

19 CUMULATIVE IMPACTS

19.1 REQUIREMENTS FOR CUMULATIVE IMPACT ANALYSIS

This chapter identifies and assesses the cumulative impacts related to the Placer County Tahoe Basin Area Plan and Tahoe City Lodge alternatives. Section 15130(a) of the State CEQA Guidelines requires a discussion of the cumulative impacts of a project when the project's incremental effect is *cumulatively considerable*, which, as defined in State CEQA Guidelines Section 15065(a)(3), means that the "incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." State CEQA Guidelines Section 15355 defines a cumulative impact as two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time. This chapter describes those cumulative impacts to which the Area Plan and Lodge alternatives would contribute, and whether that contribution would be considerable in the context of past, present, and reasonably foreseeable future projects.

19.2 CUMULATIVE IMPACT APPROACH

As discussed in Chapter 4, "Approach to Environmental Analysis," this analysis is provided to fully document the environmental effects of the four Area Plan and Lodge alternatives. The broad geography and long timeframe to which the Area Plan applies and the policy-oriented nature of its guidance is such that the EIR/EIS is prepared at a programmatic level, i.e., a more general analysis of each resource area with a level of detail and degree of specificity commensurate with the overall planning level of the Area Plan. The proposed Lodge represents a project that contains a greater level of detail and specificity such that a project-level analysis of cumulative impacts can be conducted.

Because the proposed Placer County Tahoe Basin Area Plan was prepared to implement the Lake Tahoe Regional Plan and is consistent with its goals and policies, which were evaluated in the EIS for the Regional Plan Update (RPU, December 2012), cumulative impacts of the Area Plan are addressed in light of the information in the RPU EIS. The Tahoe Metropolitan Planning Organization (TMPO) *Regional Transportation Plan: Mobility 2035 and Sustainable Communities Strategy* (RTP/SCS) was developed concurrently with the RPU and is a long-range plan to implement a transportation system in the region. The cumulative impacts of the Area Plan are also considered within the context of the impacts identified in the RTP/SCS EIR/EIS. As described in Chapter 1, "Introduction," the RPU EIS and RTP/SCS EIR/EIS are incorporated herein by reference. Cumulative impacts that are adequately addressed in those documents and still applicable to the Area Plan and Lodge are not repeated; rather, in accordance with Section 15168(d) of the State CEQA Guidelines, reference is made to the analysis in the RPU EIS and the RTP/SCS EIR/EIS. Where new projects or proposals not previously considered in the RPU EIS or RTP/SCS EIR/EIS would substantially alter the cumulative context and analysis, these projects are addressed herein. In addition, where new or refined features of the proposed Area Plan (e.g., map revisions, land use changes, and Area Plan programs and standards) can contribute to cumulative impacts, those effects are also addressed herein.

19.2.1 Cumulative Analyses of the Lake Tahoe Regional Plan EIS and Regional Transportation Plan/Sustainable Communities Strategy EIR/EIS

The Lake Tahoe Regional Plan is a long-range plan that serves as the regulatory framework and blueprint for development within the Tahoe Basin. The Regional Plan consists of goals, policies, and implementation measures to support achievement and maintenance of specific environmental standards – environmental

threshold carrying capacities – which indirectly define the capacity of the region to accommodate additional development.

The RTP is a long-range plan to develop a transportation system in the Tahoe Region that supports a healthy and prosperous community, economy, and environment and mitigates existing adverse mobility and environmental conditions. The Sustainable Communities Strategy (SCS) is a combined land use and transportation plan to meet adopted goals for the reduction in greenhouse gas (GHG) emissions, in compliance with California's Senate Bill (SB) 375, Statutes of 2008. Many of the contemporary concepts necessary to achieve the region's transportation vision were incorporated into the RTP at that time, in conjunction with the SCS for the California side of the Tahoe Basin. These concepts include integration of land use planning and transportation; bringing work, shopping, recreation, housing, and lodging closer together; linking development better to a multi-modal transportation system; closing gaps in the existing bicycle and pedestrian network; enhancing transit service; and revitalizing communities through corridor enhancement projects that improve mobility for all travel modes.

In December 2012, prior to adoption of the RPU and RTP/SCS, a policy-level EIS was certified for the RPU and a program EIR/EIS was certified for the RTP/SCS. Because of the policy-level purpose of the RPU and its long timeframe, the EIS evaluated the environmental impacts of the RPU at a policy level and recognized the need for future project-level environmental review. In accordance with Section 15168 of the State CEQA Guidelines, a program EIR may be prepared on a series of actions that can be characterized as one large project; that are subject to rules and regulations that apply to the continuing program; or individual activities carried out under the same statutory or regulatory authority and having generally similar environmental effects that can be mitigated in similar ways.

A program EIR or EIS provides regional consideration of cumulative effects and includes broad policy alternatives and program mitigation measures that are equally broad in scope. The RPU EIS and RTP/SCS EIR/EIS provide regional-scale analysis and a framework of mitigation measures for subsequent, area-specific and site-specific environmental review documents prepared by local agencies as individual planning, development, and transportation projects are proposed and assessed. The Placer County Tahoe Basin Area Plan is proposed to implement policies of the Regional Plan and RTP/SCS, and, with minor exceptions detailed herein, is consistent with the respective program EIS and EIR/EIS. Similarly, the Tahoe City Lodge project is proposed to be a real-world reflection of those policies.

As described in Chapter 1, "Introduction," the standards set forth under the TRPA environmental thresholds are the foundation for much of the decision making that occurs in the Tahoe Basin. The environmental thresholds are used, in part, to guide preparation of findings, which are required prior to approval of certain actions. The cumulative analyses of the RPU EIS and RTP/SCS EIR/EIS included assessment of: 1) programs that focus on environmental improvement, some of which are specifically designed to address environmental thresholds; 2) land management plans, which set forth planning guidelines and principles for much of the land area of the Tahoe Basin; 3) Tahoe Transportation District/Tahoe Metropolitan Planning Organization Projects and Programs; and 4) specific development projects that were known and reasonably foreseeable at the time the RPU EIS and RTP/SCS EIR/EIS were under preparation.

The analysis in Section 19.3 summarizes and/or refers to those cumulative impacts that have been addressed adequately in the RPU EIS and RTP/SCS EIR/EIS. Please refer to the RPU EIS and RTP/SCS EIR/EIS for more detailed information. The Draft and Final RPU EIS can be found and downloaded at <http://www.trpa.org/regional-plan/regional-plan-eis/>. The Draft and Final RTP/SCS EIR/EIS can be found and downloaded at <http://tahoempo.org/Mobility2035/>.

19.2.2 Cumulative Context: Geographic Scope and Related Projects

The geographic area to which impacts of the Area Plan and Lodge could contribute to cumulative effects varies depending on the environmental resource being considered. The geographic scope of each portion of the cumulative impact analysis is identified in Table 19-1.

Table 19-1 Geographic Scope of Cumulative Impacts

Resource Topic	Geographic Area
Land Use	Plan area and adjacent land uses
Agricultural and Forest Resources	Lake Tahoe Region
Scenic Resources	Plan area, Tahoe Lodge vicinity, and surrounding public viewpoints
Geology, Soils, Land Capability and Coverage	Lake Tahoe Region for land capability and coverage; Tahoe Lodge site and vicinity for geology and soils effects
Hydrology and Water Quality	Local and regional watersheds
Biological Resources	Lake Tahoe Region and beyond, depending on species distribution, habitat requirements, and scope of impact from proposed activities
Recreation	Lake Tahoe Region and beyond, including recreation areas of Squaw Valley and Martis Valley
Heritage, Cultural, and Paleontological Resources	Plan area, Tahoe Lodge site subject to construction
Hazards and Hazardous Materials	Plan area and immediate vicinity
Public Services and Utilities	Service areas of specific providers, generally North and West Shore communities of Lake Tahoe
Traffic and Transportation	Plan Area and beyond; State and local roadways and intersections affected by growth in accordance with the Regional Plan, Tahoe City Lodge project, and projects in the Squaw Valley, Truckee, and Martis Valley areas.
Air Quality, Greenhouse Gas Emissions, and Climate Change	Lake Tahoe Air Basin for criteria pollutants and pollutants that affect the air basin; immediate project vicinity for localized pollutant emissions (e.g., particulates during construction); and global/statewide for greenhouse gas emissions and climate change
Noise	Plan area and immediate project vicinity where project-generated noise can combine with noise from other sources

State CEQA Guidelines Section 15130 identifies two basic methods for establishing the cumulative context within which a project is considered: (1) the use of a list of past, present, and probable future projects; or (2) the use of adopted projections from a general plan, other regional planning document, or a certified EIR for such a planning document. A combination of these approaches may also be used.

This cumulative analysis uses the “list” approach to supplement, where needed, the analysis, modeling of projections, and impact evaluation from the previously certified RPU EIS and RTP/SCS EIR/EIS. Many of the projects are more recent proposals (since 2012) or are otherwise not explicitly identified in the program environmental documents. Probable future projects are those in the Plan area and vicinity that have a reasonable potential to interact with the Area Plan and Tahoe City Lodge project to generate a cumulative impact (based on proximity, type of impacts, and construction schedule) and:

- ▲ are partially occupied or under construction,
- ▲ have received final discretionary approvals,
- ▲ have applications accepted as complete by local agencies and are currently undergoing environmental review, or

- ▲ have been discussed publicly by an applicant or have otherwise become known, and for which sufficient information is available to allow at least a general analysis of environmental impacts.

Reasonably foreseeable future projects are described in Table 19-2, and their locations are shown in Exhibit 19-1, both at the end of this chapter. The list includes new projects not previously considered in the RPU EIS or RTP/SCS EIR/EIS, and also some projects that were previously considered, but that are within or near the Plan area. Cumulative projects include small residential, commercial, tourist, and recreation developments and upgrades (e.g., motel to timeshare projects, parking lot projects, pedestrian and bike trails, creek restoration); water, sewer, and highway upgrade and improvement projects (e.g., TCPUD water and sewer line replacements and Caltrans projects on SR 28, SR 89, and SR 267); and fuels reduction projects, all within the Tahoe Basin. The list includes the proposed Brockway Campground, also within the Tahoe Basin, and other large undertakings outside of, but near the Tahoe Basin boundary, including the Village at Squaw Valley Specific Plan, Squaw-Alpine Interconnect project, Martis Valley West Parcel Specific Plan, and ongoing buildout of larger developments already in progress, including Martis Camp, Northstar Mountain Master Plan, and Northstar Highlands Phase II. The cumulative effects of past and present projects on the environment are reflected by the existing conditions in the Plan area and Tahoe City Lodge site.

The cumulative impact analysis addresses the same environmental topics and impacts assessed for the Area Plan and Tahoe City Lodge project alternatives in Chapters 5 through 18, using the same significance criteria, as applicable. All impacts to which the project could have some contribution to cumulative effects are addressed herein; those for which the project would have no impact and therefore no potential to contribute to a cumulative effect (e.g., adverse effects to paleontological resources) need not be addressed and are not included.

19.3 CUMULATIVE IMPACT ANALYSIS

LAND USE

Like the Tahoe Basin as a whole, existing land use in the Plan area is the result of both land use practices prior to implementation of the 1987 Regional Plan, many of which were environmentally damaging, and the guiding policies and regulations of TRPA and Placer County since that time, exemplified in the Regional Plan. The growth management system, limiting the number of development rights and allocations, concentrating development on high capability lands and within Centers, and implementing the land use map, community plans, and plan area statements have facilitated environmental improvements over the planning period of the 1987 Regional Plan. As such, there is no existing adverse cumulative land use condition in the region. By virtue of their distance from the Plan area, and locations outside of the combined jurisdiction of Placer County and TRPA, out-of-Basin projects would not substantially contribute to cumulative land use effects (e.g., development pattern of the Regional Plan, expansion or intensification of nonconforming uses). Therefore, the geographic context of the cumulative land use analysis is the Tahoe Basin.

Cumulative Impact 5-1: Cumulative impacts to the regional development pattern

New development and redevelopment proceeding from the Regional Plan and Area Plan alternatives would be limited to the TRPA established allocation limits and land use designations, as modified by the limited conversion of CFA to TAUs for Alternatives 1 and 3, the ratio of which was determined to be approximately equivalent with respect to certain environmental impacts (e.g., traffic generation). All Area Plan alternatives would maintain the established growth management system of the Regional Plan; continue the existing land use pattern (concentration of development in defined urban centers); and allow for or encourages transfer of existing and potential development to appropriate areas (higher capability lands within Centers). Any new development or redevelopment occurring under the Area Plan alternatives would be required to secure residential, commercial, and tourist accommodation allocations. The system of limited allocations and concentrated development in community centers is designed to continue and accelerate improvements to the environmental conditions in the Plan area through attainment and maintenance of environmental threshold standards. The limited conversion of CFA to TAUs for Alternative 1 (400 additional TAUs and

181,600 fewer square feet of CFA) and Alternative 3 (200 additional TAUs and 90,800 fewer square feet of CFA) would still occur under a system of finite allocations, and in accordance with a plan that emphasizes concentration of development in Town centers. In the context of a 72-square-mile Plan area that presently includes over 1.3 million square feet of CFA, 11,170 residential units, and 1,340 TAUs, this feature of Alternatives 1 and 3 would not have the potential to substantially change the regional development pattern.

Cumulative programs, land management plans, and development projects, including known, and as-yet unknown residential, commercial, tourist, transit/transportation, and recreational development (including those projects described in Table 19-2), would individually and collectively contribute to the land use and development pattern that would evolve over the effective period of the Regional Plan. However, all cumulative development projects would be required to be consistent with TRPA land use designations, as applicable, and would be limited by the available allocations—as modified in the Plan area by Alternatives 1 and 3—and land capability. Those projects that do not require allocations (such as EIP projects, infrastructure upgrades, and fuels management) would also be held to the established lands use designations, the maximum allowable coverage per the Bailey system, as well as TRPA requirements to support attainment and maintenance of the environmental threshold carrying capacities (i.e., avoidance and mitigation of environmental impacts). Furthermore, the U.S. Forest Service, Lake Tahoe Basin Management Unit, which manages more than 75 percent of the lands within the region, as well as California Department of Parks and Recreation and Nevada Division of State Parks maintain land management plans that guide the use of resources, as well as activities that occur, within their jurisdictions. These land management plans are prepared and updated in coordination with TRPA to be consistent with the Regional Plan and to support environmental improvements. Because the Area Plan alternatives, Tahoe City Lodge alternatives, and all future projects implemented in accordance with the Area Plan would be required to demonstrate consistency with the Regional Plan and support the attainment of the environmental thresholds, the proposed project and the cumulative projects would have a less-than-significant cumulative impact to the regional development pattern. The contribution of any of the Area Plan and Tahoe City Lodge alternatives to development pattern impacts **would not be cumulatively considerable**.

Mitigation Measures

No mitigation is required.

Cumulative Impact 5-2: Cumulative impacts resulting from land use classification changes, including expansion or intensification of non-conforming uses

As described above, all new development permitted through the Regional Plan or the any of the Area Plan alternatives would be required to demonstrate consistency with the Regional Plan land use designations and the requirements of the TRPA Code. Cumulative development outside of the Tahoe Basin would not contribute to this potential effect. Future, cumulative programs, plans, or development projects could propose land classification changes and associated changes in permissible uses. However, these changes would be processed as amendments to the Regional Plan and would require independent environmental analysis. No future cumulative project would be approved or permitted unless it can be shown that any proposed land classification changes would not hinder progress toward attainment of the environmental thresholds and would be consistent with TRPA's goals and policies. Therefore, the proposed project and the cumulative projects would have a less-than-significant cumulative impact on land classification changes or expansion or intensification of non-conforming uses. Therefore, any contribution by any of the proposed Area Plan and Tahoe City Lodge alternatives **would not be cumulatively considerable**.

Mitigation Measures

No mitigation is required.

POPULATION AND HOUSING

Cumulative Impact 6-1: Cumulative location, distribution, density, or growth rate of population and housing

Any Area Plan and Tahoe City Lodge project alternative would be required to be consistent with the Regional Plan, which, by virtue of its growth management system, limits the number and general location of residential units, CFA, and TAUs that can be developed within the Tahoe Basin (TRPA 2012:4-32 – 4-33). In addition, the policies of the Regional Plan guide the location of development types, heights, densities, and other factors that affect the location and distribution of employment, population, and housing in the region. As described in the RPU EIS, growth in the Tahoe Basin, including the Plan area would be modest, the jobs-to-population ratio would remain relatively constant, and the cumulative projects in the Tahoe Basin would be limited by the established allocation limits and land use designations described in Chapter 5, “Land Use,” and location of development, as identified in the Area Plan Land Use Map (see Exhibit 5-1).

Construction jobs generated by foreseeable projects inside and outside the Tahoe Basin could be substantial, depending upon timing of construction of individual projects. However, because of the temporary nature of such employment, and the local and regional population centers that can provide construction workers (e.g., Truckee, Reno, Sacramento), construction work is not expected to substantially alter long-term patterns of population, employment, and housing in the region.

