.e., one or more heavy trucks per day).
- ▶ Provide information to all truck drivers identifying haul routes, speed limits, location of flaggers, and any other pertinent public safety information.
- ▶ Monitor truck and traffic Conditions to identify traffic congestion, safety concerns regarding truck, vehicle, pedestrian and bicycle conflicts and to adjust the TCM as needed.

Because construction traffic controls implemented through a traffic management plan in coordinated with El Dorado County Department of Public Works potential conflicts with local traffic, pedestrians, and bicyclists safety, the impact of the construction-related traffic from the project would be less than significant after mitigation.

4.8 AIR QUALITY

Significant Effect: Short-Term Emissions of Criteria Air Pollutants and Precursors during Construction (Impact 3.11-1)

Construction-related emissions of criteria air pollutants and precursors under the project could contribute substantially to an existing or projected air quality violation and expose sensitive receptors to substantial pollutant concentrations. This impact would be **significant**.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effects of the project to a less-than-significant level.

Facts in Support of Finding

CSP and the Commission adopted the following mitigation measure that would reduce to less-than-significant levels the project's impacts from short-term emissions of criteria air pollutants and precursors during construction.

Mitigation Measure 3.11-1: Reduce the Generation of Construction-Related Emissions of ROG, NO_x, and PM₁₀.

In accordance with the TRPA Code of Ordinances and El Dorado County Code, CSP shall implement the following mitigation measures during construction:

- ▶ CSP shall obtain all necessary TRPA and El Dorado County permits and approvals and shall follow all required TRPA codes and procedures with respect to best management practices (BMPs) (TRPA Code Chapter 25), project grading (TRPA Code Chapter 64), excavation- and construction-related and emissions-generating activities (TRPA Code Chapter 91: Air Quality Control), and all required County laws and

procedures with respect to BMPs, project grading and excavation, and construction-related and emissions-generating activities. The following specific emissions-related mitigation measures are recommended by EDCAQMD:

- CSP shall require the prime contractor to provide an approved plan demonstrating that the heavy-duty (i.e., greater than 50 horsepower) off-road vehicles to be used in project construction and operated by either the prime contractor or any subcontractor will achieve, at a minimum, a fleet-averaged 20-percent NO_x reduction compared to the most recent ARB fleet average. Implementation of this measure requires the prime contractor to submit a comprehensive inventory of all off-road construction equipment greater than 50 horsepower that will be used an aggregate of 40 or more hours during the construction project. The inventory shall include the horsepower rating, engine production year, and hours of use or fuel consumed for each piece of equipment. The inventory shall be updated monthly.
- CSP shall require that the 15% of on-site equipment include options for reducing criteria air pollutant exhaust emissions such as using late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, and/or after-treatment products.
- ▶ Dust control measures shall be required for any grading activity creating substantial quantities of dust. They shall be approved by TRPA before groundbreaking and shall comply with the provisions of Chapter 64.4 of the TRPA Code of Ordinances, El Dorado County Code, and the EDCAQMD-recommended control measures listed below:
 - CSP shall require that the prime contractor enclose, cover, or water twice daily all disturbed soil areas, including storage piles, to keep soil moist at all times.
 - CSP shall require that the prime contractor water all haul roads twice daily.
 - CSP shall require the prime contractor to cover or maintain 2 feet of freeboard on all haul loads to reduce dust emissions from escaping over the side of the truck.
 - Activities disturbing the soil shall not occur between October 15 and May 1 of each year, unless approval has been granted by TRPA. All construction sites shall be winterized by October 15 of each construction year in accordance with the provisions of Chapter 64.2.D of the TRPA Code of Ordinances, unless an extension is granted by TRPA.
- ▶ CSP shall require its contractors and suppliers, its general contractor, and all of the general contractor's subcontractors and suppliers to comply with all of the terms and conditions of all project permits, approvals, and conditions attached thereto, including all TRPA and El Dorado County permits and approvals.

