

16 PUBLIC SERVICES AND UTILITIES

16.1 INTRODUCTION

This chapter describes potential effects of the Placer County Tahoe Basin Area Plan (Area Plan) and Tahoe City Lodge project on public services and utilities systems. Public services considered in the analysis include fire protection and emergency services, law enforcement, and schools. Utilities considered include water, wastewater, solid waste, electricity, natural gas, and telecommunications.

As described in Chapter 4, “Approach to the Environmental Review,” this chapter evaluates the Area Plan at a programmatic level—a more general analysis with a level of detail and degree of specificity commensurate with that of the plan itself. Similarly, because the Kings Beach Center design concept lacks sufficient detail for definitive impact analysis, that portion of the project is also evaluated in a programmatic fashion. The Tahoe City Lodge, however, is assessed at a project level in this chapter.

The primary issues raised during scoping that pertain to public services and utilities included:

- ▲ impacts on solid waste disposal;
- ▲ concern regarding the implications of drought and climate change on water supply, including local groundwater supply;
- ▲ increased demand from each alternative, as well as cumulative demand, for water supply;
- ▲ service capacity and response times of fire protection and emergency medical services and project’s compliance with fire safety standards and water needs for fire suppression;
- ▲ capacity of public services and utilities infrastructure, including gas, electricity, telephone, wastewater, and solid waste.
- ▲ when considering density modifications, the existing location and sizing of water and sewer utilities should be considered so as to avoid the need for extensive utility construction when any increased density is utilized in the future.
- ▲ assess capacity of infrastructure for power and utilities such as gas, electricity and phone, police and fire protection, increases in sewage, garbage disposal, etc.

Sources of information used to prepare this section include *Kila Tahoe, LLC, Tahoe City Lodge, Conceptual Utility Design and Services Narrative* (Auerbach Engineering Corporation 2015a); *Kila Tahoe, LLC, Tahoe City Lodge, Conceptual Stormwater Management Plan* (Auerbach Engineering Corporation 2015b); and personal communication with service providers.

Issues related to the effects of climate change on water supply are addressed in Chapter 12, “Greenhouse Gas Emissions and Climate Change.” Water quality, including water quality issues associated with snow storage and removal, is addressed in Chapter 15, “Hydrology and Water Quality.” Parks and recreation resources are addressed in Chapter 17, “Recreation.”

Any development or redevelopment permitted through the Area Plan would be located within existing service areas for communication systems providers. Each project, including the Kings Beach Center design concept, would be responsible for any elected connection or subscription to communication systems within the Tahoe Region, but extension of these services requiring new construction is not expected. Additionally, the

increased development and re-development could stimulate investment in improved broadband service, which was identified as a need in the *Lake Tahoe Basin Prosperity Plan* (Western Nevada Development District [WNDD] 2010). For these reasons, implementation of the Area Plan would not result in the need for new systems, or substantial alterations to existing communication systems. This issue is not discussed further for the Area Plan in this chapter.

16.2 REGULATORY SETTING

16.2.1 Federal

CLEAN WATER ACT

The Clean Water Act (CWA) employs a variety of regulatory and non-regulatory tools to reduce direct pollutant discharges into waterways, finance municipal wastewater treatment facilities, and manage polluted runoff. The U.S. Environmental Protection Agency (EPA) established primary drinking water standards in Section 304 of the CWA. States are required to ensure that the public's potable water meets these standards.

Section 402 of the CWA creates the National Pollutant Discharge Elimination System (NPDES) regulatory program. Point sources must obtain a discharge permit from the proper authority (usually a state, sometimes EPA, a tribe, or a territory). NPDES permits cover various industrial and municipal discharges, including discharges from storm sewer systems in larger cities, stormwater associated with numerous kinds of industrial activity, runoff from construction sites disturbing more than 1 acre, and mining operations. All so-called "indirect" dischargers are not required to obtain NPDES permits. "Indirect" dischargers send their wastewater into a public sewer system, which carries it to the municipal sewage treatment plant, through which it passes before entering any surface water.

SAFE DRINKING WATER ACT

As mandated by the Safe Drinking Water Act (Public Law 93-523), passed in 1974, EPA regulates contaminants of concern to domestic water supply. Such contaminants are defined as those that pose a public health threat or that alter the aesthetic acceptability of the water. These types of contaminants are regulated by EPA primary and secondary maximum contaminant levels (MCLs). MCLs and the process for setting these standards are reviewed every three years. Amendments to the Safe Drinking Water Act enacted in 1986 established an accelerated schedule for setting drinking water MCLs. EPA has delegated responsibility for California's drinking water program to the State Water Resources Control Board Division of Drinking Water (SWRCB-DDW). SWRCB-DDW is accountable to EPA for program implementation and for adoption of standards and regulations that are at least as stringent as those developed by EPA.