Reasonably foreseeable projects outside, but near the Tahoe Basin could have a moderate effect on patterns of population, employment, and housing. The Village at Squaw Valley Specific Plan, Northstar Highlands Phase II, and Martis Valley West Parcel Specific Plan would result in construction of additional tourist units, second homes, and some permanent residences. Associated commercial and recreational development, particularly at the Village at Squaw Valley, would generate additional seasonal and year-round employment that would likely draw workers from Truckee and communities within the Plan area. Other developments in the Martis Valley and Truckee (e.g., Martis Camp, Joerger Ranch Specific Plan) would also include housing (second-home and permanent) and employment. Because the residential component of these projects includes a substantial number of second homes, and employment opportunities would be limited in number and potentially seasonal, the cumulative projects would not have a substantial effect on the distribution of population, employment, and housing such that it could result in significant cumulative effects.

As described in Impact 6-1, Area Plan Alternatives 1, 2, and 3 would result in less-than-significant impacts on the location of population, housing, and employment in the region. Consistent with the Regional Plan, implementation of the Area Plan would result in modest growth in population, jobs, and housing along with the promotion of environmental improvements and increases in walkability, transit, and bicycle usage. Future development under Alternative 4, No Project, would be subject to Regional Plan policies and development limitations, but this alternative would not result in an increase in development density or adoption of additional policies to further incentivize development in Town centers that would encourage the level of environmental improvement or increases in walkability, transit, and bicycle usage that could occur under Area Plan Alternatives 1, 2, and 3. For the reasons described above, the Area Plan alternatives, in combination with cumulative projects, would result in a less-than-significant cumulative impact on the distribution and location of population, housing, and employment in the region. It follows, then, that the contribution of any of the Area Plan alternatives **would not be cumulatively considerable**.

The Tahoe City Lodge would not directly result in any permanent housing, and would generate approximately 66 full-time equivalent (FTE) employees, an increase of approximately 29 FTE as compared to baseline conditions. The project would conform to the Area Plan, and thus to the Regional Plan. Because the Area Plan, in combination with other cumulative development would result in a less-than-significant cumulative effect on population, employment, and housing, it follows that the contribution of the Lodge project **would not be cumulatively considerable**.

Mitigation Measures

No mitigation is required.

Cumulative Impact 6-2: Cumulative population growth and housing demand

Cumulative development in the region, to the degree that it is not offset by redevelopment projects, would generate a small increase in employment both within the Tahoe Basin (e.g., VOLTAIX Commercial Project, Boulder Bay, 6731 Tahoe Timeshare, Brockway Campground, and Homewood Mountain Resort Ski Area Master Plan), and outside the Tahoe Basin (e.g., Martis Valley West Parcel Specific Plan [MVWPSP], Martis Camp, Northstar Mountain Master Plan, Northstar Highlands Phase II, Joerger Ranch Specific Plan, Tahoe Expedition Academy, Village at Squaw Valley Specific Plan). A number of these projects would provide additional housing that could meet future demand associated with population and employment growth resulting from cumulative projects (e.g., MVWPSP, Northstar Highlands Phase II, and Joerger Ranch Specific Plan). Housing development projects in Placer County are required to set aside at least 15 percent of the total housing units for affordable housing (Placer County Code Section 15.65.130), and new development projects are required to provide housing for 50 percent of FTE employees of the project, either through constructing new employee housing, dedication of land for needed units, or payment of an in-lieu fee to the County (Placer County General Plan Policy C.2). Development of affordable housing within the Tahoe Basin is incentivized through the MRIP, which distributes bonus units for improving environmental conditions or through development of affordable or moderate-income housing. Because cumulative development would occur in accordance with land use plans in effect for the various jurisdictions, cumulative growth includes both jobs-producing and residential developments, and that TRPA and Placer County require compliance with employee housing programs, future demand for housing associated with the modest population and employment growth from cumulative development could be met through such housing programs and existing housing stock in the region. Cumulative projects would not induce substantial population growth, directly or indirectly, that would create additional demand for housing such that an adverse physical effect on the environment would occur. This would be a less-than-significant cumulative impact.

Future development implemented pursuant to the Area Plan would be limited by the Regional Plan allocations for new residential units, CFA, and TAUs, as modified by the limited conversion of CFA to TAUs for Alternatives 1 and 3. Implementation of Area Plan Alternatives 1 and 3 would result in a balance of jobs and housing, where the number of jobs would roughly equal the number of available housing units in the Tahoe Basin. Because of the relatively higher proportion of CFA to TAUs at buildout, Area Plan Alternatives 2 and 4 would result in a jobs-to-occupied housing ratio in which approximately 870 employees may have to find housing outside the Tahoe Basin (see Chapter 6, "Population and Housing," Impact 6-2). As described above, future development under all of the Area Plan alternatives would be subject to Placer County requirements to provide affordable and/or workforce housing. Additionally, future Area Plan development could receive bonus units for affordable housing purposes. Although Alternatives 2 and 4 could increase the demand for housing relative to Alternatives 1 and 3, this demand could likely be met through workforce housing, bonus units for affordable housing, and to some degree by planned housing developments identified in the cumulative projects list (Table 19-2). In the event that additional housing would need to be constructed, those future housing projects would be subject to project-level environmental review and would be required to mitigate any potential adverse environmental effects. For these reasons, cumulative development, including the Area Plan alternatives, would not induce population growth to the degree that demand for, and construction of, new housing would cause adverse physical effects on the environment. The cumulative impact would be less than significant. Therefore, any contribution by development under any of the Area Plan alternatives **would not be cumulatively considerable**.

The Tahoe City Lodge project would generate approximately 66 FTE employees, an increase of approximately 29 FTE as compared to baseline conditions. The Lodge project would be required to comply with Placer County workforce housing requirements. This degree of change would be negligible in the context of cumulative development in the region. Therefore, the contribution by any of the Tahoe City Lodge alternatives to cumulative housing demand **would not be cumulatively considerable**.

Mitigation Measures

No mitigation is required.

BIOLOGICAL RESOURCES

Cumulative Impact 7-1: Cumulative disturbance or loss of sensitive habitats

Sensitive habitats in the Plan area and the region include a variety of wetland and riparian communities such as wet meadows, riparian zones along streams, marshes, seasonal wetlands, and drainages. Most of these communities in the Tahoe Basin are also designated by TRPA as SEZ and/or habitats of special significance. Other sensitive habitats include late seral/old growth forest. Decades of growth and development, Comstock-era logging, hydrologic modification, livestock grazing, and fire suppression activities in the Tahoe Basin and beyond have resulted in an overall significant cumulative effect on these sensitive habitat types. It is estimated that 75 percent of marsh habitat and 50 percent of meadow habitats in the Tahoe Basin have experienced some level of functional degradation (TRPA 2012). Attainment status for meadow, wetland, and riparian hardwood habitats in the Tahoe Basin are “somewhat worse” than TRPA threshold targets. Outside of the Tahoe Basin, sensitive habitats have also declined in abundance and function.

As described in Impact 7-1, depending on the specific locations of projects, development under all Area Plan alternatives (Alternatives 1, 2, 3, and 4) could result in removal or disturbance of sensitive habitats, including SEZs and potential jurisdictional wetlands. Development projects outside the Tahoe Basin, including those in the Martis Valley, Olympic Valley, Truckee, and other areas could also result in removal or disturbance of sensitive habitats. Most of the SEZ/wetland/riparian habitats affected by cumulative development would likely be considered jurisdictional by USACE and LRWQCB under CWA Section 404 and the Porter-Cologne Act. Fill or reconfiguration of jurisdictional waters of the United States requires a permit from USACE under CWA Section 404. In addition, the deciduous riparian vegetation within most or all riparian areas and SEZs would likely be considered jurisdictional habitat by USACE and would require a permit and mitigation. CDFW has jurisdiction over activities affecting the bed and bank of drainages and would also require mitigation for any adverse impacts.

Any new commercial, tourist, or residential development, redevelopment, or construction of restoration projects under all Area Plan alternatives would be required to comply with existing TRPA, federal, and state regulations and permitting requirements that protect SEZs, wetlands, and other sensitive habitats. TRPA’s existing policies and Code provisions address potential construction-related impacts to SEZs and other sensitive habitats Basin-wide through site-specific environmental review; they require development and implementation of project-specific measures to minimize or avoid impacts through the design, siting, and permitting process; and they require compensatory or other mitigation for any significant effects as a condition of project approval. Specifically, the TRPA Goals and Policies and the Code require protection of riparian habitats and SEZs through establishment of setbacks, BMPs, or other measures and protection of late seral/old growth forests and other sensitive habitats. The TRPA Rules of Procedure require mitigation for any significant impact on these resources as a condition of project approval. Additionally, the disturbance or loss of jurisdictional wetlands during construction would be minimized or avoided, and habitat compensation would be provided, through the CWA Section 404 permitting process. Impacts to riparian, wetland, and other sensitive habitats would also be minimized, avoided, or mitigated, as needed, through the permitting processes required by CWA Section 401, CDFW Code Section 1600 *et seq.*, and CEQA. Depending on the type and magnitude of a potential impact to SEZ or other sensitive habitat, mitigation measures can include BMPs or setbacks specifically designed to protect those resources, compensatory enhancement or restoration on- or off-site, and requirements to provide funding for or otherwise contribute to restoration projects. Project-level planning, environmental analysis, and compliance with existing regulations would identify potentially significant effects, minimize or avoid those impacts through the design, siting and permitting process, and require mitigation for any significant effects as a condition of project approval and permitting. Therefore, with all Area Plan alternatives, the contribution of approved projects to the cumulative impact on SEZs and other sensitive habitats **would not be cumulatively considerable**.

No sensitive biological communities are present on the Tahoe City Lodge project site. Therefore, construction of the project **would not contribute** to a cumulative impact on sensitive habitats or communities.

Mitigation Measures

No mitigation is required.

Cumulative Impact 7-2: Cumulative disturbance or loss of special-status plants and animals

The cumulative projects include residential and commercial development, recreation facilities, resort development, and forest vegetation and fuels treatment that could affect habitat for special-status plants in the Tahoe Basin and beyond. Habitat for several special-status plants and animals in the Tahoe Basin and other areas within the geographic scope for cumulative effects is primarily within riparian and wetland settings, and some upland conifer forest and shrub/meadow communities. Development project areas that overlap with these habitats would be expected to have some level of adverse effects on these resources; however, forest vegetation and fuels treatment projects are expected to result in long-term habitat enhancement that may benefit those special-status plant species associated with forest habitats. Overall, the effects of past projects on special-status species are considered cumulatively significant.

With all Area Plan alternatives (Alternatives 1, 2, 3, and 4), construction of some projects could affect special-status plant or animal species, depending on the specific locations, presence of suitable habitat and the type, timing, and specific nature of the project actions. During project-level planning and evaluation, project-specific review and sources would be used to determine special-status plant and animal species with potential to occur on a specific project site, including reconnaissance or protocol-level surveys. Most ground disturbances resulting from development would occur within community centers, which are already largely developed and disturbed. However, projects in more remote areas could result in construction-related disturbances and loss of habitat for special-status plant or animal species. For example, cross-country bike trails, fuels management, habitat restoration, infrastructure development, and other projects in more remote areas could encroach into buffer zones around TRPA special interest species (e.g., northern goshawk, osprey) and adversely affect other special-status plant and animal species. At the project-review level, special-status plant and wildlife species with potential to be affected would be determined based on the species' distribution and known occurrences relative to the project site, the presence of suitable habitat for the species in or near the project site, and preconstruction surveys.

As described in Impact 7-2, if special-status plants are present in affected areas, construction activities could result in vegetation removal or trampling, deposition of dust or debris, soil compaction, or disturbance to root systems that could affect their survival. Construction actions could temporarily disturb foraging, movement, and reproductive activities of special-status wildlife species that may occur on project sites, as a result of vegetation removal, noise, dust generation, or other project-related factors. Construction could also result in noise, dust, and other disturbances to special-status animals in the vicinity of project sites, resulting in potential site abandonment and mortality to young. In addition, long-term operation and use of some facilities (e.g., trails) could disturb or displace special-status wildlife species.

With all Area Plan alternatives, each project that could affect biological resources would require some level of project-specific environmental review. TRPA's existing policies and Code provisions address potential impacts to special-status species through site-specific environmental review and requiring development and implementation of project-specific measures to minimize or avoid impacts through the design process, and providing compensatory or other mitigation for any significant effects on special-status species as a condition of project approval. For any TRPA special interest wildlife species that could be affected, compliance with the TRPA Code requires that projects or land uses within TRPA nondegradation zones would not, directly or indirectly, significantly affect the habitat or cause the displacement or extirpation of the population; and TRPA would not permit a project that would degrade habitat without compensatory mitigation to avoid a significant effect. For other special-status species, project-level planning and environmental analysis for CEQA and/or TRPA review would identify potentially significant effects, based on the type and location of the project; minimize or avoid those impacts through the design process (e.g., conducting surveys and modifying projects to avoid special-status species, if feasible); and provide

mitigation for any significant effects as a condition of project approval (e.g., implementing limited operating periods for construction and/or operations, compensatory habitat enhancement/restoration). Therefore, with all Area Plan alternatives, the contribution of approved projects to the cumulative impact on special-status species **would not be cumulatively considerable**.

The Tahoe City Lodge project site is urban and characterized primarily by a paved parking lot, buildings and other developed facilities, and a small patch of disturbed Jeffrey pine, and does not provide suitable habitat for special-status species. Therefore, construction of any of the Tahoe City Lodge alternatives **would not contribute** to a cumulative impact on special-status species.

Mitigation Measures

No mitigation is required.

Cumulative Impact 7-3: Cumulative tree removal

Logging, fire suppression activities, insect infestation, and drought have contributed to a relatively new stock of trees in the Tahoe Basin and beyond. As a result, many of the forestlands are even-aged and densely stocked. Based on the most current data on the distribution on vegetation, the Tahoe Basin is not in attainment with management targets adopted for “other than mature,” small-diameter (<10.9 inches in diameter at breast height [dbh]) for both red fir and yellow pine. The current percentage of small-diameter yellow pine cover within this vegetation type is 3.6 percent (or 24 percent of target), an estimated additional 11,570 acres of small-diameter yellow pine dominated stands is needed to achieve the lower limits of this management standard. The current percentage of small-diameter red fir cover with this vegetation type is 10.9 percent (or 72 percent of target) – an estimated additional 1,380 acres of small-diameter dominated stands is needed to achieve the lower limits of this management target. Overall, the effects of past logging, fire management activities, and other factors on the size-class distributions for forest types in the Tahoe Basin and beyond are considered cumulatively significant.

As described in Impact 7-3, depending on their specific locations, construction of some individual projects with all Area Plan alternatives would require the removal of native trees. For most development, construction-related ground disturbance would be concentrated within urban areas, existing transportation corridors, and other already-disturbed areas, such as with the Kings Beach Center design concept parcels. Because ground disturbance would be focused mostly in these already-disturbed areas, the potential removal of native trees would have a relatively minor effect on the surrounding environment. In addition, locations where most development projects would be constructed support common tree species such as Jeffrey pine, white fir, and lodgepole pine. Stands that consist of these species and their biological functions, particularly those that are disturbed and within developed landscapes, are not considered threatened or vulnerable to decline in the Tahoe Basin, Truckee, or other nearby regions. These trees or stands are not considered critical or limiting to the presence or viability of common or sensitive biological resources in the region.

Regardless of the magnitude or biological effects of tree removal, native trees are protected in the Tahoe region. TRPA’s existing policies and Code provisions address tree removal through site-specific environmental review; require development and implementation of project-specific measures to minimize or avoid impacts through the design, siting, and permitting process; and require compensatory or other mitigation for any significant effects as a condition of project approval. Specifically, the TRPA Goals and Policies and Code of Ordinances include provisions limiting tree removal and protecting late seral/old growth forests, and TRPA’s Rules of Procedure require mitigation for any significant impact as a condition of project approval. Additionally, TRPA cannot approve projects that would cause a significant adverse effect on the late seral/old growth ecosystem threshold standard without appropriate mitigation.

Specific provisions for tree removal in the Tahoe region are provided in the TRPA Code (Chapter 61, and Chapters 36, 33, 62), and the removal of trees greater than 14 inches in diameter at breast height (dbh) requires review and approval by TRPA. A harvest or tree removal plan is required by TRPA where implementation of a project would cause “substantial” tree removal. “Substantial” tree removal is defined in

Chapter 61 of the TRPA Code as: (1) removal of more than 100 live trees 10 inches dbh or larger on project sites of 20 acres or more; or (2) removal of more than 100 live trees 10 inches dbh or larger within land capability districts (LCDs) 1a, 1b, 1c, 2, or 3, regardless of the project site; or (3) tree removal that, as determined by TRPA after a joint inspection with appropriate state or federal forestry staff, does not meet the minimum acceptable stocking standards set forth in Chapter 61. For the purpose of late seral/old growth ecosystem protection, the Code specifies that no tree greater than or equal to 24 and 30 inches dbh in eastside and westside forest types, respectively, shall be cut. However, the Code provides an exception for private landowners by allowing for a limited forest plan to be prepared if 10 percent or less of the trees greater than or equal to 24 inches dbh in eastside forest types within a project site are proposed to be cut within the life of the plan. In addition, trees and vegetation not scheduled to be removed must be protected during construction in accordance with Code Chapter 33, Grading and Construction, Section 33.6, Vegetation Protection during Construction.