Implementation of Mitigation Measure 3.11-1 would reduce fugitive PM₁₀ dust emissions by a minimum of approximately 75 percent and would prevent the fugitive PM₁₀ dust from dispersing beyond the property boundary. Implementation of this mitigation measure would also reduce exhaust emissions of ROG, NO_x, and PM₁₀ from diesel equipment by at least 5, 20, and 45 percent, respectively (WRAP 2006:3, EDCAQMD 2002:4-22 and 4-23). Implementation of Mitigation Measure 3.11-1 would ensure compliance with TRPA regulations for

construction emissions, and mitigated daily emissions of NO_x would be reduced below the EDCAQMD mass emission standard of 82 lb/day. Therefore, this impact would be less than significant with mitigation.

4.9 PUBLIC SERVICES AND UTILITIES

Significant Effect: Temporary Disruption of Public Services during Construction (Impact 3.13-1)

Construction activities and construction-related traffic could temporarily interfere with the ability of law enforcement, fire protection, and emergency medical service providers to provide emergency services to the project vicinity. This impact would be **potentially significant**.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effects of the project to a less-than-significant level.

Facts in Support of Finding

CSP and the Commission adopted the following mitigation measures that would reduce to less-than-significant levels the project's impacts from temporary disruption of public services during construction.

Mitigation Measure 3.13-1: Incorporate Public Service and Emergency Access Provisions in the Construction Traffic Management Plan.

As part of the Construction Traffic Management Plan, prepared pursuant to Mitigation Measure 3.10-3, CSP will coordinate with the appropriate public service agencies, providing construction-related traffic details and evaluating the need for specific actions to maintain adequate public service access to the study area and surrounding vicinity during construction. The plan will include measures to inform public service agencies of access conditions, create and maintain emergency access routes for the study area and vicinity affected by project access routes, and instruct construction personnel about providing priority for public service emergency response.

- ▶ Implementation of this mitigation measure would reduce impacts associated with the potential temporary disruption of public services during construction, because adequate public service and emergency access would be maintained and public service providers would be notified about access conditions and routes during construction. Because emergency access would be maintained throughout construction, this impact would be less than significant.

Significant Effect: Temporary Disruption or Damage of Underground Utility Services during Construction and Ongoing Risk of Damage to Sewer Pipelines (Impact 3.13-2)

- ▶ Project excavation and grading and the potential need for relocation of or hookup to underground pipelines could disrupt existing known or unknown underground utilities. Furthermore, although the risk of damage to the sewer pipelines would be reduced relative to the No Project/No Action Alternative for some locations, it would be increased in other portions of the study area. This impact would be **potentially significant**.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effects of the project to a less-than-significant level.

Facts in Support of Finding

CSP and the Commission adopted the following mitigation measure that would reduce to less-than-significant levels the project's impacts on temporary disruption or damage of underground utility services during construction and ongoing risk of damage to sewer pipelines.

Mitigation Measure 3.13-2A: Verify Utility Locations, Coordinate with Utility Providers, Prepare and Implement a Response Plan, and Conduct Worker Training with Respect to Accidental Utility Damage.

As part of detailed design development, CSP will consult with applicable utility providers to determine the exact location of underground facilities in the project area, including the public right-of-way, and design the final grading plans to avoid existing utilities where possible. If these utilities cannot be avoided, CSP shall coordinate with the applicable utility to determine the best possible course of action to minimize potential disturbance.

- ▶ Before the start of construction, utility locations will be verified through field surveys and the use of the Underground Service Alert services. Any buried utility lines shall be clearly marked in the area of construction on the construction specifications in advance of any earthmoving activities.
- ▶ Before construction begins, CSP will provide advance notification of any needed disturbance to area businesses and residents. Utility service provider consultation will continue during construction to ensure that facilities are avoided and protected and that utility service disruptions are avoided as construction proceeds.
- ▶ Before the start of construction, a response plan will be prepared to address potential accidental damage to a utility line. The plan will identify chain-of-command rules for notifying authorities and appropriate actions and responsibilities to ensure the safety of the public and workers. Worker education training in response to such situations will be conducted by the contractor. The response plan will be implemented by CSP and its contractors during construction activities.