TRUCKEE RIVER OPERATING AGREEMENT

The area of Placer County within the Tahoe Basin is located within the Truckee River basin or watershed. In 1990, Congress passed the Truckee-Carson-Pyramid Lake Water Rights Settlement Act (Pub.L. No. 101-618, Title II [Nov. 16, 1990]) (the Settlement Act). The Settlement Act mandated that the States of Nevada and California negotiate an agreement for Truckee River operations and that the resulting operating agreement be promulgated as a federal regulation (Settlement Act Section 205). The Truckee River Operating Agreement (TROA) was developed to formalize, regulate, and monitor water rights and water use within the Tahoe Region, the Truckee River Watershed, and the final outflow areas of Pyramid Lake and the Carson River. The TROA was officially implemented on December 1, 2015.

Two elements of the Settlement Act and the TROA are relevant to new groundwater production and uses within the Truckee River Basin. First, the Settlement Act allocates 32,000 acre-feet annually of total water diversions from all sources – both surface and groundwater – to California for use in the Tahoe Basin

(Settlement Act Section 204[b][1]). In its analysis of predicted water usage in California through 2033, the EIS/EIR for the TROA included water use projections from the California Department of Water Resources (DWR). The TROA EIS/EIR analysis predicted that California's Truckee River basin total water usage (surface and groundwater) would not exceed 22,700 acre-feet annually by 2033 (U.S. Bureau of Reclamation et al. 2008:2-24, Attachment C).

Second, the TROA, includes specifications for new wells constructed in the Truckee River basin. Section 204(c)(1)(B) of the Settlement Act requires that new wells be designed to minimize any short-term surface water streamflow reductions to the maximum extent possible. To that end, TROA section 10.B designates "special zones" and criteria for each of those zones that, if observed, will lead to a presumption of compliance with the Settlement Act's mandate. To ensure that all new wells comply with the Settlement Act, section 10.C.1 of the TROA requires a "Notice of Intent to Construct a Well" to be filed with the TROA Administrator before drilling.

The Area Plan and Tahoe City Lodge do not include proposals to construct any new groundwater wells. Any future development subsequent to the Area Plan that proposes to construct new wells would be subject to the requirements described above.

NATIONAL FIRE PLAN AND 10-YEAR COMPREHENSIVE STRATEGY

The National Fire Plan was developed by the U.S. Department of Agriculture and U.S. Department of the Interior (2000) in response to the need for reducing the risk of wildland fire to communities and the environment, and subsequently, the economic impact from severe wildland fires. Preparation of the National Fire Plan was followed by the creation of the 10-Year Comprehensive Strategy and the 10-Year Comprehensive Strategy – Implementation Plan. Together, these three documents outline the resources necessary to ensure sufficient firefighting capacity for the future, identifies communities at risk from wildland fires, and promotes collaboration between agencies and local communities.

MULTI-JURISDICTIONAL FUELS REDUCTION AND WILDFIRE PREVENTION STRATEGY

The Lake Tahoe Basin Multi-Jurisdictional Fuels Reduction and Wildfire Prevention Strategy (Fuel Reduction Strategy) provides land management, fire, and regulatory agencies with strategies to reduce the probability of a catastrophic fire in the region. The Fuel Reduction Strategy is consistent with the National Fire Plan and the 10-Year Comprehensive Strategy.

The U.S. Forest Service Lake Tahoe Basin Management Unit is the agency with primary responsibility over implementation of the Fuel Reduction Strategy; however, individual land owners and various agencies are responsible for aspects of its implementation. The Fuel Reduction Strategy is a comprehensive plan that combines projects from a variety of sources, as follows:

- ▲ Fuel Reduction and Forest Restoration Plan for the Lake Tahoe Basin Wildland Urban Interface (Tahoe Regional Planning Agency [TRPA] 2007);
- ▲ U.S. Department of Agriculture, Forest Service Stewardship Fireshed Assessment (Bahro et al. 2007);
- ▲ California Department of Forestry and Fire Protection (CAL FIRE) Unit Strategic Fire Plans for the Nevada-Yuba-Placer Unit (CAL FIRE 2015);
- ▲ California Department of Parks and Recreation;
- ▲ California Tahoe Conservancy; and
- ▲ Nevada Tahoe Resource Team representing Nevada Division of State Lands, Nevada Division of Forestry, and Nevada State Parks.