TRPA's Goals and Policies, Code of Ordinances, and Rules of Procedure require protection of large trees, with limited exceptions; protection of late seral/old growth ecosystems; preparation and approval of tree removal plans; compensatory tree replacement or other project-level mitigation to avoid significant impacts if appropriate and needed; and other protection measures. Because project-level planning, environmental analysis, and compliance with existing TRPA regulations and policies would identify potentially significant tree removal; minimize or avoid those impacts through the design, siting, and permitting process; and provide mitigation for any significant effects as a condition of project approval and permitting, the contribution of approved tree removal under all Area Plan alternatives (Alternatives 1, 2, 3, and 4) **would not be cumulatively considerable**.

For the Tahoe City Lodge project, none of the project alternatives (Alternatives 1, 2, 3, and 4) would result in substantial tree removal, such that it would adversely affect wildlife habitat or scenic quality. Additionally, the Tahoe City Lodge project site is urban and characterized primarily by a paved parking lot, buildings and other developed facilities, and a small patch of disturbed Jeffrey pine; and, project-related tree removal on the site would not result in any conversion of natural forest lands. Thus, tree removal required for the Tahoe City Lodge project under all of the alternatives **would not be cumulatively considerable**.

Mitigation Measures

No mitigation is required.

CULTURAL AND HISTORIC RESOURCES

Cumulative Impact 8-1: Cumulative change in the significance of historical resources

The cumulative context for historical resources is the north shore of the Lake Tahoe Basin and areas north and east, where common patterns of historic-era settlement have occurred over roughly the past century. As discussed under Impact 8-1, there are a number of federal, state, and local regulations in place to protect historical resources and to reduce the probability of demolition or alteration of historic buildings and structures. Without such protections, the proposed project, in combination with other development in the region, could cause a substantial adverse change in the significance of an historical resource as defined in §15064.5 of the State CEQA Guidelines. Impacts to known and unknown historical resources would be avoided and minimized through compliance with the TRPA Code of Ordinances for projects within the Tahoe Basin, and through other federal, state, and local regulations for projects outside the Tahoe Basin. These requirements protect cultural resources by capturing and preserving knowledge of such resources to provide opportunities for increasing our understanding historical resources and their cultural contexts. Therefore, cumulative development in the region, including any of the Area Plan alternatives, would not result in a significant cumulative impact to historical resources, and any contribution by the Area Plan alternatives **would not be cumulatively considerable**.

There are no historical resources on the Tahoe City Lodge site. Therefore, the project **would not contribute** to cumulative impacts on historical resources.

Mitigation Measures

No mitigation is required.

Cumulative Impact 8-2: Cumulative disturbance to unique archaeological resources

The cumulative context for archaeological resources is the Truckee-Tahoe Basin portion of the Washoe territory. Based on previous cultural resource surveys and research, the Truckee-Tahoe Basin has been inhabited by prehistoric and historic people for thousands of years. Archaeological resources, including sacred and religious sites, are unique and non-renewable. For this reason, all detrimental effects to these resources erode a dwindling resource base. Destruction of any single cultural site or resource affects all others in the region because as a group they make up the context of the cultural setting. The cultural system is represented archaeologically by the total inventory of all sites and other cultural remains in the region. As a result, a meaningful approach to preserving and managing cultural resources must focus on the likely distribution of cultural resources, rather than on a single project or parcel boundary.

Project construction that would occur as a result of cumulative development projects within, and outside the Tahoe Basin, and development under any of the Area Plan alternatives, including construction of the Tahoe City Lodge, could encounter previously undiscovered or unrecorded archaeological sites and materials during project-related preconstruction or construction-related ground disturbing activities. These activities could damage or destroy individual archaeological resources, which could in turn contribute to adverse cumulative effects relative to regional and cultural context. However, implementation of Mitigation Measure 8-2 would reduce potentially significant impacts to archaeological resources in the Plan area because mitigation would be developed in coordination with the appropriate federal, state, and/or local agency(ies) to avoid, move, record, or otherwise treat the resource appropriately, in accordance with pertinent laws and regulations. Projects outside the Plan area require similar mitigation to achieve compliance with CEQA, and federal, state, and local requirements to protect archaeological resources. By requiring projects to avoid disturbance, disruption, or destruction of archaeological resources, cumulative impacts to archaeological resources would be less than significant. Therefore, any contribution by any of the Area Plan or Tahoe City Lodge alternatives **would not be cumulatively considerable**.

Mitigation Measures

No additional mitigation is required.

Cumulative Impact 8-3: Cumulative impacts on human remains

Because of the likelihood that any undiscovered or unknown human remains would be Native American in origin, the cumulative context for human remains is the Truckee-Tahoe Basin portion of the Washoe territory. As discussed above under Cumulative Impact 8-2, the Truckee-Tahoe Basin has been inhabited by prehistoric and historic people for thousands of years. The loss of any one archaeological site or human remains could affect the scientific value of others in a region because these resources are best understood in the context of the entirety of the cultural system of which they are a part. The proposed project, in combination with other development in the Truckee-Tahoe Basin could contribute to the disturbance of human remains due to project-related construction activities. However, with implementation of Mitigation Measure 8-3, adverse effects on undiscovered or unknown human remains would be avoided. Similarly, projects outside the Plan area require similar mitigation to achieve compliance with CEQA, and federal, state, and local requirements to protect Native American remains. Cumulative impacts would be less than significant. With implementation of these measures, neither the Area Plan nor Tahoe City Lodge alternatives would contribute to a cumulative loss of undiscovered or unknown human remains, and the contribution **would not be cumulatively considerable**.

Mitigation Measures

No additional mitigation is required.

SCENIC RESOURCES

To maintain scenic values in the Tahoe Basin, as mandated by the Tahoe Regional Planning Compact, the environmental thresholds include scenic standards for roadways, the shoreline, and public recreation areas and bike trails. As described in the most recent Threshold Evaluation Report (2012), scenic thresholds have improved in recent years. The threshold standard for scenic quality is a non-degradation standard, meaning that a scenic resource is considered in attainment of the threshold standard as long as its scenic quality rating remains equal to or higher than the rating it was originally assigned. Thus, there is not an existing adverse cumulative effect associated with scenic quality in the Tahoe region.

Because the Tahoe Basin is geographically and topographically separated from the Martis Valley, Olympic Valley, Truckee, and other areas in which reasonably foreseeable future projects could be constructed, it is also visually isolated so that in-Basin and out-of-Basin projects do not readily combine to create cumulative effects. The nearest, and largest of the out-of-Basin cumulative projects include Village at Squaw Valley Specific Plan, physically distant and visually isolated from the Plan area; and Martis Valley West Parcel Specific Plan (MVWPSP), adjacent to, but just outside the Tahoe Basin boundary, east of SR 267. Visual analyses and simulations conducted for the MVWPSP conclude that the project is not visible from scenic resources in the Tahoe Basin. Brockway Campground is proposed within the Basin boundary, adjacent to the MVWPSP, near the Brockway Summit off of SR 267. While no detailed scenic analysis or simulations of the Brockway Campground project have yet been conducted, the nature of the project (e.g., tent sites, camper sites, and eco-shelters, and accessory facilities and amenities) is such that it is expected that it would be generally low profile, distant from viewing locations, and largely screened by trees and topography. In addition, this project would be required to comply with TRPA standards and the Area Plan provisions, including policy SR-P-9, which prohibits buildings from projecting above the forest canopy, ridgelines, or otherwise detracting from the viewshed. For these reasons, the cumulative scenic impacts of the Area Plan alternatives would result from development within the Tahoe Basin, and would be unaffected by out-of-Basin projects.

Cumulative Impact 9-1: Cumulative effects on scenic or visual quality

Consistent with the Regional Plan, the Area Plan alternatives would allow for changes in the built environment through the use of remaining allocations, use of newly authorized allocations, and through implementation of existing and revised policies that ultimately affect the form of new development and redevelopment.

All future projects within the scenic resources cumulative effects analysis area would also be located within or directly adjacent to the Plan. As such, the analysis provided in Chapter 9, “Scenic Resources” takes into consideration potential cumulative projects that would be located within the Plan area. As described in Chapter 9, future projects within the Plan area would be subject to the Area Plan scenic requirements and design standards, and all existing TRPA requirements. Additionally, projects outside of the Plan area but within the cumulative effects analysis area would be subject to the existing TRPA scenic standards. These provisions would minimize any potentially cumulative adverse effects on the existing visual character or quality of the Plan area, the TRPA scenic threshold ratings, scenic vistas, scenic resources, or views of Lake Tahoe. Therefore, the contribution by any of the Area Plan and Tahoe City Lodge alternatives to adverse effects on scenic or visual quality **would not be cumulatively considerable**.

Mitigation Measures

No additional mitigation is required.

Cumulative Impact 9-2: Cumulative effects on community character

As described for Cumulative Impact 9-1, All future projects within the scenic resources cumulative effects analysis area would also be located within or directly adjacent to the Plan area. For this reason, the analysis provided in Chapter 9, “Scenic Resources” considers the potential cumulative effects to community character from cumulative project within the Plan area. For the same reasons described in Chapter 9, projects that are outside of the Plan area but within the cumulative analysis area would be subject to the

scenic requirements of the TRPA Regional Plan and Code. Because individual projects proposed pursuant to any of the Area Plan alternatives, Tahoe City Lodge alternatives, and cumulative projects in the vicinity would be required to demonstrate consistency with TRPA scenic protections, the cumulative impact would be less than significant. Therefore, the contribution by any of the Area Plan and Tahoe City Lodge alternatives to adverse effects on community character **would not be cumulatively considerable**.

Mitigation Measures

No mitigation is required.

Cumulative Impact 9-3: Cumulative effects from light and glare

Redevelopment stemming from implementation of the alternatives would include light sources and high-shine surfaces which could create adverse light and glare effect. However, all alternatives would maintain the substantive TRPA exterior lighting standards. In addition, the action alternatives (Alternatives 1 – 3) would convert portions of existing discretionary lighting guidelines into required standards; and add new standards that address prohibited lighting, fixture types, glare, and light trespass. These standards would reduce the potential for future projects within the Plan area to contribute to cumulative effects from light and glare. Additionally, any project located outside of the Plan area but within the cumulative analysis area would be subject to the stringent lighting requirements of the TRPA Code. Although cumulative projects located outside of TRPAs jurisdiction (such as the Village at Squaw Valley Specific Plan and the Martis Valley West Parcel Specific Plan) could potentially increase the amount of visible light and glare within the region, the proposed projects contribution toward this effect **would not be cumulatively considerable**.

Mitigation Measures

No mitigation is required.

TRANSPORTATION AND CIRCULATION

Cumulative projects, including known, and as-yet unknown residential, commercial, tourist, transit/transportation, and recreational development in the Tahoe Region, including those projects described in Table 19-2, would generate traffic trips that contribute to the cumulative intersection and roadway operations of the region. Because development projects in the Tahoe Basin are required to receive allocations from a limited pool of CFA, residential allocations, residential bonus units, and TAUs, as applicable, and because development in accordance with those allocations is assumed to be fully built out over the planning period of the Regional Plan, Chapter 10, “Transportation and Circulation,” addresses reasonably foreseeable cumulative future traffic conditions. Modeling of traffic conditions was conducted for the year 2035, assuming build-out of the Regional Plan, generation of vehicle trips from the respective authorized allocations, and construction and operation of reasonably foreseeable transportation projects and programs proposed as part of the Regional Transportation Plan. As such, the transportation analysis in Chapter 10 is reflective of cumulative transportation conditions in the Tahoe Basin.

The analysis in Chapter 10 also reflects some, but not all, of the cumulative growth that could occur outside of the Tahoe Basin. The cumulative analysis below considers additional traffic increases that could occur as the result of growth outside of the Tahoe Basin, including Martis Valley, the Squaw Valley/Alpine Meadows area, and Truckee. Model outputs and additional detail on methods, including estimation of the external traffic growth is discussed in Appendix G.

The following cumulative scenarios are evaluated in this chapter:

- ▲ Alternative 1 Cumulative – The Alternative 1 in 2035 scenario with the addition of traffic associated with build-out of surrounding areas outside of the Lake Tahoe Basin.
- ▲ Alternative 2 Cumulative – The Alternative 2 in 2035 scenario with the addition of traffic associated with build-out of surrounding areas outside of the Lake Tahoe Basin.

- ▲ Alternative 3 Cumulative – The Alternative 3 in 2035 scenario with the addition of traffic associated with build-out of surrounding areas outside of the Lake Tahoe Basin.
- ▲ Alternative 4 Cumulative – The Alternative 4 in 2035 scenario with the addition of traffic associated with build-out of surrounding areas outside of the Lake Tahoe Basin.

Cumulative Impact 10-1: Roadway LOS under 2035 cumulative scenarios

Table 19-3 shows existing roadway directional volume and LOS and the cumulative peak-hour directional roadway traffic volumes and LOS for each alternative, which includes buildout of the Area Plan and the lodge components of each alternative. In future cumulative conditions with all Area Plan and lodge alternatives, LOS on the segment of SR 28 east of the SR 89 between the Wye intersection and Grove Street in Tahoe City would worsen from LOS E (for four hours per day or less) in the westbound direction to LOS F. The eastbound direction, which is currently at LOS F, would worsen. Because this roadway segment would operate at an unacceptable level, this would be a significant cumulative impact. As described in impact 10-1, all Area Plan alternatives would have a significant impact related to LOS in this roadway segment, thus all Area Plan alternatives would make a **considerable contribution** to a cumulatively significant impact. As described under Impact 10-1, after implementation of all feasible mitigation, this impact would remain significant and unavoidable. As this is a recognized problem, the Area Plan proposes to adopt a substitute standard as allowed by the Regional Plan, to modify the current LOS standards as described in Area Policy T-P-6. If this policy is adopted, the LOS impact at SR 28 in Tahoe City would be consistent with the adopted LOS standard. As described in Impact 10-1 in Chapter 10, Tahoe City Lodge Alternatives 1- 3 would not add traffic volumes in a direction or location that would exacerbate an existing LOS deficiency or degrade an existing acceptable LOS. However, Lodge Alternative 4 would result in additional traffic that would exacerbate the existing LOS deficiency. Therefore, the effects of Lodge Alternatives 1, 2, and 3 **would not be cumulatively considerable**, but Lodge Alternative 4 would make a **considerable contribution** to a cumulatively significant impact.

Table 19-3 Roadway LOS - 2035 Cumulative Scenarios

Location	Urban / Rural		Existing	LOS	Future Cumulative Alt 1	LOS	Future Cumulative Alt 2	LOS	Future Cumulative Alt 3	LOS	Future Cumulative Alt 4	LOS
SR 89, West of Tahoe City	Rural	Eastbound	809	D	974	E	956	E	967	E	920	E
		Westbound	654	D	794	E	795	E	794	E	781	E
SR 89, Granlibakken Rd to Sunnyside	Rural	Northbound	533	D	611	D	599	D	616	D	602	D
		Southbound	746	D	809	E	818	E	807	E	786	E
SR 28, Between the Wye and Grove St ¹	Urban	Eastbound	791	F	860	F	864	F	879	F	891	F
		Westbound	706	E	827	F	823	F	848	F	856	F
SR 28, Dollar Hill to Tahoe Vista	Rural	Eastbound	585	C	665	D	676	D	677	D	674	D
		Westbound	479	C	545	C	554	D	555	D	552	D
SR 28, East of SR 267 ²	Urban	Eastbound	1,025	D	1,090	D	1,080	D	1,095	D	1,095	D
		Westbound	876	C	971	D	952	D	973	D	962	D
SR 267, North of SR 28	Urban	Northbound	595	D	726	E	733	E	745	E	730	E
		Southbound	699	D	816	E	836	E	834	E	836	E

Bold indicates that the LOS standard is exceeded. Note that a bold "E" indicates LOS E for 5 hours or more, which exceeds the TRPA LOS standard.
¹ Capacity for SR 28 in Tahoe City: eastbound 750 vehicles per hour; westbound 731 vehicles per hour, as estimated by LSC Transportation Consultants, Inc. as a part of the *Kings Beach Urban Improvement Project Traffic Study* (LSC 2007). The methodology used in developing these estimates is described in Appendix G.
² Capacity for SR 28 in Kings Beach: eastbound 1,241 vehicles per hour; westbound 1,171 vehicles per hour, as estimated by LSC Transportation Consultants, Inc. as a part of the *Kings Beach Urban Improvement Project Traffic Study* (LSC 2007). The methodology used in developing these estimates is described in Appendix G.
 Source: LSC Transportation Consultants, Inc. 2016

Mitigation Measures

As described in Impact 10-1, no additional mitigation is feasible.

Cumulative Impact 10-2: Impact on local residential streets under 2035 cumulative scenarios

In future cumulative peak summer traffic periods, the capacity of SR 28 in the Tahoe City Town Center will continue to be exceeded, resulting in long traffic queues, particularly in the westbound direction. Long traffic queues can result in the diversion of some traffic onto local residential streets. In this case, Fairway Drive could be affected by diverted traffic. Given the Placer County guideline regarding traffic volumes on residential streets (2,500 vehicles per day) and the existing traffic volume (600 vehicles per day), daily traffic volume on Fairway Drive would have to increase by 1,900 vehicles per day to exceed capacity. Table 19-4 shows the average daily trips (ADT) likely to occur on study roadway segments under future cumulative conditions with each alternative.