Mitigation Measure 3.13-2B: Protect Vulnerable Portions of the Sewer Pipeline from the 100-Year Flood Event.

This mitigation measure is additional to Mitigation Measure 3.4-2A. During detailed design development and in coordination with STPUD, CSP will design protections for the buried sewer pipeline north and west of the proposed reconnected meanders on the Upper Truckee River upstream of existing RS 4100 and downstream of RS 7900. Final design will include actions to prevent channel adjustments resulting from the 100-year peak event from exposing/undermining sewer pipelines. Examples of potential protective actions could include bank protection, sheet pile, or relocation of sewer pipelines. Final design schematics will be reviewed and approved by STPUD Engineering Department and the actions will be installed during project construction.

With implementation of Mitigation Measure 3.13-2A and Mitigation Measure 3.13-2B as described above, Impact 3.13-2, the potential to disrupt or damage existing utilities, would be less than significant because the project

would be designed to protect utilities through utility location verification consultation requirements during project design and prior to construction; utilities would be relocated with notification to neighbors; and workers would receive safety training.

4.10 HUMAN HEALTH

Significant Effect: Potential Human Health Hazards from Exposure to Existing On-Site Hazardous Materials (Impact 3.14-2)

Implementing the project could expose workers to hazardous materials present on-site during construction activities, and hazardous materials on-site could create an environmental or health hazard if left in place. This impact would be **potentially significant**.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effects of the project to a less-than-significant level.

Facts in Support of Finding

CSP and the Commission adopted the following mitigation measures that would reduce to less-than-significant levels the project's impacts from the exposure to existing hazardous materials

Mitigation Measure 3.14-2: Implement Measures to Reduce the Risk of Health Hazards Associated with Potential Exposure to Hazardous Substances.

If evidence of previously undiscovered soil or groundwater contamination (e.g., stained soil, odorous groundwater) is encountered during construction activities, the construction contractor will immediately stop work in that area and notify CSP. CSP will notify the appropriate Federal, State, and local agencies and will ensure that any contaminated areas are cleaned up in accordance with recommendations made by the El Dorado County Environmental Management Department, Lahontan RWQCB, DTSC, or other appropriate Federal, State, or local regulatory agencies as generally described above before authorizing work to continue in the area.

- ▶ Implementing this mitigation measure would reduce potentially significant impacts associated with exposure of unknown hazardous materials within the study area because hazardous substances that are encountered would be evaluated, removed, and properly disposed of in accordance with Federal, State, and local regulations as necessary. Furthermore, as described in Mitigation Measure Mitigation Measure 3.13-2A, above, before the start of construction, a response plan will be prepared to address potential accidental damage to a utility line. The plan will identify chain-of-command rules for notifying authorities and appropriate actions and responsibilities to ensure the safety of the public and workers. Worker education training in response to such situations will be conducted by the contractor. The response plan will be implemented by CSP and its contractors during construction activities. Because the response plan and regulations pertaining to hazardous substances are protective of human health, implementation of these measures would reduce this impact to less than significant.

Significant Effect: 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 (Impact 3.14-3)

One school is located within one-quarter mile of the study area. The project would involve the handling of hazardous materials or acutely hazardous materials within the study area during construction, general golf course operations, and fuels management. This impact would be **potentially significant**.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effects of the project to a less-than-significant level.

Facts in Support of Finding

CSP and the Commission adopted the following mitigation measure that would reduce to less-than-significant levels the project's impacts from hazardous emissions or handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

Mitigation Measure 3.14-3: Notify Applicable School District with Jurisdiction over Schools within One-Quarter Mile of Project Construction Activities.

As required by Public Resource Code Section 21151.4, CSP shall provide written notification of the project to the Lake Tahoe Unified School District and the Lake Tahoe Environmental Science Magnet School at least 30 days before certification of the EIR/EIS/EIS and shall consult with the school district and Lake Tahoe Environmental Science Magnet School regarding the potential impacts on schoolchildren associated with hazards from project implementation.