Table 19-4 Area Plan Alternatives - Intersection Level of Service - Future Cumulative Scenarios

Intersection	Type of Control ¹		Existing		Alternative 1		Alternative 2		Alternative 3		Alternative 4	
			Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
SR 28 / SR 89 (TC "Wye")	Traffic Signal	–	21.1	C	–	–	–	–	–	–	–	–
	Roundabout	Worst Approach	–	–	23.4	C	22.5	C	25.0	C	25.1	D
		Total Intersection	–	–	20.6	C	19.2	C	22.0	C	21.2	C
SR 28 / Mackinaw Rd	Stop-Control	–	15.2	C	15.6	C	15.5	C	16.0	C	25.7	D
SR 28 / Grove Street	Stop-Control	–	227.3	F	OVF	F	OVF	F	OVF	F	OVF	F
SR 28 / SR 267	Traffic Signal	–	31.8	C	46.6	D	51.0	D	51.9	D	49.3	D
SR 28 / Bear Street	Roundabout	Worst Approach	10.5	B	13.3	B	12.9	B	13.0	B	12.9	B
		Total Intersection	9.9	A	12.1	B	11.9	B	11.9	B	12.0	B
SR 28 / Coon Street	Roundabout	Worst Approach	15.8	C	22.8	C	23.0	C	19.2	C	23.7	C
		Total Intersection	12.7	B	16.9	C	17.1	C	14.8	B	17.3	C

Notes: OVF = Overflow; overflow indicates a delay greater than 300 seconds per vehicle, which cannot be accurately predicted by HCM methodology.
¹: LOS for signalized intersections is reported as average total intersection delay. LOS for stop-controlled and roundabout intersections is reported as worst movement delay.
 Source: LSC Transportation Consultants, Inc.

Under cumulative conditions, ADT on SR 28 in Tahoe City between Grove Street and Jackpine Street is expected to increase by a total of 2,300, 1,900, 2,600, and 2,200 vehicles per day under Alternatives 1, 2, 3, and 4, respectively. While there are factors that indicate actual diversion volumes will be substantially below the ADT figures discussed above, such as the proportion of traffic that is bound to Tahoe City or to SR 89 south and the proportion of daily traffic increase that will occur during periods of traffic congestion, this impact is still considered to be a potentially significant cumulative impact. As discussed in Impact 10-2 in Chapter 10, all Area Plan alternatives would contribute to the increase in ADT on this roadway segment. While the Area Plan alternatives, by themselves, would not result in significant impacts, they would make a **considerable contribution** to a potential cumulatively significant impact related to traffic diversion onto local streets. The Tahoe City Lodge alternatives would increase the westbound traffic volumes on SR 28 approaching Grove Street by between 11 and 24 vehicles per hour or less, depending on the alternative. This increase in traffic volumes represents a maximum of 3.3 percent of future cumulative traffic volumes. As such, the lodge alternatives would each results in a less-than-significant impact on additional vehicles diverting to Fairway Drive. As described above, the cumulative impact related to traffic diversion onto local streets is potentially significant cumulative, however, because the lodge alternatives would contribute very few additional trips the lodge alternatives the effects of the lodge alternatives **would not be cumulatively considerable**.

Cumulative Mitigation Measure 10-2: Fairway Drive monitoring and traffic management program.

This mitigation measure applies to Area Plan Alternatives 1 – 3.

At least every 5 years, Placer County would conduct traffic counts on Fairway Drive between Bunker Drive and Grove Street for a two-week period in early August (peak summer traffic season). These counts will be summarized by day and by direction. If on any one day the daily two-way total traffic volume exceeds 1,700 vehicles, the County will implement traffic management measures to reduce diversion traffic on Fairway Drive and connecting local residential streets to maintain daily two-way total traffic volumes below 2,500 vehicles. Traffic management measures could include, but are not limited to: additional signage, increased traffic speed enforcement, speed cushions, and turn prohibitions.

Significance after Mitigation

Implementation of the Fairway Drive monitoring and traffic management program would allow Placer County to detect increases in diversion traffic. The mitigation would trigger traffic management measures if traffic levels on Fairway Drive exceed 1,700 vehicles per day. This trigger would allow traffic management measures to reduce diversion traffic before Fairway Drive would exceed its capacity of 2,500 vehicles per day. This would reduce the cumulative impact to **less-than-significant** for Area Plan Alternatives 1, 2, and 3. Because mitigation measures cannot be required for the no-project alternative, Alternative 4 would remain **significant and unavoidable**.

Cumulative Impact 10-3: Intersection LOS under future cumulative scenarios

Table 19-4 shows existing LOS at study intersections within the Plan area and summarizes the intersection LOS conditions under future cumulative conditions with each alternative, including both the Area Plan and lodge components of each alternative. Under existing conditions all study intersections operate at acceptable levels except for the SR 28/Grove Street intersection, which operated at an unacceptable LOS F under summer peak PM conditions. As shown in Table 19-4, under future cumulative conditions with all alternatives, existing unacceptable LOS F conditions at the SR 28 and Grove Street intersection in Tahoe City would be exacerbated. Because already unacceptable intersection LOS would be degraded, this would be a significant cumulative impact. As described in Impact 10-3 in Chapter 10, all Area Plan and lodge alternatives would have a significant impact related to LOS at this intersection, thus all alternatives would make a **considerable contribution** to a cumulatively significant impact. As described under Impact 10-3, after implementation of all feasible mitigation, this impact would remain significant and unavoidable. As this is a recognized problem, the Area Plan proposes to include a substitute standard that would modify the current LOS standards as described in Area Policy T-P-6. If this policy is adopted, the LOS impact at SR 28 and Grove Street intersection in Tahoe City would be consistent with the adopted LOS standard.

Mitigation Measures

As described in Cumulative Impact 10-3, no additional mitigation is feasible.

Cumulative Impact 10-4: Cumulative vehicle miles traveled

The analysis of region-wide VMT resulting from build-out of the alternatives is presented in Chapter 10. That analysis also accounted for growth that could occur throughout the rest of the Lake Tahoe region consistent with the TRPA Regional Plan, to allow for comparison of regional VMT under the alternatives to TRPA's regional VMT threshold standard. The TRPA TransCAD model scenarios analyzed in Chapter 10 reflect some, but not all, of the cumulative growth that could occur outside of the Tahoe Basin. This cumulative analysis adds traffic growth that could occur as the result of growth outside of the Tahoe Basin, including Martis Valley, the Squaw/Alpine Meadows area, and Truckee. Table 19-5 shows summer daily VMT in the Tahoe Basin under baseline 2015 conditions and in cumulative 2035 conditions for each alternative, assuming full build-out of the Tahoe Basin and surrounding areas near the Plan area (including Martis Valley, Truckee, and Squaw/Alpine). The VMT threshold is periodically updated whenever the TRPA updates its transportation model. The most recent VMT threshold was calculated at 2,030,938 for a peak summer day, based on the 2014 model update. Existing summer daily regional VMT is estimated to be 1,937,070, or 93,868 below the TRPA threshold standard based on the most recent modeling completed to support the Tahoe Regional

Transportation Plan (TRPA 2016). Additional detail on the cumulative VMT methodology is provided in Appendix G. In future cumulative conditions with all alternatives, daily summer VMT in the Tahoe region would increase by various amounts. However, under cumulative conditions with all alternatives VMT would remain below the TRPA regional VMT threshold standard of 2,030,938. Because cumulative VMT would remain below the adopted standard under all alternatives, the cumulative impact would be less-than-significant. Thus, the Area Plan or Lodge alternatives **would not make a considerable contribution** to a significant cumulative impact.

Table 19-5 Region-Wide Daily Summer VMT under Future Cumulative Conditions with Build-Out of Each Alternative

	Baseline 2015	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Cumulative region-wide VMT	1,937,070	1,973,780	1,980,026	1,978,719	1,983,452
TRPA Threshold Standard	2,030,938	2,030,938	2,030,938	2,030,938	2,030,938
Standard Met	Yes	Yes	Yes	Yes	Yes

Source: LSC Transportation Consultants, Inc.

Mitigation Measures

No mitigation is required.

Cumulative Impact 10-5: Cumulative transit service and operations

As described under Impact 10-5 in Chapter 10, all Area Plan alternatives are expected to result in increased transit ridership during the peak-hour period. As some TART transit runs between Squaw Valley - Tahoe City, Tahoe City - North Stateline, and Northstar - North Stateline in winter currently exceed the seating capacity, this increase in transit ridership would result in a potentially significant impact for all alternatives. Implementation of Mitigation Measure 10-5 would establish a funding mechanism that would facilitate increased transit service during peak periods. This increased transit service would accommodate typical peak-period transit loads that would occur with Area Plan Alternatives 1, 2, and 3 under cumulative future conditions. All Tahoe City Lodge alternatives would increase the key PM peak-hour transit ridership. Some of these trips could occur on a route and run already operating with passenger loads exceeding seating capacity during the winter. However, mitigation fees required by the TRPA Code would provide a funding source for transit improvements, which would offset the increase in ridership during peak periods for all lodge alternatives. In addition, Lodge Alternatives 1 -3 would comply with Mitigation Measure 10-3, which would require that the lodge project applicant provide annual transit fees beginning with the first year of operation. If the county service area funding program is not implemented prior to the opening of the lodge, the lodge project would pay all annual fees accrued retroactive to the opening date once the program comes into effect. Because Area Plan Alternatives 1 - 3 and all lodge alternatives would fund transit improvements that would accommodate typical cumulative peak-period transit loads, the effects of these alternatives **would not be cumulatively considerable**. Area Plan alternative 4 would result in increased transit ridership during the peak-hour period in winter. Because this alternative would add transit ridership during periods when ridership currently exceeds the seating capacity, and mitigation cannot be required for a no-project alternative, Area Plan Alternative 4 would make a **considerable contribution** to a cumulatively significant impact.

AIR QUALITY

Cumulative Impact 11-1: Consistency with air quality plan and transportation conformity requirements

The Lake Tahoe Air Basin (LTAB) is in attainment of the National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS) for carbon monoxide (CO), as shown in Table 11-1. Thus, existing concentrations of CO in the LTAB are not considered to be cumulatively significant. However,

the LTAB is designated as a maintenance area with respect to the NAAQS for CO. For the Placer County portion of the LTAB, which includes the Plan area, the applicable federal air quality maintenance plan is the Carbon Monoxide Maintenance Plan (CO Maintenance Plan) originally adopted in 1996 and revised in 2004 (ARB 2004). Part of the maintenance strategy in the CO Maintenance Plan involves the allocation of transportation emissions budgets to the maintenance area. The Area Plan must conform to the transportation emissions budget, or Placer County would face penalties for impairing the region's ability to maintain the NAAQS for CO. If the Area Plan conforms to the emissions budget allocated to the maintenance area, then the Area Plan would be consistent with the CO maintenance strategy for the CO NAAQS. Thus, the analysis presented under Impact 11-1 in Chapter 11, "Air Quality" is an inherently cumulative analysis of the combined level of CO emissions from existing vehicle travel and other sources, in combination with new or increased vehicle travel that may result from implementation of the Area Plan alternatives. As shown in Table 11-2, all of the Area Plan alternatives would result in a level of mobile-source CO emissions that is within the emissions budgets allocated for transportation conformity. The transportation emissions budget is the basis for air quality planning efforts in the Lake Tahoe CO Maintenance Plan. Thus, because the transportation emissions budget would continue to be met with implementation of the Area Plan alternatives, the maintenance area would continue to be on track for maintaining the CO AAQS. The Area Plan alternatives would decrease daily VMT in the LTAB relative to estimates included in the Regional Plan Update (RPU) EIS estimates for 2035. The Area Plan alternatives, as well as the Tahoe City Lodge and Kings Beach Center design concept that would be consistent with those alternatives, would not conflict with or obstruct regional efforts to maintain the NAAQS for CO. This cumulative impact would be less than significant. Therefore, any contribution from any of the Area Plan and Tahoe City Lodge alternatives **would not be cumulatively considerable**.

Mitigation Measures

No mitigation is required.

Cumulative Impact 11-2: Cumulative short-term construction emissions of ROG, NO_x, PM₁₀, and PM_{2.5}

The Plan area is located in the Placer County portion of the LTAB, which is designated as nonattainment with respect to the CAAQS for ozone and PM₁₀. This nonattainment designation is the result of emissions of ozone precursors, reactive organic gases (ROG), and oxides of nitrogen (NO_x), generated by cumulative development projects in the LTAB, as well as from transport of these same pollutants from outside the LTAB. This is also the case regarding the nonattainment status of the LTAB with respect to the CAAQS for PM₁₀. When all sources of ROG and NO_x in the LTAB are combined they result in a severe ozone problem. Similarly, when all sources of PM₁₀ in the LTAB are combined they result in a severe PM₁₀ problem. The analysis of construction-generated emissions of ROG, NO_x, PM₁₀, and PM_{2.5} presented under Impact 11-2 in Chapter 11, "Air Quality" is an inherently cumulative analysis of the combined levels of ozone precursor and particulate emissions from existing emission sources in the LTAB in combination with emissions-generating construction activity that would result from implementation of the Area Plan and Tahoe City Lodge alternatives.

As discussed in Impact 11-2, emissions of pollutants generated during construction are temporary in nature. Emissions are primarily associated with heavy-duty construction equipment and fugitive emissions from ground disturbance and earth-moving activities. Unmitigated emissions associated with construction projects in the LTAB that would occur under the Area Plan alternatives would contribute on a cumulative basis to nonattainment conditions for ozone and PM₁₀. In addition, when taken together, construction-generated emissions would have the potential to result in violations of, or considerable contributions to violations of, ambient air quality standards.

All Area Plan alternatives would implement Mitigation Measure 11-2, whereby projects proposed under the Area Plan, including any Tahoe City Lodge alternative, would be required to demonstrate that construction-related emissions would not exceed significance standards of the Placer County Air Pollution Control District (PCAPCD) and, where projects still exceed thresholds, would be required to adopt additional project-specific emissions reduction measures. Possible additional measures include using emissions-efficient construction equipment with engines rated Tier 3 or better, using architectural coatings with no- or low-solids content, and participating in PCAPCD's offsite mitigation program. Projects would also be subject to TRPA's construction

best practices included in TRPA's revised Standard Conditions of Approval for Construction Projects and Code of Ordinances (TRPA 2012). These policies would reduce construction-generated emissions of ROG, NO_x, PM₁₀, and PM_{2.5}. Additionally, implementation Mitigation Measure 11-2 would reduce ROG emissions associated with construction of the Tahoe City Lodge to below PCAPCD significance levels for Alternatives 1 through 3. These mitigation measures would minimize construction-generated emissions and an individual project's contribution of ROG, NO_x, and PM₁₀. Therefore, cumulative construction-related emissions of ROG, NO_x, and PM₁₀ would be less than significant, and the project contribution **would not be cumulatively considerable**.

Mitigation Measures

No additional mitigation is required.

Cumulative Impact 11-3: Cumulative long-term emissions of ROG, NO_x, PM₁₀, and PM_{2.5}

As discussed above, the nonattainment designations of the LTAB with respect to the CAAQS for ozone and PM₁₀ are the result of the emissions generated by cumulative development in the LTAB, as well as from transport of these same pollutants from outside the LTAB. When all sources of ROG, NO_x, and PM₁₀ throughout the region are combined they can result in a severe ozone and PM₁₀ problem, as expressed by a nonattainment status with respect to the CAAQS for these pollutants. The analysis of long-term emissions of ROG, NO_x, PM₁₀, and PM_{2.5} presented under Impact 11-3 in Chapter 11, "Air Quality" is an inherently cumulative analysis of the combined level of ozone precursor and particulate emissions from existing vehicle travel and area sources in combination with new or increased vehicle travel and area sources that would result from implementation of the Area Plan alternatives.

As explained in Impact 11-3, development in the Area Plan area would result in a net reduction in daily emissions of ozone precursors and particulate matter at buildout in 2035. Emissions of ROG, NO_x, and PM₁₀ would decrease by approximately 530 pounds per day (lb./day), 4,103 lb./day, and 74 lb./day from 2015 conditions, respectively. This is shown in Tables 11-10 through 11-13. These reductions would include any new emissions generated by the Tahoe City Lodge project alternatives and the Kings Beach Center design concept because these projects are included with the development allowable under the Area Plan. Thus, long-term operational emissions of the proposed project and alternatives **would not be cumulatively considerable**.

Mitigation Measures

No mitigation is required.

Cumulative Impact 11-4: Cumulative exposure to mobile-source carbon monoxide emissions

As discussed above, the LTAB is in attainment of the CAAQS and NAAQS for CO. Thus, there is no cumulative impact with respect to localized concentrations of CO in the LTAB. As explained under Impact 11-4 in Chapter 11, "Air Quality," a project would not result in a significant localized CO impact if an affected intersection would experience fewer than 35,111 vehicles per hour (vph). This screening criterion is based on one recommended by Sacramento Metropolitan Air Management District (SMAMQD) and adjusted for conditions in the LTAB. As shown in Table C of Appendix G-2 and presented in Impact 10-3, future cumulative intersection volumes would be less than 3,000 vph at full buildout in 2035 for Alternatives 1 through 4 and, therefore, would not exceed the screening criterion under future cumulative conditions. The cumulative conditions used in this screening-level analysis account for vehicle trips and related congestion associated with existing and future development in the LTAB, including future proposed land use development in and near the LTAB, such as the Village at Squaw Valley, Plumpjack Squaw Valley Inn, Palisades at Squaw, Alpine Sierra Subdivision, and the Fanny Bridge Community Revitalization Project. Thus, the analysis under Impact 11-4 is inherently cumulative because it examines whether project-related traffic could cause localized concentrations of CO to exceed the CAAQS and NAAQS for CO or contribute to an exceedance of the CAAQS and NAAQS for CO in combination with ambient concentrations of CO. Because the affected intersections under the cumulative scenario for each Area Plan and Tahoe City Lodge alternative

would not experience traffic volumes that exceed the volume-based screening criterion, the project contribution to CO concentrations at affected intersections **would not be cumulatively considerable**.