Implementation of this mitigation measure would reduce potentially significant impacts associated with hazardous materials emissions within one-quarter mile of a school because the notification and consultation process satisfies the requirements of Public Resource Code Section 21151.4. Because Public Resources Code Section 21151.4 is protective of human health, implementation of this measure would reduce this impact to a less-than-significant level.

Significant Effect: Potential Increase in Public Health Hazards from Mosquitoes Resulting from Increased Floodplain Inundation (Impact 3.14-6)

Implementing the project would result in more extensive floodplain inundation that could result in greater abundance of mosquitoes and thus greater potential for exposure of people to mosquito-borne viruses. This impact would be **potentially significant**.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effects of the project to a less-than-significant level.

Facts in Support of Finding

CSP and the Commission adopted the following mitigation measure that would reduce to less-than-significant levels the project's impacts from an increase in mosquitoes.

Mitigation Measure 3.14-6: Establish and Implement a Management Agreement with the El Dorado County Vector Control District.

CSP will establish and implement a management agreement with EDCVCD. As a performance criterion for the management agreement, the terms and conditions of the agreement will be designed to ensure that EDCVCD can maintain mosquito abundance at or below pre-project levels. The agreement will include but not be limited to:

- ▶ measures that ensure necessary access for monitoring and control measures;
- ▶ applicable best management practices from the California Department of Public Health's *Best Management Practices for Mosquito Control on California State Properties* (CDPH 2008), including:
 - implementing procedures for coordinating CSP and EDCVCD management activities, including procedures for golf course ponds; and
 - providing public information for visitors and the community regarding control measures being implemented, the risk of transmission of mosquito-borne disease, and personal protective measures.

Implementation of this mitigation measure would reduce potentially significant impacts associated with increased exposure of the public to mosquito-borne viruses to a less-than-significant level because the establishment and implementation of the management agreement would ensure that EDCVCD maintains mosquito abundance at or below pre-project levels.

5 CUMULATIVE

Significant Effect: Cumulative Geomorphology and Water Quality – Short-Term Risk of Surface Water or Groundwater Degradation during Construction (Impact 3.16-9)

Project construction activities would occur along or in the channel of the Upper Truckee River, Angora Creek, and the unnamed creek under the all action alternatives. Although temporary BMPs would be implemented, short-term risk of water quality degradation during construction could occur during summer construction seasons or intervening winters. Short-term turbidity that potentially impairs noncontact recreation beneficial uses (i.e., aesthetics) would be minimized by mitigation features planned as part of the alternatives. The residual impact would be minor under the action alternatives, but could violate water quality standards of the Basin Plan, including the turbidity standard (<10 percent above background). If similar impacts occurred under reasonably foreseeable projects at the same time, the effects could combine downstream to increase the magnitude or duration of the water quality standard violation. Although the joint probability of concurrent failures of BMPs, given the high anticipated performance standards and short overlapping periods of construction, would be extremely remote, if it occurred, the combined effect would be cumulatively significant. The project could result in a considerable contribution to the combined, significant cumulative adverse effects related to violation of a water quality standard. This cumulative impact would be **potentially significant**.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effect of the project, but not to a less-than-significant level; this impact would remain significant and unavoidable.

- Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the implementation of other mitigation measures or alternatives that could reduce the impact to a less-than-significant level.

Facts in Support of Finding

CSP adopted feasible mitigation measure to protect beneficial uses of the Upper Truckee River, as described in Section 5.1, “Hydrology and Water Quality” above. However, the potential for violations of narrative or numerical water quality objectives in the Basin Plan at least for short periods of time cannot feasibly be eliminated. As described above, criteria used to evaluate a significant water quality impact was exceeding 10% of background turbidity, therefore, the cumulative effects must meet or exceed such water quality standards to earn a less-than-significant conclusion, recognizing that any violation of a water quality standard is considered a water quality impact without taking in account the extent and duration of that impact. 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 and the residual impact would remain cumulatively significant and unavoidable.