Mitigation Measures

No mitigation is required.

Cumulative Impact 11-5: Cumulative exposure of sensitive receptors to toxic air contaminants

Construction of development accommodated under Area Plan, Tahoe City Lodge (Alternatives 1 through 3), in combination with construction of reasonably foreseeable development projects (including those listed under Cumulative Impact 11-4) and currently unknown projects, could result in temporary emissions that contribute to cumulative exposure of sensitive receptors to TAC emissions and related health risks. However, all Area Plan alternatives would be required to implement TRPA's best construction practices included in the Standard Conditions of Approval and Code of Ordinances and Mitigation Measure 11-5. Mitigation Measure 11-5 would reduce exposure of sensitive receptors to short-term construction-generated TAC emissions by requiring project applicants to address project-level construction impacts, in coordination with PCAPCD. These practices would reduce exposure of sensitive receptors to fugitive PM₁₀ and PM_{2.5} dust emissions, diesel equipment exhaust emissions, and emissions of other TACs. These practices would be consistent with the requirements of Mitigation Measure 3.4-5 in the RPU EIS which applies to the entire Tahoe Region, ensuring that all construction activities over the life of the Regional Plan and applicable changes under the Area Plan would be mitigated to less-than-significant levels and would not contribute to cumulative TAC impacts. Thus, TACs associated with the development of land uses under the Area Plan, including development of the Tahoe City Lodge alternatives and Kings Beach Center design concept **would not be cumulatively considerable**.

Mitigation Measures

No additional mitigation is required.

Cumulative Impact 11-6: Cumulative exposure to excessive odorous emissions

There are no known odor problems or issues in the Plan area. None of the cumulative projects involve uses that result in substantial, long-term generation of odorous emissions (e.g., sewage treatment plant, landfill, industrial uses). Cumulative odor impacts are less than significant. The Area Plan and Tahoe City Lodge alternatives would have less-than-significant project-level odor impacts and, for the same reasons identified in Impact 11-6, any project contribution **would not be cumulatively considerable**.

Mitigation Measures

No mitigation is required.

Cumulative Impact 11-7: Cumulative atmospheric deposition of NO_x and phosphorus

As discussed in Impact 11-7, the reductions in mobile-source emissions anticipated under the Regional Plan would not be inhibited by the Area Plan and Tahoe City Lodge project. The region-wide operational emissions reductions would continue under the Area Plan alternatives. Thus, mobile-source emissions of NO_x would decrease substantially in the Tahoe Region as a whole between 2010 and 2035. The cumulative impact is less than significant. Because mobile-source NO_x is an important contributor to atmospheric nitrogen loading, it is reasonable to conclude that atmospheric nitrogen deposition to the lake would be substantially reduced associated with implementation of any of the Area Plan alternatives. The Area Plan would support achievement and maintenance of the threshold standards for atmospheric nitrogen and the total maximum daily load requirements, and project contributions **would not be cumulatively considerable**.

GREENHOUSE GAS EMISSIONS AND CLIMATE CHANGE

Greenhouse gas emissions are inherently cumulative in nature and are discussed in Impact 12-1 in Chapter 12, "Greenhouse Gas Emissions and Climate Change."

NOISE AND VIBRATION

Cumulative Impact 13-1: Cumulative long-term traffic noise levels

The noise analysis in Chapter 13, “Noise and Vibration,” is based in large part on the analysis of traffic-generated CNEL levels along highway corridors, which considers cumulative development in the Plan area as well as the rest of the Tahoe Region. By definition, the CNEL is the combined, or cumulative, long-term noise level experienced at a particular location, and highway traffic is the predominant noise source in the Tahoe Region. Therefore, Impact 13-1, Long-Term Traffic Noise Levels, is an inherently cumulative analysis of the combined level of noise from existing traffic noise sources, new or increased traffic that may result from implementation of the Area Plan, traffic originating from outside the Plan area, and traffic from outside the Tahoe Region. This analysis determined that noise from additional traffic associated with development under all of the Area Plan alternatives, including reasonably foreseeable development projects and currently unknown projects, would be cumulatively significant because it would cause highway traffic noise levels to exceed TRPA-established contour-based CNEL standards for highway corridors, as well as CNEL standards designated for nearby land uses, and/or result in increases to traffic noise levels where these applicable CNEL standards are already exceeded. However, TRPA Code requires projects that alter or improve highways that are not in attainment of adopted corridor CNEL standards to develop and implement design features to achieve the standards (Code of Ordinances Section 68.8.3). In addition, in-Basin projects would be required to implement Mitigation Measure 13-1, project specific traffic noise impact analyses and features to minimize contribution to traffic noise. Therefore, although highway traffic noise levels exceed TRPA-established contour-based CNEL standards in some areas, projects developed pursuant to the Area Plan would be prohibited by TRPA Code from substantially contributing to such exceedance. Therefore, any contribution by the Area Plan and Tahoe City Lodge alternatives **would not be cumulatively considerable**.

Mitigation Measures

No additional mitigation is required.

Cumulative Impact 13-2: Cumulative short-term project-related construction noise levels

Impacts related to short-term project-related construction noise levels (Impact 13-2) are localized in nature, based on audibility, and distance to sensitive receptors. These noises do not accumulate to cause broader environmental impacts, so by their nature, cumulative impacts would not occur. Therefore, the contribution by any Area Plan and Tahoe City Lodge alternatives **would not be cumulatively considerable**.

Mitigation Measures

No mitigation is required.

Cumulative Impact 13-3: Cumulative ground vibration

Impacts related to short-term project-related construction-generated levels of ground vibration (Impact 13-3) are localized in nature, based on audibility and sensitive receptors. Therefore, these vibration levels do not accumulate to cause broader environmental impacts, so by their nature, cumulative impacts would not occur. Therefore, the contribution by any Area Plan and Tahoe City Lodge alternatives **would not be cumulatively considerable**.

Mitigation Measures

No mitigation is required.

Cumulative Impact 13-4: Cumulative land use compatibility

Some land uses in the Plan area and other parts of the Tahoe Region are exposed to noise levels that exceed applicable TRPA threshold standards and/or applicable Placer County noise standards.

The land use compatibility analysis under Impact 13-4 in Section 13, “Noise and Vibration” is an inherently cumulative analysis because it examines whether newly located noise-sensitive receptors would be exposed

to excessive noise levels generated by existing and future noise sources. The predominant noise source in the Plan area is traffic on local highways. As described in Impact 13-4, TRPA policies require that residential and tourist accommodation land uses with outdoor activity areas are not developed in locations where they would be exposed to noise levels that exceed applicable TRPA and Placer County noise standards. For this reason, the contribution by any Area Plan and Tahoe City Lodge alternatives to potentially incompatible land uses **would not be cumulatively considerable**.

Mitigation Measures

No mitigation is required.

GEOLOGY, SOILS, LAND CAPABILITY, AND COVERAGE

Cumulative impacts to soil compaction and land capability are considered in the geographic context of the Lake Tahoe Basin. Impacts related to seismic and other geologic hazards (Impact 14-4) are localized in nature; they do not accumulate to cause broader environmental consequences and cumulative impacts would not occur. Therefore, these issues are not discussed further.

Cumulative Impact 14-1: Cumulative compaction and land coverage

The Bailey land classification system (Bailey 1974) provides structure for land development within the Lake Tahoe Basin. This system emphasizes prevention of resource damage by directing development toward the most resilient soils and by protecting the natural functions of more sensitive soils. Development prior to TRPA's adoption of the land capability system resulted in excess land coverage in LCDs 1b and 2 (TRPA 2012a), creating a significant, adverse cumulative condition. According to the 2011 Threshold Evaluation for soils, LCDs 1a, 1c, and 2 through 7 are meeting the threshold standard based on hard impervious cover. LCD 1b is not meeting the standard as existing hard impervious cover is estimated to be exceeding the allowable land coverage by 657 acres or 681 percent.

Coverage is an important environmental issue in the Tahoe Region and various programs and projects are in place to reduce coverage and the associated indirect impacts (e.g., water quality). Many cumulative projects addressed in the RPU EIS involve reductions in coverage on sensitive lands, including EIP projects, CTC and NDSL land acquisition/restoration projects, USFS restoration projects, the excess coverage mitigation program, coverage transfer requirements, as well as certain development projects (such as Beach Club on Lake Tahoe, Boulder Bay CEP, Kings Beach Housing Now, and Kings Beach Town Center).

The proposed project and many of the cumulative projects would create additional land coverage within the cumulative analysis area. However, all projects within the Tahoe Basin would be required to comply with TRPA land coverage regulations. In cases where excess coverage is permitted (such as within Town Centers or for linear public facilities, public health and safety facilities, or water quality control facilities) all coverage exceeding the base allowable would be purchased and transferred from within hydrologically connected areas or retired from sensitive lands. In addition, all land coverage within LCD 1b must be mitigated at a ratio of 1.5 acres of restoration for every 1 acre of disturbance (per TRPA Code Section 30.5.3). Although development prior to the implementation of the Bailey land classification system resulted in an adverse cumulative condition relative to land coverage, TRPA's existing regulatory framework is structured to protect soil resources and reduce land coverage in sensitive LCDs. Therefore, the contribution of the proposed project to cumulative land coverage impacts **would not be cumulatively considerable**.

Mitigation Measures

No mitigation is required.

Cumulative Impact 14-2: Cumulative grading, erosion, and alteration of topography

The proposed project and the cumulative projects would result in grading and excavation, and soil disturbances that could cause erosion. However, all construction projects in the Tahoe Region must meet requirements and regulations of the TRPA, Lahontan RWQCB, NDEP, and federal, other state, and local

agencies. The TRPA Code restricts grading, excavation, and alteration of natural topography (TRPA Code Chapter 33). In addition, all construction projects located in California with greater than one acre of disturbance are required, by Lahontan RWQCB, to submit an NPDES permit which includes the preparation of a SWPPP that includes site-specific construction site monitoring and reporting. In Nevada, projects are required to comply with NDEP's Stormwater General Permit, which also includes a requirement for the preparation and implementation of a SWPPP. Project SWPPPs are required to describe the site, construction activities, proposed erosion and sediment controls, means of waste disposal, maintenance requirements for temporary BMPs, and management controls unrelated to stormwater. Temporary BMPs to prevent erosion and protect water quality would be required during all site development activities, must be consistent with TRPA requirements, and would be required to ensure that runoff quality meets or surpasses TRPA, state, and federal water quality objectives and discharge limits.

The robust regulatory requirements of TRPA and other federal, state, and local agencies ensure that the proposed project and the cumulative projects would implement erosion and sediment controls such that site preparation and construction of individual projects would not create grading or excavation that conflicts with TRPA policies or contribute to a significant increase in soil erosion. Cumulative impacts are less than significant. Therefore, the contribution by any of the Area Plan or Tahoe City Lodge alternatives **would not be cumulatively considerable**.

Mitigation Measures

No mitigation is required.

HYDROLOGY AND WATER QUALITY

Cumulative impacts to hydrology and water quality are considered in the context of the Lake Tahoe Basin and Middle Truckee River watersheds. Historic activities such as logging, milling, mining, and grazing within the Tahoe Basin and Middle Truckee River Watersheds combined with runoff from urban and recreational developments, have degraded the water quality of the tributaries to Lake Tahoe and the Truckee River, resulting in an existing cumulative adverse condition. Within the Tahoe Basin, the historic disturbances along Ward Creek and Blackwood Creek continue to generate large amounts of sediment and other pollutants during storm events (Simon 2006). On the Truckee River, the concentrations of suspended sediment during high stream flows exceed the water quality limits for protection of aquatic life (Lahontan RWQCB 2008). The Lake Tahoe and Truckee River TMDLs were developed to address sediment levels and Placer County has developed a stormwater management program. Additionally, numerous publicly and privately funded projects have been implemented to restore disturbed areas of the watershed and reduce this adverse condition. As described in Chapter 14, "Hydrology and Water Quality," development and construction activities that could result in erosion, release of pollutants, or encroachment within floodplain or sensitive habitats are highly regulated by TRPA, Lahontan RWQCB, and Placer County. The effect of these regulations on cumulative hydrology and water quality are discussed below.

Cumulative Impact 15-1: Cumulative adverse impacts to water quality

The proposed Area Plan would incentivize development and redevelopment activities that could result in construction and ground disturbance. In addition, the proposed Lodge Project in combination with other projects in the Lake Tahoe and Truckee River Watersheds would result in construction activities that would create ground disturbance and increase the potential for soil erosion and sediment pollution of waterways. The equipment required for construction would use fuel, solvents, lubricants, and other potentially hazardous materials that could degrade surface and groundwater quality through accidental spills. Without mitigation, the construction activities of the Lodge project, future development projects, and the cumulative development identified herein would have the potential to create a significant cumulative impact to water quality. However, the potential water quality impacts of the Tahoe City Lodge project would be fully mitigated through implementation of Mitigation Measures 15-1a through 15-1d. These mitigation measures reflect standard Placer County development permit conditions which would be applicable to the Lodge project and to the other cumulative projects. The Lodge project and other foreseeable development would also be

required to comply with Lahontan RWQCB NPDES permit conditions that include preparation of a SWPPP and a Hazardous Materials Spill Response Plan, and to comply with all Placer County stream setbacks. In addition, projects within the Lake Tahoe Basin would be required to meet TRPA's construction site BMP standards. Because the Tahoe City Lodge, any future project stemming from the Area Plan, and all other projects within the Lake Tahoe and Truckee River Watersheds would be required to comply with applicable protective regulations, the by any of the Area Plan or Tahoe City Lodge alternatives to adverse water quality conditions **would not be cumulatively considerable**.

Mitigation Measures

No additional mitigation is required.

Cumulative Impact 15-2: Potential for increase in stormwater runoff or alteration of drainage patterns

Development and redevelopment projects in the in the Tahoe Basin, including those that may be implemented in accordance with the Area Plan and the Tahoe City Lodge, are required to comply with TRPA regulations such that each individual project would be designed to infiltrate the 20-year, 1-hour design storm event. In special circumstances where this is not feasible, the project must provide documentation that its stormwater is fully infiltrated by an offsite facility (TRPA Code of Ordinances Section 60.4). Because the proposed project and the cumulative projects in the Tahoe Basin are required to fully infiltrate runoff on site or demonstrate that its runoff can be accommodated by shared stormwater infrastructure off site, the impacts of each individual project are minimized. Cumulative stormwater impacts are less than significant. Compliance with these protective regulations would result in a reduction in the volume of stormwater leaving project sites for which stormwater BMPs have not previously been implemented (as described for the proposed project under Impact 15-3). In addition, the proposed project would comply with Mitigation Measure 15-3, which requires that a final drainage plan be submitted to Placer County which demonstrates that the project would not adversely affect existing storm drain systems or flow volumes. This mitigation measure is a standard requirement of the Placer County Engineering Services Division and would be applicable to all future projects in Placer County. Because the proposed project and all future projects would be required to comply with TRPA, Placer County, and LRWQCB regulations and permit conditions, the Area Plan and Tahoe City Lodge in combination with the cumulative development would not result in significant cumulative stormwater impacts. Therefore, contributions by any of the Area Plan or Tahoe City Lodge alternatives **would not be cumulatively considerable**.

Mitigation Measures

No mitigation is required.

Cumulative Impact 15-3: Cumulative risks from exposure to flood hazards

Floodplains are well regulated by federal and Placer County codes which require all projects to minimize their potential affects to floodplains and 100-year flood elevations and no existing cumulatively adverse condition exists. The potential for future projects to expose people or properties to flood risks would be minimized through compliance with the Placer County Flood Damage Prevention Regulations (Section 15.52, Placer County Code). These regulations require that projects located within a mapped 100-year flood zone must be evaluated by a registered civil engineer. An engineering study would be required including a hydraulic analysis which demonstrate that the project would not aggravate or cause flooding problems on an adjacent property, would not create risks to users of the project itself, and would not cause an increase in the 100-year flood elevation. Cumulative impacts relative to flood hazard risks are less than significant. Therefore, contribution by any of the Area Plan or Tahoe City Lodge alternatives to such flood impacts **would not be cumulatively considerable**.

Mitigation Measures

No mitigation is required.

PUBLIC SERVICES AND UTILITIES

Water supply and wastewater conveyance services in the Plan area are provided by Tahoe City Public Utility District (TCPUD) and North Tahoe Public Utility District (NTPUD). Additional wastewater conveyance, treatment, and disposal is provided by Tahoe-Truckee Sanitation Agency (T-TSA). Electric service is provided by Liberty Utilities and Southwest Gas Corporation, respectively. Fire protection is provided by North Tahoe Fire Protection District and law enforcement is provided by the Placer County Sheriff's Department. All public service and utility providers are currently able to meet the needs of residents, workers, and visitors year-round. Therefore, no significant cumulative public services and utilities impacts currently exist.

As discussed in Chapter 16, Public Services and Utilities, the existing service providers are expected to be able to meet the projected demands of buildout conditions of each Area Plan alternative. Population increases of all alternatives are relatively modest and would occur over approximately 20 years, allowing substantial time for planning and consideration of local and regional public services and utilities requirements. In accordance with Chapter 32 of the TRPA Code of Ordinances, applicants for new development must acquire will-serve letters for construction or reconstruction of any building intended for human occupancy.

Cumulative development in the Plan area and beyond would result in some increased demand for fire protection, law enforcement, and school services that, in turn, could require new or improved facilities, the construction of which could result in adverse effects to the environment. However, as with other project development, environmental review of specific public facility projects (e.g., new schools, fire stations, sheriff's stations) would be required to ensure that such impacts are identified and mitigated.

Cumulative Impact 16-1: Cumulative water demand

Cumulative development in the Plan area and beyond would result in some increased demand for water supply. The surface water allocation for the Tahoe Basin, pursuant to the Truckee River Operating Agreement (TROA) is 32,000 acre-feet per year (afy). At the time of preparation of the RPU EIS, water demand in the Basin was approximately 28,079 afy, and the estimated additional demand generated by development of remaining commodities allocations, Basin-wide, would be 1,725 afy (TRPA 2012a:3.13-12 – 3.13-13). Because development has been relatively limited since that time, existing water demand in the Basin is similar to that presented in the RPU EIS, and projected Basin-wide demand under the Regional Plan would be accommodated by the TROA allocation.

The Area Plan proposes a pilot program of conversion of CFA to TAUs, which would affect water demand. Conversion of CFA to up to 400 TAUs under Alternative 1, and up to 200 TAUs under Alternative 3 would increase water demand at buildout by approximately 41.2 and 20.6 afy, respectively. These additional volumes could be accommodated with existing water supplies. As described in Chapter 16, NTPUD and TCPUD are able to meet existing water demand and anticipate being able to continue to meet water demand for anticipated population growth through 2030 (TCPUD 2011: 3-6 – 3-8, 4-1, 4-2).

Water demand for projects outside the Basin is met through surface water allocations and groundwater that does not intersect with Plan area water supplies provided through NTPUD and TCPUD. For example, surface water from Lake Tahoe and the Truckee River for project areas downstream from the Tahoe Basin are subject to TROA allocations for those areas, separate from allocations for the Tahoe Basin. The nearest, large projects to the Basin, the Village at Squaw Valley Specific Plan and the Martis Valley West Parcel Specific Plan would be served by groundwater from Olympic Valley and Martis Valley, respectively, which are hydrologically disconnected from the Tahoe Basin (DWR 2003). Thus, water demand from projects outside the Basin would not combine with the proposed project to create cumulative water supply impacts. Water supply for the Brockway Campground is not yet proposed nor has demand been calculated. Given the project site location adjacent to the TRPA boundary and away from the urban areas of the Tahoe Basin, it is likely that water supplies would be drawn from groundwater, would be limited to summertime use, and would also be subject to TROA limitations.

Because adequate water supply is available to accommodate buildout of the Regional Plan and any of the Area Plan alternatives, and because individual projects, including the Tahoe City Lodge, would be required to comply with applicable codes and regulations and to acquire will-serve letters from water purveyors, thereby verifying adequate water supplies, cumulative water demand would be less than significant and contribution by any of the Area Plan or Tahoe City Lodge alternatives to cumulative water demand **would not be cumulatively considerable**.

Mitigation Measures

No mitigation is required.

Cumulative Impact 16-2: Cumulative wastewater conveyance demand

Wastewater conveyance from the Plan area is via an existing collection system pipeline networks for TCPUD and NTPUD, which have pipeline diameters large enough to convey historic and future sewage flows based on potential growth.

Alternative 2 would not increase the amount of allowable development that would require wastewater collection and conveyance in the Plan area beyond that assessed in the PRU EIS and RTP EIS/EIR, which concluded that sufficient wastewater conveyance capacity would be available to accommodate the anticipated population increase and land uses. The CFA to TAU conversion program under Alternatives 1 and 3 would result in an increase in wastewater flows of 36,800 gpd (approximately 0.04 mgd) and 18,400 gpd (approximately 0.02 mgd) respectively over those generated by Alternative 2. Wastewater from the Plan area is transported to the T-TSA Water Reclamation Plant (WRP) via the Truckee River Interceptor (TRI), which has sufficient capacity to serve existing demand. The TRI capacity varies throughout its length between the Basin (where NTPUD and TCPUD lines tie in) and the WRP. There is currently a bottleneck in segments of the TRI near Olympic Valley and T-TSA is in the early planning stages of addressing anticipated future wastewater demand. Excess capacities in the TRI and at the WRP are available on a first come/first serve basis, and project proponents must submit an application to T-TSA to be allocated capacity. Potential development resulting from Alternatives 1 through 3 would be required to comply with TRPA Code and local policies to obtain certification from the service provider that either existing services are available or needed improvements will be made prior to occupancy.

Cumulative projects that would have the potential to increase wastewater conveyance demand include the Homewood Mountain Resort Ski Area Master Plan, the Village at Squaw Valley Specific Plan, the Martis Valley West Parcel Specific Plan, and the Brockway Campground project. The Homewood Mountain Resort Ski Area Master Plan EIR/EIS determined that the Master Plan would not contribute to a cumulative impact on wastewater conveyance. For the Village at Squaw Valley Specific Plan, the environmental analysis determined that the Specific Plan would not contribute to potential wastewater conveyance cumulative impact because, if needed, the project applicant would add wastewater detention capacity on the project site to ensure that during peak flow periods, wastewater delivered to the TRI can be retained on the project site until TRI flows are not at their peak and the TRI can accommodate additional flows. The Martis Valley West Parcel Specific Plan connects to the TRI at an area close to the WRP where the pipeline has capacity to meet anticipated buildout conditions, and therefore would not contribute to an adverse cumulative condition. Finally, although the Brockway Campground project would generate wastewater, it would connect to a septic system outside of the Basin and would not affect the TRI.

As with water demand, the CFA to TAU conversion policy contemplated by Alternatives 1 and 3 could increase the demand for wastewater treatment conveyance beyond the level previously analyzed in the RPU EIS. Although the current wastewater conveyance system has the capacity to meet the projected demand for the region, a pinch point exists along the TRI near Olympic Valley, which could affect the potential for the system to accommodate increased wastewater flows. Additionally, some of the cumulative projects discussed above would contribute wastewater to the TRI. However, environmental review for some of the cumulative projects that would connect to the TRI has been completed and, where necessary, include measures to manage flow during peak periods so as to avoid exceeding the capacity of the TRI. Any excess capacity in the TRI is allocated on a first-come, first-served basis and all future projects that would use this

conveyance would be required to demonstrate that sufficient wastewater conveyance capacity is available. Therefore, the effects to the wastewater conveyance system from buildout of any of the Area Plan and Tahoe City Lodge alternatives **would not be cumulatively considerable**.

Mitigation Measures

No mitigation is required.

Cumulative Impact 16-3: Cumulative wastewater treatment demand

The T-TSA WRP has a capacity of 9.6 mgd based on a seven-day dry weather average flow basis (Parker, pers. comm., 2015b). The remaining available capacity at the treatment plant is estimated to be 3.2 mgd. Currently, there is ample available capacity to serve projected future development, including the buildout conditions anticipated in the RPU EIS.

As discussed above, Alternative 2 would not increase the amount of allowable development that would require wastewater collection and conveyance in the Plan area beyond that assessed in the PRU EIS and RTP/SCS EIS/EIR, which concluded that sufficient wastewater conveyance capacity would be available to accommodate the anticipated population increase and land uses. The CFA to TAU conversion program under Alternatives 1 and 3 would result in an increase in wastewater flows of 36,800 gpd (approximately 0.04 mgd) and 18,400 gpd (approximately 0.02 mgd) respectively over those generated by Alternative 2. However, the excess capacity at the WRP are available on a first-come, first-served basis, and project proponents must submit an application to T-TSA to be allocated capacity. Potential development resulting from Alternatives 1 through 3 would be required to comply with TRPA Code and local policies to obtain certification from the service provider that either existing services are available or needed improvements will be made prior to occupancy. Additionally, cumulative projects that would contribute wastewater to the WRP would include most future development projects within the Plan area (including the Homewood Mountain Resort Ski Area Master Plan, Joerger Ranch, North Highlands II, Northstar Mountain Master Plan, Martis Camp, and projects in Squaw Valley, Alpine Meadows, Northstar, and the Martis Valley West Parcel Specific Plan).

The T-TSA WRP is designed to address buildout of its service area which includes cumulative projects located within the Town of Truckee and Placer County (Placer County 1994, Town of Truckee 2006). Also, the T-TSA emergency overflow ponds located between Riverview Park and the Truckee River are designed to hold additional volume that could be generated during peak flows until such flows could be processed by the treatment plant (T-TSA 2009).

Therefore, because no project would be permitted without confirmation that available capacity exists at the WRP, and because the WRP has been designed to accommodate buildout of all projects within its service area, the Area Plans contribution to wastewater treatment demand **would not be cumulatively considerable**.

Mitigation Measures

No mitigation is required.

RECREATION

Cumulative Impact 17-1: Cumulative demand for recreation facilities and physical deterioration of recreation facilities

Recreation demand within the Tahoe Basin as well as nearby Martis Valley and the area containing Squaw Valley is met with a wide variety and extensive amount of recreational facilities and opportunities. A number of projects identified in Table 19-2, including Northstar Mountain Master Plan, Truckee River Corridor Access Plan, Dollar Creek Shared-Use Trail, North Tahoe Bike Trail, and Brockway Campground would provide new recreation opportunities in the region. The Tahoe Basin, Squaw Valley, and Martis Valley areas contain thousands of acres of public lands and lands in permanent conservation that provide the public with opportunities for hiking, biking, cross country skiing, snowshoeing, snowmobiling, wildlife viewing, water

sports, and relaxation. These resources include, but are not limited to, the Tahoe Rim Trail, Burton Creek State Recreation Area, Tahoe National Forest, Lake Tahoe Basin Management Unit, Fibreboard Freeway, Martis Creek Lake Recreation Area, Tahoe State Recreation Area, and Kings Beach State Recreation Area. The Homewood, Squaw Valley, Alpine Meadows, Northstar resorts also include trail systems and ski resorts that provide further recreation opportunities for visitors and residents. These recreation resources provide ample opportunities for recreating to meet the existing and future demand such that adverse physical effects would not result beyond that which occurs under current conditions. Currently, there is no existing adverse cumulative condition related to effects on existing recreation users or adverse physical effects on recreation resources.

Several cumulative projects would generate recreationists that would utilize recreation resources and could result in impacts to recreation facilities. These include projects that propose new residential or visitor lodging, such as Brockway Campground, Martis Valley West Parcel Specific Plan, Joerger Ranch Specific Plan, Palisades at Squaw, Village at Squaw Valley Specific Plan, Alpine Sierra Subdivision, and Martis Camp among others. However, due to the dispersed nature and largely seasonal occupancy of these projects, and the ample variety and supply of recreation opportunities throughout the region, these projects together would not result in a cumulative impact on recreation user experience or adverse physical effects on these recreation resources. Furthermore, Table 19-2 also identifies cumulative projects that would result in new or enhanced existing recreation resources, including the Martis Valley Trail, Northstar Mountain Master Plan, Northstar at Tahoe Ski Trail Widening, Truckee River Corridor Access Plan, and the Dollar Creek Shared Use Trail among others. These projects together would result in a less-than-significant cumulative impact on recreation resources.

As described in Chapter 17, the Placer County Tahoe Basin Area Plan and Tahoe City Lodge would result in an increased demand for recreation resources. The proposed project, in combination with other cumulative projects, could affect recreation user experiences by new noise sources and new developed features that result in visual impacts. However, due to the dispersed nature of the projects and recreation resources, there is limited potential for project development to substantially affect recreation resources. In addition, the user experience at recreation resources that are within or surrounded by urban development in the Plan area (e.g., beaches, bike trails, parks) would likely be improved through redevelopment projects that replace older, lower-quality development with new projects that meet current scenic and design standards.

As described in Impact 17-1, the Area Plan and Tahoe City Lodge project impact on recreation resources and recreation user experience would be reduced through implementation of a number of Area Plan policies that provide for the appropriate type, location and rate of development of recreational uses and facilities and that protect natural resources from overuse, reduce conflicts between uses, are consistent with environmental constraints and threshold standards (Area Plan Policies R-P-1, R-P-7, R-P-8, and R-P-10). Because the Plan area contains and is surrounded by ample recreation resources, with additional planned recreation projects nearby, the effects on these recreation users would be minimized through implementation of Regional Plan and Area Plan policies, no substantial physical deterioration of existing recreation resources and facilities would occur. Therefore, the contribution by any of the Area Plan or Tahoe City Lodge alternatives to such effects **would not be cumulatively considerable**.

Mitigation Measures

No mitigation is required.

Cumulative Impact 17-2: Cumulative conflicts with existing or planned recreation resources

Cumulative projects listed in Table 19-2 that could combine with the Area Plan and Tahoe City Lodge project to create potential recreation conflicts include the Martis Valley West Parcel Specific Plan, directly adjacent to the Area Plan boundary, and the projects within the Area Plan boundaries. There are no known conflicts between any reasonably foreseeable projects and recreation resources. In fact, many of the cumulative projects are new or enhanced recreation facilities. For periodic recreation events (e.g., bike or hike events on the Tahoe Rim Trail and Fiberboard Freeway), event planners are required to coordinate with, and secure

permits, as appropriate, from the U.S. Forest Service and/or other affected agencies. In this way, adequate notice is provided and potential conflicts are addressed and remedied.

As described in Impact 17-2, the Area Plan and Tahoe City Lodge project would not result in substantial conflicts with existing or planned recreation resources as a result of Area Plan and Regional Plan policies related to avoidance of recreational land use conflicts that would be implemented and because maintenance of existing threshold attainment would be evaluated when considering approval of future projects. Additionally, future project planning would be completed in coordination with recreation providers and TRPA threshold standard requirements and potential conflicts with existing recreation resources would be addressed at the project-level. Thus, the Area Plan and Tahoe City Lodge project in combination with other cumulative projects would result in a less-than-significant cumulative impact, and the contribution by any of the proposed Area Plan and Tahoe City Lodge project alternatives **would not be cumulatively considerable**.

Mitigation Measures

No mitigation is required.

Cumulative Impact 17-3: Cumulative decrease in public access to Lake Tahoe, public lands, and recreation areas

As described in Impact 17-3, implementation of the Area Plan and Tahoe City Lodge project would not result in obstructions to existing public access to the Lake, public lands, or recreation areas. In fact, the Area Plan would support implementation of projects that would improve public access to the Lake, public lands, and recreation areas. For these reasons, there would be **no cumulative impact** from implementation of the Area Plan and Tahoe City Lodge project.

Mitigation Measures

No mitigation is required.

HAZARDS, HAZARDOUS MATERIALS, AND RISK OF UPSET

Cumulative Impact 18-1: Cumulative exposure of the public or environment to hazards because of the routine use, storage, or transport of hazardous materials or from accidental release or upset

Although some hazardous materials releases can cover a large area and interact with other releases (e.g., atmospheric contamination, contamination of groundwater aquifers), incidents of hazardous materials contamination are more typically isolated to a small geographic area. These relatively isolated areas of contamination typically do not combine in a cumulative manner with other sites of hazardous materials contamination. In the Plan area, including at the Lodge project site, and in its vicinity, there are no identified incidents of widespread hazardous materials contamination with different sources of contamination interacting on a cumulative basis. Future projects that would include construction activities and add new residences, commercial uses, tourist accommodation units, recreation projects, and infrastructure, may use, store, and generate hazardous materials. However, these projects would be subject to existing federal, state, and local hazardous materials regulations, limiting the potential for releases and contamination and requiring clean-up when such events occurred. Given these conditions, there would not be a significant cumulative impact related to hazardous materials.

Future projects implemented in accordance with the Area Plan would result in the transport, storage, and use of hazardous materials as part of their construction and operation. Individual future projects would be required to comply with existing federal, state, and local hazardous materials regulations would apply, limiting the potential for releases and contamination and requiring clean-up when releases/contamination do occur. In addition, the potential for the individual future projects to expose people or the environment to hazardous materials would be reduced through proper handling and compliance with applicable regulations as described in Impact 18-1. Therefore, any contribution by the proposed Area Plan and Tahoe City Lodge

alternatives to cumulative exposure to hazardous materials from routine use, storage, or upset **would not be cumulatively considerable.**

Mitigation Measures

No mitigation is required.

Cumulative Impact 18-2: Cumulative exposure to hazardous materials sites and recognized environmental conditions

The geographic area for cumulative impacts related to exposure to hazardous materials sites or recognized environmental conditions (RECs) would be limited to the Lodge project site and the project sites and immediate adjacent areas for future individual projects subsequent to the Area Plan. While there are hazardous materials sites in the Plan area identified as undergoing ongoing remediation, monitoring, or characterization of potential contamination (see Table 18-2), there are no identified incidents of widespread hazardous materials contamination such that a cumulative impact would result.