Significant Effect: Cumulative Geomorphology and Water Quality – Short-Term Risk of Surface Water or Groundwater Degradation Following Construction (Impact 3.16-10)

Project implementation would include periods of adjustment in channel sections following construction to meet final design, reseeded of native species on active floodplains, and biotechnical streambank treatments that could be vulnerable to a large flood within the first few years following construction. Potential reductions in coarse sediment delivery downstream, mobilization of fine sediment and organic matter on reactivated floodplains, and flood damage resulting in persistent or chronic water quality degradation would be controlled by mitigation features planned as part of the alternatives development. The residual impacts would be minor under the action alternatives, but could violate a stringent water quality standard of the Basin Plan (<10% above background). If similar impacts occurred at reasonably foreseeable projects during the same interim period, effects could combine downstream to increase the magnitude or duration of the water quality standard violation. This combined effect would be cumulatively significant and the project could result in a considerable contribution to the effect. This cumulative impact would be **potentially significant**.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effect of the project, but not to a less-than-significant level; this impact would remain significant and unavoidable.

- Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the implementation of other mitigation measures or alternatives that could reduce the impact to a less-than-significant level.

Facts in Support of Finding

CSP and the Commission adopted the following feasible mitigation measure to protect beneficial uses of the Upper Truckee River. However, the potential for violations of narrative or numerical water quality objectives in the Basin Plan at least for short periods of time cannot feasibly be eliminated. This impact would remain significant and unavoidable.

Mitigation Measure 3.16-10A: Cumulative Geomorphology and Water Quality – Implement Alternative-Specific Measures to Minimize or Correct Temporary Water Quality Effects Following Construction.

The nature of this mitigation measure would vary by project site/reach and by alternative selected, and each project lead agency/sponsor shall develop and implement these measures separately during detailed design development. The measures would be alternative and site specific and designed to minimize or correct potential water quality effects from a large flood (25-year recurrence or larger) within 5 years of construction. The performance criterion for the mitigation will be to minimize the risk of significant water quality impact(s) during the 5 year period following completion of construction. For example, some of the proposed alternatives shall include longer revegetation/stabilization periods before reactivation of channel sections, other alternatives shall include preproject removal of accumulated fines and organic matter in reactivated floodplains/channels, and some shall involve monitoring and the potential replenishment of coarse sediment to downstream reaches.

Mitigation Measure 3.16-10B: Cumulative Geomorphology and Water Quality – Implement an Interim Adaptive Management Plan on the Upper Truckee River.

The project proponents for all the restoration project reaches on the Upper Truckee River (i.e., California Tahoe Conservancy, CSP, United States Forest Service, and the City of South Lake Tahoe) currently participate in the Upper Truckee River Watershed Advisory Group (UTRWAG), which is a forum to facilitate discussion of issues important to the planning, implementation, and monitoring of SEZ and river improvement, enhancement, and restoration projects in the watershed. The aforementioned agencies also participate in a subcommittee of the UTRWAG that focuses on coordinated adaptive management (activities necessary for resource management of the various Upper Truckee River improvement projects). These activities include:

- ▶ sharing and evaluating monitoring data
- ▶ determining effectiveness of implementation and monitoring
- ▶ identifying potential problems and sources
- ▶ making suggestions and providing mutual feedback regarding potential activities or actions in response to resource degradation or revisions to objectives or monitoring in the various Upper Truckee River project areas

The project proponents shall continue adaptive management with a plan focused on preventing potential short-term water quality degradation that may result if unexpectedly large flood flows occur within the first 5 years after construction of each project. Each project reach will collect and evaluate monitoring data for its reach. The

UTRWAG subcommittee will coordinate annual data review and field inspections for each project reach during the period of adjustment and initial flood vulnerability and will develop recommendations for an adaptive management action. Potential actions could include changes to objectives or monitoring, minor maintenance, (e.g., additional re-vegetation or spot repairs) or intervention such as corrective action to ameliorate a chronic or worsening trend and continued monitoring to determine if there is need for future action. The adaptive management subcommittee will focus on identifying potential problems, and guiding levels of monitoring or action to prevent them from becoming a persistent, recurring, or chronic source. The coordinated effort will foster early identification of short-term surface water quality degradation and will aid in the facilitation of remedial actions. Adaptive management shall be in force for the interim period of channel adjustment and initial flood vulnerability (i.e., at least 5 years but no more than 10 years from the end of construction—sufficient length to allow for expected natural channel adjustments).