Impact 18-2 identifies a less-than-significant impact related to exposure to hazardous materials sites and RECs for the Area Plan, and the impact associated with encountering RECs or unknown contaminants would be specific to a given site under construction. There are no nearby similar conditions that would interact with conditions in these areas. Furthermore, future individual projects would be required to undergo some level of project-specific environmental review to assess hazardous materials conditions on the project site and would be required to mitigate any significant adverse impacts. Consequently, there would be no cumulative impact related to exposure to recognized environmental conditions. For these reasons, any contribution by the proposed Area Plan and Tahoe City Lodge alternatives to cumulative exposure to hazardous materials sites and RECs **would not be cumulatively considerable.**

Mitigation Measures

No mitigation is required.

Cumulative Impact 18-3: Cumulative interference with implementation of an emergency response plan or emergency evacuation plan

The geographic area for cumulative impacts related to implementation of emergency response and emergency evacuation plans would be the area extending along the West Shore and North Shore of Lake Tahoe and up to the southeastern portion of the Town of Truckee. Roadways identified in the Placer Operational Area East Side Emergency Evacuation Plan to be used as evacuation routes include State Route (SR) 28, SR 267, and Interstate 80 (I-80). Evacuation centers are identified in Kings Beach, Tahoe City, and Town of Truckee (see Table 18-1). In the event of an emergency that would require evacuation from these areas, evacuees could be directed to Kings Beach, Tahoe City, or Truckee.

By virtue of their location along major transportation routes in the Plan area, construction and operation of some cumulative projects (see Table 19-2) could interfere with implementation of emergency evacuation plans in the project vicinity, including:

- ▲ Kings Beach State Recreation Area General Plan (KBSRA GP) Revision and Public Pier Rebuild Project,
- ▲ Kings Beach Commercial Core Improvement Project,
- ▲ Tahoe Vista Partners, LLC Affordable Housing and Interval Ownership Development Project,
- ▲ VOLTAIX Commercial Project,
- ▲ Boulder Bay,
- ▲ Brockway Campground,
- ▲ Homewood Mountain Resort Ski Area Master Plan, and
- ▲ Homewood Trail Project.

Construction of some cumulative projects could result in temporary interference with implementation of emergency evacuation plans, but would result in mobility improvements that would enhance long-term emergency response services within the Area Plan and vicinity, including:

- ▲ SR 89/Fanny Bridge Community Revitalization Project,
- ▲ Transportation Corridor Concept Report for SR 267,
- ▲ Transportation Corridor Concept Report for SR 28,
- ▲ SR 28 to SR 267 Intersection Improvements,
- ▲ Lakeside Project,
- ▲ Tahoe City Mobility Plan, and
- ▲ Tahoe-Truckee Airport District Helipad.

In the event of an emergency, evacuation from these areas would occur via local roads to SR 28, SR 89, and/or SR 267. From there, evacuees could be routed to evacuation centers located in Tahoe City, Kings Beach, and Truckee. While conditions on local roadways and highways during an emergency evacuation could be congested, construction and operation of future projects implemented in accordance with the Area Plan plus cumulative development could prevent or impede evacuation, or result in physical interference with an evacuation plan such that evacuation occurs more slowly. The cumulative projects listed above would be subject to project-level analysis for potential interference of an emergency response plan or evacuation plan and would be required to mitigate any adverse effects. Such mitigation could include off-street parking, staging, and materials storage during construction; signage; designated points of ingress and egress for construction vehicles and equipment; traffic control personnel; emergency preparedness and evacuation plans, and other measures. The cumulative impact with regard to emergency evacuation would be less than significant.

Future individual projects subsequent to the Area Plan would be required to assess potential impacts on emergency response and evacuation plans. Any potential adverse effects would require individual projects to implement Mitigation Measure 18-3, which requires a project to prepare and implement a Traffic Control Plan, subject to approval by Placer County, to minimize the effects of project construction on emergency access and response. Because future individual projects subsequent to the Area Plan, including the Tahoe City Lodge, would be required to maintain sufficient access and traffic flow and operate in a manner that would not conflict with emergency response and evacuation plans, any contribution by the proposed Area Plan and Tahoe City Lodge alternatives to interference with an emergency response or evacuation plan **would not be cumulatively considerable.**

Mitigation Measures

No mitigation is required.

Cumulative Impact 18-4: Cumulative exposure of people or structures to wildland fire hazards

Lands within the boundaries of the Area Plan contain moderate, high, and very high fire hazards. Past fires in the region have resulted in loss of life, significant losses of property, and substantial damage to habitat and environmental resources. Historic fire suppression and other forest land management practices have allowed fuels to accumulate in many areas, contributing to the severity of wildfires when they do occur. Additionally, past development in the forested landscape has increased the risk to life and property when fires do occur, and increased the potential for ignition of wildland fires through increased human presence and activity.

Cumulative development will continue this trend to varying degrees, including residential, commercial, and tourist-related projects (e.g., Martis Valley West Parcel Specific Plan; VOLTAIX Commercial Project; Boulder Bay; and Homewood Mountain Resort Ski Area Master Plan) and recreation projects (e.g., Brockway Campground, KBSRA GP Revision and Public Pier Rebuild Project, North Tahoe Bike Trail, Tahoe Basin Connector Trail, Dollar Creek Shared-Use Trail, Truckee River Corridor Access Plan, and Homewood Trail Project). Past and future fuels management projects serve to reduce wildland fire risk, including the fuels management activities conducted by NTFPD, USFS, CAL FIRE, DPR, and Conservancy through projects that

include the Carnelian, Incline, and West Shore Fuels Reduction and Healthy Forest Restoration Projects, DPR Fuels Reduction and Understory Burning project, and the Conservancy Forest Habitat Enhancement program. Although developments have placed additional structures and people within a fire hazard zone, the projects have also extended water service, roadways, and fire clearance measures that allow for improved wildland fire response in the region. In addition, there are CWPPs on neighboring lands, including Northstar and Alpine Meadows, which direct the implementation of wildfire protection measures such as defensible space. All habitable structures that can be used as residential space are also assessed a State Responsibility Area (SRA) Fire Prevention Fee by the State, which funds State efforts at fire prevention. The combination of these cumulative projects, including projects that would manage fuels and reduce wildland fire risk, would result in a less-than-significant cumulative impact related to exposure of people and structures to wildland fires.

The proposed project would result in additional development in a moderate to very high fire hazard area, which could increase the risk to life and property where fires do occur and increase the potential for ignition of wildland fires through increased human presence and activity. However, new development in accordance with the Area Plan will be concentrated in already-urbanized areas, and does not encourage development in the wildland-urban interface. In addition, as described in Impact 18-4, future individual projects subsequent to the Area Plan would be required to comply with fire protection regulations and practices, consult with the North Tahoe Fire Protection District or other fire protection districts, and pay the SRA Fire Prevention Fee, which provides funding for additional fire protection staffing to reduce the potential exposure to wildfire hazards. Therefore, with mitigation the cumulative condition related to wildland fire hazard because of the combination of effects from the proposed project with past, present, and reasonably foreseeable future projects is less than significant.

As identified in Impact 18-4, the Area Plan would result in a less-than-significant impact related to wildland fire hazards because the Area Plan supports continued implementation of fire fuels reduction projects and existing fire protection regulations that would ensure new development includes fire resistant building materials, defensible space, fire-safe landscaping, adequate water supply, and emergency access. Additionally, future individual projects subsequent to the Area Plan would be required to assess, and mitigate if necessary, their potential impacts on exposure of people or structures to wildland fire hazards. For these reasons, any contribution by the proposed Area Plan and Tahoe City Lodge alternatives to cumulative wildland fire hazards **would not be cumulatively considerable**.

Mitigation Measures

No mitigation is required.

Table 19-2 Cumulative Projects List

Map Number	Project Name	Location	Description	Residential Units and/or Non-Residential Area	Project Status
Development and Other Projects (Residential, Commercial, Tourist, Recreation, Transportation, Utility)					
1	Kings Beach State Recreation Area General Plan (KBSRA GP) Revision and Public Pier Rebuild Project	Kings Beach State Recreation Area, Kings Beach, CA	Revisions would bring the existing 1980 KBSRA GP up to current standards, address the needs of the community, and bring adjacent State property that falls outside of the existing boundaries into the comprehensive planning effort. The reconstructed public pier would enhance recreational access to the Lake and the State Recreation Area, increase interpretive outreach potential, meet access needs of persons with disabilities, and promote public health and safety.	—	The General Plan revision and plans for the new pier are being developed. The environmental review process is underway.
2	Lake Tahoe Regional Multimodal Pedestrian and Safety Improvement Project (formerly Kings Beach Commercial Core Improvement Project)	SR 28 commercial corridor, Kings Beach, CA	Project involves reducing SR 28 in Kings Beach from a 4-lane highway to a 3-lane highway with roundabouts. Project is a SR 28 beautification project, and includes off-highway and water quality improvement components.	—	Environmental review complete; project approved. Phased project construction began in 2013, with ongoing construction activities during the appropriate season through at least 2016.
3	Kings Beach Boardwalk/Promenade	Brockway Vista Drive between Kings Beach State Recreation Area and Secline Beach, Kings Beach, CA	Improve Brockway Vista Drive along the Kings Beach waterfront with curb, gutter, sidewalk and storm drains; and construct a boardwalk along Lake Tahoe between the State Recreation Area and Secline Beach. The promenade concept was developed through the Kings Beach visioning efforts conducted in support of the Area Plan.	—	In early planning stages. The environmental review process has not yet begun.
4	Kings Beach Library Relocation	301 Secline Street, Kings Beach, CA	In conjunction with the Griff Creek improvements, the Kings Beach library is planned to be relocated from SEZ to high capability lands.	—	In early planning stages. The environmental review process has not yet begun.
5	Rainbow Parking Lot	8334 Rainbow Avenue, Kings Beach, CA	The project includes an 18-space public parking lot off of Rainbow Drive to support the Kings Beach Commercial Core Improvement Project.	—	Mitigated Negative Declaration approved. Approved Minor Use Permit and variance for the parking lot. Constructed completed in fall 2015.
6	West End Parking Lot	8200 to 8230 Rainbow Avenue, Kings Beach, CA	The project would include construction of a 29-space public parking lot to support the Kings Beach Commercial Core Improvement Project.	—	Mitigated Negative Declaration released March 2015. In the process of obtaining a Minor Use Permit and variance for construction of the parking lot. If approved, construction is anticipated for 2016.

Table 19-2 Cumulative Projects List

Map Number	Project Name	Location	Description	Residential Units and/or Non-Residential Area	Project Status
7	CalPeco (Liberty Utilities) 625 and 650 Electrical Line Upgrade	24.1 miles of upgraded electrical line extending along two lines—one from the Town of Truckee to Kings Beach, and the other from Kings Beach to Tahoe City	Upgrade of CalPeco's existing 625 and 650 electrical power lines and related substation improvements. Project includes improvements within and outside of the Tahoe Basin.	—	Final EIS/EIS/EIR released in September 2014; document certification and project approval for Phase 1 and Phase 2 in April 2015. Martis to Northstar segment completed in 2015. Northstar to Kings Beach segment underway and projected for completion in October 2016.
8	Tahoe Vista Partners, LLC Affordable Housing and Interval Ownership Development Project	6873 N. Lake Tahoe Blvd, Tahoe Vista, CA	The project would replace the existing seasonal Sandy Beach Campground with a year-round tourist destination development, provide affordable housing to the north Lake Tahoe area, and install permanent best management practices (BMPs) at the site. The project would include 39 interval ownership units, a clubhouse/administrative building, 6 deed-restricted affordable/employee housing units located offsite in the Kings Beach area, and SR 28 frontage improvements.	39 interval ownership units and 6 deed-restricted affordable/employee housing units	Construction underway.
9	VOLTAIX Commercial Project	620 Bear Street, Kings Beach, CA	Consolidation of 12 lots into three lots. The project proposes to construct two two-story commercial buildings with 9,389 square feet of commercial use on the first floors and five residential units in conjunction with commercial uses on the second floors on a 0.8-acre lot.	9,389 square feet of mixed use, including 5 residential units	A Minor Use Permit is proposed to allow a "Contract Construction Services" business as an approved use on the parcels. Approved by Zoning Administrator September 24, 2015.
10	North Tahoe Bike Trail	Between Dollar Creek Shared-Use Trail and the North Tahoe Regional Park	Approximately 6-mile, shared-use path connecting the Dollar Creek Shared-Use Trail to the North Tahoe Regional Park.	—	In early planning stages. The environmental review process has not yet begun.
11	Boulder Bay Community Enhancement Program Project	Crystal Bay, NV	Redevelopment of Tahoe Biltmore on North Shore. Project includes a four-story, 275-room hotel with a 10,000-square foot casino. Implementation of the project would reduce the total commercial floor area at the site from approximately 56,000 to 21,000 square feet.	275-room hotel with 10,000-square foot casino	Environmental review complete; project was approved on April 27, 2011. The applicant has secured financing, but the construction start date is unknown.
12	Denny's Trailer Park	8679 Trout Avenue, Kings Beach, CA	The project is requesting approval of a Tentative Subdivision Map to allow seven existing non-conforming lots to be reconfigured within the existing Denny's Trailer Park to allow for individual manufactured home ownership.	7 mobile home units	A mitigated negative declaration was completed in April 2014. Tentative Subdivision Map approved by the Placer County Planning Commission September 2015.

Table 19-2 Cumulative Projects List

Map Number	Project Name	Location	Description	Residential Units and/or Non-Residential Area	Project Status
13	6731 Tahoe Timeshare	6731 North Lake Boulevard and 215 Anderson Road, Tahoe Vista, CA	The project proposes to replace an existing motel facility with ten new timeshare duplexes (20 units) and a 1,757 square foot clubhouse with a two-bedroom manager's unit above on the property located at 6731 North Lake Boulevard and to replace an existing single family residence with three detached employee housing units on an adjacent property located at 215 Anderson Road.	10 duplexes; 4 employee housing units	A mitigated negative declaration was completed in November 2011. A Conditional Use Permit and Tentative Parcel Map for 6731 Tahoe was approved February 2012.
14	Peak 10	8308 North Lake Boulevard, Kings Beach, CA	The project proposes to redevelop the existing motel with 10 multi-family residential units with common area.	10 multi-family units	CEQA process complete.
15	Tahoe Basin Connector Trail	From Tahoe Basin boundary to North Tahoe Regional Park, Tahoe Vista, CA	Approximately 5-mile, shared-use path connecting planned shared-use trail at Basin boundary to North Tahoe Regional Park.	—	Planning has not yet commenced.
16	Brockway Campground	West side of SR 267 near Brockway Summit; 104 acres within the Lake Tahoe Basin, directly adjacent to the proposed Martis Valley West Parcel Specific Plan area	Up to 550 campsites composed of a mix of tent sites, camper sites, and eco-shelters with accessory facilities and amenities.	Up to 550 campsites	Application submitted July 2015. The environmental review process is underway.
17	Lake Tahoe Passenger Ferry Project	Cross-lake ferry service with a South Shore Ferry Terminal at Ski Run Marina in South Lake Tahoe and a North Shore Ferry Terminal at either the Tahoe City Marina or the Lighthouse Mall Pier.	Year-round waterborne transit between north and south shores of Lake Tahoe.	—	Notice of Preparation (NOP)/Notice of Intent (NOI) released in November 2013; Draft EIS/EIR/EIS in preparation, but on hold.
18	Caltrans Maintenance Yard Relocation Project	Tahoe City, CA	The existing Caltrans Maintenance Yard in Tahoe City along the Truckee River is proposed for relocation and considered for consolidation with Placer County's maintenance yard. Relocation of the Caltrans Maintenance Yard would allow for restoration work to occur on the existing yard site.	—	In early planning stages. Relocation site to be determined.
19	Tahoe-Truckee Airport District Helipad	Tahoe City Golf Course, Tahoe City, CA	Tahoe-Truckee Airport District proposes to construct a helipad at the Tahoe City Golf Course to be used for emergency situations and personnel training.	—	In early planning stages.

Table 19-2 Cumulative Projects List

Map Number	Project Name	Location	Description	Residential Units and/or Non-Residential Area	Project Status
20	Aviva Inn Renovation (Base Camp Lodge)	955 N. Lake Tahoe Blvd, Tahoe City, CA	Repurposing an old hotel into high-end lodging. 24 TAUs have been verified. Project is proposing 24 TAUs, one communal kitchen, and 26 parking spaces. No kitchenettes are proposed.	24 TAUs	This project will require Design Review pending final information from applicant.
21	Lighthouse Mall	850-952 N. Lake Tahoe Blvd, Tahoe City, CA	Renovations to existing mall. Consists of exterior modifications, i.e., new siding, roofing, signage, etc. CVS has plans to move into the space. Approximately 3,000 square feet of commercial area would remain for future tenant(s). No changes to parking.	—	Exterior modifications have been reviewed and approved through a Design Review permit.
22	Dollar Creek Shared-Use Trail	Between the existing trail at Dollar Hill and the Cedar Flats neighborhood on the North Shore	2.2-mile-long shared-use trail.	—	Environmental review complete; project approved; construction expected to occur in 2016.
23	Truckee River Corridor Access Plan	Truckee River Watershed, Placer and Nevada counties	Continuous and coordinated system of preserved lands and habitat, with a connecting corridor of walking, in-line skating, equestrian, bicycle trails, and angling and boating access from Lake Tahoe to the Martis Valley.	—	Environmental document to be prepared.
24	SR 89/Fanny Bridge Community Revitalization Project	SR 89 and SR 28 at the Truckee River Crossing, Tahoe City, CA	Construction of a new bridge over the Truckee River, repair or replacement of Fanny Bridge, and various other improvements proposed to relieve traffic congestion during peak periods.	—	EIR/EIS/Environmental Assessment complete; environmental document certified and project approved by Tahoe Transportation District in April 2015 and by TRPA in May 2015. Construction could begin as early as spring 2016.
25	Burton Creek Justice Center Relocation	Burton Creek Road and SR 89, Tahoe City, CA	Relocate County justice center and ancillary facilities out of Burton Creek SEZ.	—	Planning has not yet been initiated.
26	Homewood Mountain Resort Ski Area Master Plan	5145 Westlake Boulevard, Homewood, CA	The project includes redevelopment of the ski area to include mixed uses at the North Base area, residential uses at the South Base area, a lodge at the Mid-Mountain Base area, retail space, and other ski area improvements and accessory uses.	North Base: 75 hotel rooms 35 hotel residences 138 condominiums 48 chalets 16 townhomes 13 apartments (workforce housing) Mid Mountain: 15,000 square foot day-use lodge	EIR/EIS certified and project approved in December 2011. Following legal challenge, a scaled down version of the original proposal was produced; phased project construction could begin in 2016 and extend through 2023.

Table 19-2 Cumulative Projects List

Map Number	Project Name	Location	Description	Residential Units and/or Non-Residential Area	Project Status
27	Homewood Trail Project	Cherry Street to Fawn Street, Homewood, CA	Approximately 1-mile shared-use path that would connect existing Tahoe City Public Utility District (TCPUD) shared-use paths in Homewood.	—	This Class 1 shared-use path will be constructed by TCPUD in summer 2016
28	Lake Forest Creek Area Restoration	Tahoe City, CA	This project would restore the mouth of Lake Forest Creek, springs, and associated areas including the removal and possible relocation of the Pomin Park recreation facilities. TRPA lists this project in their EIP list, under "Restoring California Priority Watersheds Action Priority."	—	Project complete except for relocation of Pomin Park recreation facilities. Planning for relocation could begin in 2016.
29	William Kent Campground and Day Use BMP Retrofit Phase 2, and Administrative Site BMPs	Sunnyside, CA	Beginning in 2015, this project would renovate facilities to complete improvements to circulation efficiency and campsite reconstruction. This project would also install water quality protection BMPs and paving associated with the administrative facility.	—	Project construction initiated in 2015.
Caltrans Highway Improvement Projects (not mapped)					
NA	Transportation Corridor Concept Report, SR 267	SR 267 between Placer County line and SR 28	Planned Improvements (those included in a long-term plan that can be funded) and Programmed Improvements (those included in a near-term programming document that identifies funding amounts by year) in the 2012 Transportation Corridor Concept Report for SR 267 include: widening to 4 lanes between the Placer County line and Northstar Drive, rehabilitating pavement and widening shoulders between the Nevada/Placer County line and Brockway Summit, plant establishment and protection from Northstar Drive to SR 28, and a Class II bicycle lane from Brockway Summit to SR 28.	—	Periodic construction over the next 20 years.
NA	Transportation Corridor Concept Report, SR 28	SR 28 between the California/Nevada state line and SR 89	Planned Improvements and Programmed Improvements in the 2012 Transportation Corridor Concept Report for SR 28 include: Class II bicycle lanes from Tahoe City to Kings Beach, reduce the number of lanes between Estates Drive and Beach Street to three lanes for most of the segment, pedestrian facility from Chipmunk Street to Stateline Road.	—	Periodic construction over the next 20 years.
NA	SR 28 to SR 267 Intersection Improvements	Kings Beach, CA	The intersection of SR 28 and SR 267 would be improved with turn lanes to aid traffic flow.	—	In early stages of planning led by Placer County. Preferential intersection improvement would be a roundabout to improve traffic flow and enhance pedestrian mobility.

Table 19-2 Cumulative Projects List

Map Number	Project Name	Location	Description	Residential Units and/or Non-Residential Area	Project Status
NA	Lakeside Project	SR 89 between Tahoe City andTahoma	Widening of SR 89 to provide left turn lanes in areas such as Sunnyside and Homewood.	—	Construction of a portion of this project from Homewood to Ward Creek is underway and should be complete by 2016.
Public Services and Utilities Projects (not mapped)					
NA	North Tahoe Public Utility District (NTPUD) Infrastructure/System Improvements Projects	North Shore communities between Dollar Point and North Stateline	Planned sewer capital improvement projects include sewer line replacement, rehabilitation of pump stations, and relocation of sewer lines. The District's capital improvement projects also include upgrades, replacement, and relocation of water distribution mains and water lines. Projects that would result in new facilities and enhance water supply include: <ul style="list-style-type: none"> ▲ NTPUD Buildings (Park and Sign Storage Buildings, Base Facilities, and Parks Maintenance Building) ▲ New Kings Beach Water Storage - Zone 1 	—	Projects are included in the NTPUD Capital Improvements Plan for fiscal years 2014/15 through 2018/19.
NA	TCPUD Infrastructure/System Improvements Projects	North Shore and West Shore communities located between Dollar Point and the Placer/EI Dorado county line	Planned projects include surface water treatment plant for the west shore as well as water well, waterline, and water storage replacement, upgrade, and repair projects. The District also has a number of rehabilitation projects and proposed repairs in the sewer system. Parks and recreation projects consist of rehabilitation of existing bike trail and repairs to other recreation facilities. Projects that would result in new facilities and enhanced water supply, sewer services, and recreation opportunities include: <ul style="list-style-type: none"> ▲ SR 89 Conductor Casing Crossing ▲ West Lake Tahoe Regional Water Treatment Plant ▲ Bunker Water Tank Replacement ▲ Tahoe City Main Emergency Water Supply ▲ Truckee River Access and Restoration Improvements 	—	Projects are included in the TCPUD Capital Projects list for 2015 through 2019.
NA	Tahoe City Mobility Plan	Tahoe City	The plan proposes a shared-use trail between Fanny Bridge and Commons Beach, signalized crossing(s) on SR 28, and improved parking, circulation and access infrastructure for businesses along north side SR 28	—	In planning stages. Environmental review process to commence in 2016.

Table 19-2 Cumulative Projects List

Map Number	Project Name	Location	Description	Residential Units and/or Non-Residential Area	Project Status
Specific Water Quality Improvement Projects (not mapped)					
NA	<ul style="list-style-type: none"> ▲ Griff Creek Water Quality Improvement Project ▲ Kings Beach Water Quality Improvement Project (various locations) 	Various locations throughout the Plan Area	These projects include, but are not limited to, a variety of improvements to drainage, stormwater collection, stormwater treatment, and erosion control.	—	Currently being designed and have completed environmental review. Future projects may be identified over time.
Fuels Reduction and Healthy Forest Restoration Projects (not mapped)					
NA	<ul style="list-style-type: none"> ▲ Carnelian Fuels Reduction and Healthy Forest Restoration Project ▲ Incline Fuels Reduction and Healthy Forest Restoration ▲ North Tahoe Interagency Forest Health and Biomass Project West Shore Wildland Urban Interface (WUI) Hazardous Fuel Reduction ▲ North Tahoe Interagency Forest Health and Biomass Project 	Throughout the Plan area	Multi-agency efforts to reduce the risk of severe wildfire, improve forest health, and provide defensible space to neighboring communities. Includes, but is not limited to, forest thinning using mechanical, hand, and prescribed burning treatments.	—	Status for projects range from ongoing implementation to undergoing environmental review.
Nearby Projects, Outside the Tahoe Basin					
30	Martis Valley West Parcel Specific Plan (MVWSP)	Martis Valley off of SR 267 between the Town of Truckee and Brockway Summit; consists of the 1,052-acre West Parcel, adjacent to the Northstar California Resort, and the 6,376-acre East Parcel, east of SR 267	Mixed residential uses (including single family, town homes, cabins, condos) and commercial development (including resort services, fitness center, family entertainment, and community center) located on the West Parcel. The project proposes to place the East Parcel in a conservation easement.	760 residential units; approximately 7 acres of commercial development	Notice of Preparation was released for public review in February 2015. Public Draft EIR released October 2015. Final EIR released in May 2016. Scheduled for consideration by Placer County in 2016.

Table 19-2 Cumulative Projects List

Map Number	Project Name	Location	Description	Residential Units and/or Non-Residential Area	Project Status
31	Verizon Wireless Brockway Summit Cell Tower	Martis Valley off of SR 267; Assessor's Parcel Number 110-060-062; on Sierra Pacific Industries property; on the West Parcel of the proposed MVWPSP	Proposed wireless facility with a 115-foot-tall monopine tower, 12 by 12-foot shelter, and 50-kilowatt propane generator within a 30 by 40-foot lease area	—	Application submitted in May 2015.
32	Martis Camp	12000 Lodge Trail Drive, Truckee, CA	A private golf and ski club community of upscale second homes.	663 lots (between 2.5 and 0.5 acres) on over 2,000 acres	Opened in 2006; partially built-out.
33	Northstar Mountain Master Plan	5001 Northstar Drive, Truckee, CA	Mountain Master Plan for the existing ski resort area. Various additions and changes to ski lifts, snowmaking, trails, bridges, access, ropes course, bike trails, and campsites.	—	Final EIR released June 9, 2014; document certification/project approval pending.
34	Northstar Highlands Phase II	Northstar Drive, Truckee, CA	Modifications to the original subdivision approval, reducing the development area and number of housing units (from 576 units to 446 units).	446 units, including townhomes, single family lots, condominiums, and 4,000 square feet of commercial space	Modifications approved in July 2013; construction on the first three phases underway. Applicant is still processing small lot maps. Northstar Highlands Phase II includes the Mountainside at Northstar Project. Project has until 2020 to complete construction.
35	Joerger Ranch Specific Plan	Intersection of SR 267, Brockway Road, and Soaring Way, Truckee, CA	70-acre mixed-use planned community including industrial, office space, public facility, transportation, and apartment uses.	318 dwelling units	Final EIR available January 2015; Planning Commission recommended approval; EIR certification and approval by Town Council pending.
36	Tahoe Expedition Academy	Schaffer Mill Road near SR 267, Truckee, CA.	A private school in Kings Beach is proposing to relocate to Martis Valley and construct a 60,000-square-foot campus that can accommodate up to 270 students, Kindergarten through 12th grade.	—	Construction is tentatively planned to begin May 2016 and be completed by 2017. Currently, the project has temporary approval for eight modular classrooms.
37	Martis Valley Trail	From USACE land south to Tahoe Basin boundary west of Brockway Summit, Truckee, CA	Approximately 8-mile, shared-use path connecting existing shared-use trail on north side of valley to south crossing Northstar Drive and connecting to Northstar Village and then terminating at Four Corners Area near Fiberboard Freeway along Tahoe Basin boundary.	—	Planning, preliminary design, and environmental review complete. Portions of multi-year trail construction have been completed.

Table 19-2 Cumulative Projects List

Map Number	Project Name	Location	Description	Residential Units and/or Non-Residential Area	Project Status
38	Village at Squaw Valley Specific Plan	Western end of Olympic Valley at base of Squaw Valley Ski Area	Establishes the guiding principles for comprehensive development of approximately 100 acres of the previously developed Squaw Valley Olympic Village.	Up to 1,643 bedrooms in 900 units, approximately 297,700 square feet of commercial, 90,000 square-foot Mountain Adventure Camp	Draft EIR released for public review May 2015. Final EIR released April 2016. Scheduled for consideration by Placer County in 2016.
39	Palisades at Squaw	Squaw Valley Road and Creeks End Court, Squaw Valley, CA	The project proposes to develop a total of 63 residential units, consisting of eight 5-bedroom, 18 4-bedroom, seven 3-bedroom homes, and 30 3-bedroom halfplex residential units on a 19.9-acre parcel.	63 single-family residences and 30 halfplex residential units	Environmental review in progress.
40	Squaw-Alpine Interconnect	Base of Squaw Valley, through White Wolf property, to base of Alpine Meadows	A base-to-base gondola between Squaw Valley and Alpine Meadows. Anticipated to have eight-person cars and potentially be able to carry 1,400 skiers an hour.	—	NOP released for public review April 2016.
41	PiumpJack Squaw Valley Inn	1920 Squaw Valley Road, Olympic Valley, CA	The project would replace the existing inn with a new hotel, residential buildings, underground parking, and an outdoor activity area on a 3.15-acre property.	60 hotel rooms and 24 residences to replace 61 existing hotel rooms	Application complete; NOP released for public review June 2015; EIR preparation underway.
42	Alpine Sierra Subdivision	Terminus of Alpine Meadows Road near Alpine Meadows Ski Resort	The project includes a 44-acre planned development to include single-family lots and commonly held parcels.	47 residences	Application complete; scoping period ended May 9, 2014; EIR preparation underway.
43	Stanford Chalet Subdivision	1080 Chalet Road, Alpine Meadows, CA	The project proposes to develop 18 halfplex residential units on an existing commercial facility of 2.5 acres.	18 halfplex residential units	County comments sent June 2015. Applicant 2 nd submittal pending.
44	Cabin Creek Biomass Facility Project	900 Cabin Creek Road, Truckee, CA	Develop a two megawatt wood-to-energy facility that would utilize a gasification technology. Would support fuels reduction and thinning activities within and outside of the Lake Tahoe Basin. Fueled by forest-sourced material only.	—	Final EIR certified and project approved by Board of Supervisors on May 7, 2013. Project on hold pending negotiation of agreement with utility partner.

Source: Compiled by Ascent Environmental 2015

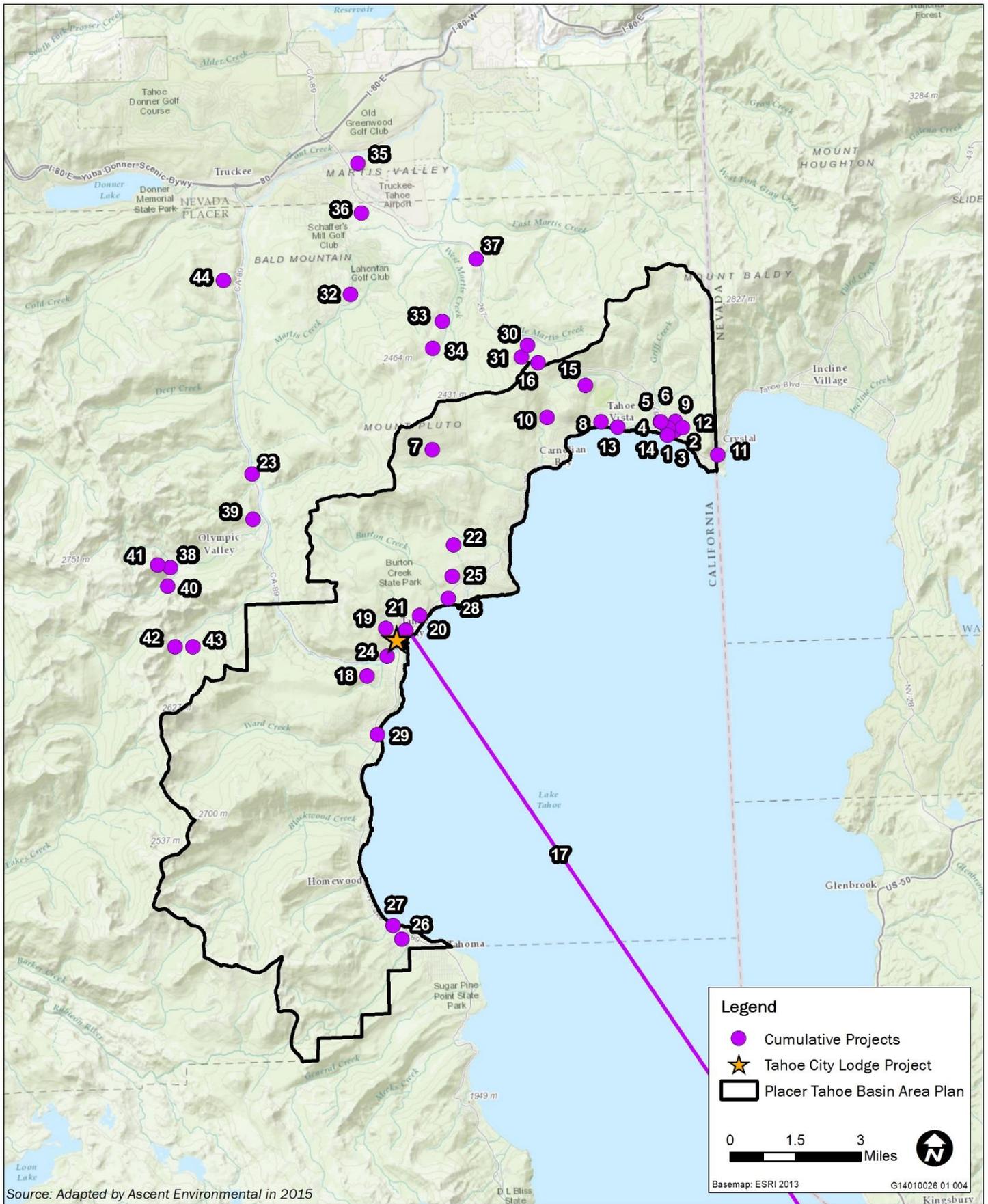


Exhibit 19-1

Future Projects



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