With implementation of Mitigation Measures 3.16-10A and 3.16-10B as described above, the likelihood and potential magnitude and duration of Impact 3.16-10 would be lessened, and would not be considerably worse than under existing conditions or the No Project/No Action Alternative. As described above, criteria used to evaluate a significant water quality impact was exceeding 10 percent of background turbidity, therefore, the cumulative effects must meet or exceed such water quality standards to earn a less-than-significant conclusion, recognizing that any violation of a water quality standard is considered a water quality impact without taking in account the extent and duration of that impact. However, the cumulative risk of Basin Plan turbidity standard violations cannot be feasibly eliminated and the residual effect would remain significant and unavoidable.

Significant Effect: Cumulative Biological Resources – Short-Term Effects on Fisheries and Aquatic Resources (Impact 3.16-11)

Project construction activities along or in the channel of the Upper Truckee River, Angora Creek, or the unnamed creek could result in temporary adverse effects on water quality, aquatic habitats, and the aquatic community under the action alternatives. Project implementation would also cause channel sections or features to undergo periods of adjustment after construction, making project features vulnerable to habitat degradation as a result of a large flood occurring within the first few years after construction. These short-term effects would be minimized by mitigation features planned as part of alternatives development. The residual effects of the action alternatives would be minor, but if similar effects were to occur as a result of reasonably foreseeable projects during the same interim period, the effects could combine downstream to increase the magnitude or severity of an adverse effect on water quality, aquatic habitat, and/or the aquatic community. The combined risk of such an event would be cumulatively significant and the project's contribution could be considerable. This cumulative impact would be **potentially significant**.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effects of the project to a less-than-significant level.

Facts in Support of Finding

CSP and the Commission adopted the following mitigation measure that would reduce to less-than-significant levels the project's short-term impacts on fisheries.

Mitigation Measure 3.16-11A: Cumulative Biological Resources – Implement Alternative-Specific Measures to Minimize or Correct Temporary Water Quality Effects Following Construction.

This mitigation measure is identical to Mitigation Measure 3.16-10A.

Mitigation Measure 3.16-11B: Cumulative Biological Resources – Implement an Interim Adaptive Management Plan on the Upper Truckee River.

This mitigation measure is identical to Mitigation Measure 3.16-10A.

With implementation of the measures described above, the likelihood and potential magnitude of Impact 3.16-11 would not be substantially different than under the existing conditions or the No Project/No Action Alternative. These measures would reduce Impact 3.16-10 to a less-than-significant level by ensuring aquatic species are relocated prior to construction, and minimizing temporary increases in turbidity to the maximum extent possible, as not to impact beneficial uses, including those related to aquatic species, and monitoring coarse sediment supply through the project reach.

Significant Effect: Cumulative Air Quality — Generation of Greenhouse Gases (Impact 3.16-28)

Implementation of the project would not result in the generation of substantial short-term construction-related or long-term operation-related emissions of greenhouse gases (GHGs). The proposed project's emissions would not create a considerable contribution to cumulative GHG emissions and would not affect GHG reduction planning efforts. Although for traffic analysis it was presumed that all trees would be hauled off-site, it is expected that some would be used for restoration (e.g., woody debris material) and chipped for mulch material. However, because the estimated tree removal is relatively large (1,640) and the amount of material proposed to be used on-site or hauled off have not been defined, additional mitigation has been developed to lessen the effects of tree removal on carbon sequestering and GHG emissions. This impact is **potentially significant**.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effects of the project to a less-than-significant level.

Facts in Support of Finding

CSP and the Commission adopted the following mitigation measure that would reduce to less-than-significant levels the project's impacts on carbon sequestering.

Mitigation Measure 3.16-28: Cumulative Air Quality – Develop and Implement a Carbon Sequestering Plan for Project Related Tree Removal

Project construction will be handled in a manner that either extends the duration of its sequestration function (i.e., chip and used as mulch or till into soils) or is used for renewable energy purposes thereby minimizing landfill disposal or open burning of woodpiles.

With implementation of the Mitigation Measure 3.16-28, Impact 3.16-28 would be reduced by maximizing the woody material on-site that can sequester carbon and avoiding activities that would increase GHG emissions such as burning woodpiles. In addition, the project would not result in the generation of substantial short-term construction-related or long-term operation-related GHG emissions. Therefore, this impact would be less than significant.

6 STATEMENT OF OVERRIDING CONSIDERATIONS

As discussed in Section 5 of these CEQA Findings, the final EIR concludes that the proposed project, even with the incorporation of all feasible mitigation measures and consideration of alternatives, will nonetheless cause a significant unavoidable impact on the following resources:

- ▶ Hydrology and Water Quality - Short-Term Risk of Surface Water or Groundwater Degradation during Construction
- ▶ Hydrology and Water Quality - Short-Term Risk of Surface Water or Groundwater Degradation Following Construction
- ▶ Cumulative Geomorphology and Water Quality – Short-Term Risk of Surface Water or Groundwater Degradation during Construction
- ▶ Cumulative Geomorphology and Water Quality – Short-Term Risk of Surface Water or Groundwater Degradation Following Construction

CSP has also adopted all feasible mitigation measures with respect to these impacts, which further lessen the impact but would not reduce it below a level of significance.

Under CEQA, before a project which is determined to have a significant, unmitigated environmental effect can be approved, the public agency must consider and adopt a “statement of overriding considerations” pursuant to CEQA Guidelines Sections 15043 and 15093. As the primary purpose of CEQA is to fully inform the decision makers and the public as to the environmental effects of a proposed project and to include feasible mitigation measures and alternatives to reduce any such adverse effects below a level of significance, CEQA nonetheless recognizes and authorizes the approval of projects where not all adverse impacts can be fully lessened or avoided. However, that agency must explain and justify its conclusion to approve such project through the statement of overriding considerations, setting forth the proposed project’s general social, economic, policy, or other public benefits that support the agency’s informed conclusion to approve the proposed project.

CSP finds that the proposed project meets the following stated project objectives – which have substantial social, economic, policy and other public benefits – justifying its approval and implementation, notwithstanding the fact that not all environmental impacts were fully reduced below a level of significance:

The proposed project will provide for the following:

- ▶ It would allow room for geomorphic and ecological restoration of the river, while accommodating continuation of an 18-hole golf course.

- ▶ It would minimize connectivity of the golf course and the river.
- ▶ It would minimize or avoid sensitive archaeological sites and sensitive ecological habitat.
- ▶ It would maximize golf use of higher capability lands and minimize use of SEZ lands.
- ▶ It would include trail alignments for non-golf use that connect to the existing trail network and provide for safe use and enjoyment by Washoe Meadows SP and Lake Valley SRA visitors.
- ▶ It would provide golf recreation developed, constructed, and operated in a financially responsible and cost-effective manner capable of generating revenue at a level similar to current levels.

7 CONCLUSION

The mitigation measures listed in conjunction with each of the findings set forth above, as implemented through the MMRP, have eliminated or reduced, or will eliminate or reduce to a level of insignificance, all adverse environmental impacts, except for those described above in Sections 5 and 6.

The MMRP, as adopted by the State Parks Director at the time of project approval, is attached to these Findings.

8 REFERENCES

For complete lists of references used in preparing the draft EIR/EIS/EIS, see Chapter 8, “References Cited,” in the draft EIR/EIS/EIS. For a complete list of references used in preparing the final EIR/EIS/EIS, see Chapter 6, “References Cited,” in the final EIR/EIS/EIS.

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