16.2.2 Tahoe Regional Planning Agency

In 1987, TRPA adopted the first Regional Plan for the Lake Tahoe Region to address growth and development and provide a policy guide for decision making. Several components of the Regional Plan address policies and regulations pertaining to public services and utilities: Goals and Policies and Code of Ordinances (Code). TRPA has not established any environmental threshold carrying capacities related to public services and utilities.

LAKE TAHOE REGIONAL PLAN

Goals and Policies

The Public Services and Facilities Element of the TRPA Regional Plan includes goals and policies related to the provision of adequate public services and utilities to meet the needs of existing and new development (Policies PS-2.1, PS-2.3) and protection of surface and groundwater from solid and liquid municipal waste (Policies PS-3.1, PS-3.2; TRPA 2012b:6-3 – 6-4). Additionally, the Air Quality Subelement includes policies that promote replacement of energy inefficient buildings and improve energy efficiency of existing buildings (Policy AQ-1.5; TRPA 2012b:2-32).

Code of Ordinances

Chapter 33, Grading and Construction, of the Code applies to grading, excavation, filling, clearing of vegetation, or disturbance of the soil, and protection of vegetation during construction. In accordance with Section 33.3.4 of this chapter, the methods of disposal of solid or liquid materials, including soil, silt, clay, sand, or other organic or earthen materials, shall be reviewed and approved by TRPA. These methods of disposal shall include, but are not limited to: temporary stockpiling of all or some of the top soil on the site for use on areas to be revegetated; disposal of the material at a location approved by TRPA; or export of the materials outside the region. Provisions of Chapter 33 regarding disposal of construction materials would apply to those portions of the project located within the area under the land use authority of TRPA.

Water Service

Section 32.4 of the Code contains a basic water service requirement for projects proposing a new structure, reconstruction, or expansion of an existing structure, designed or intended for human occupancy, specifically directing that such projects shall have adequate water rights and water supply systems.

If the local fire district has not adopted fire flow standards, Section 32.4.2 of the Code identifies minimum adequate fire flows based on land use type within the Tahoe Basin.

Wastewater Service

Section 32.5 of the Code specifically directs that such projects that would generate wastewater shall be served by facilities for the treatment and export of wastewater from the Tahoe Basin. To be considered served, a service connection shall be required to transport wastewater from the parcel to a treatment plant.

Electrical Service

Section 32.6 of the Code requires that adequate electrical supply shall be served to structures intended for human occupancy.

16.2.3 State

WATER

Urban Water Management Planning Act

The Urban Water Management Planning Act (Water Code Sections 10610 through 10656) requires that every urban water supplier that provides water to 3,000 or more customers or that provides over 3,000 acre-feet of water annually prepare and adopt an urban water management plan. The act states that urban water suppliers should make every effort to ensure the appropriate level of reliability in its water service sufficient to meet the needs of its various categories of customers during normal, dry, and multiple dry years. The act also states that the management of urban water demands and the efficient use of water shall be actively pursued to protect both the people of the state and their water resources.

WASTEWATER

Porter-Cologne Water Quality Control Act of 1970

The Porter-Cologne Water Quality Control Act of 1970 prohibits the use of reclaimed wastewater within the Tahoe Basin. Wastewater is transported out of the basin through the Truckee River Interceptor (TRI) operated by the Tahoe-Truckee Sanitation Agency (T-TSA) to the T-TSA wastewater treatment plant in Truckee, and no reclaimed water is imported back into the basin.

SOLID WASTE

California Integrated Waste Management Act

To minimize the amount of solid waste that must be disposed of in landfills, the State Legislature passed the California Integrated Waste Management Act of 1989 (AB 939), effective January 1990. According to AB 939, all cities and counties were required to divert 25 percent of all solid waste from landfill facilities by January 1, 1995 and 50 percent by January 1, 2000. Solid waste plans are required to explain how each city's AB 939 plan will be integrated with the county plan. In order of priority, the plans must promote source reduction, recycling and composting, and environmentally safe transformation and land disposal.

In 2011, AB 341 modified the California Integrated Waste Management Act, established a statewide recycling goal of 75 percent, and directed CalRecycle to develop and adopt regulations for mandatory commercial recycling. The resulting Mandatory Commercial Recycling Regulation (CalRecycle 2012) requires that on and after July 1, 2012, certain businesses that generate four cubic yards or more of commercial solid waste per week shall arrange for recycling services. To comply with this requirement, businesses may either separate recyclables and self-haul them or subscribe to recycling service, or subscribe to a recycling service that includes mixed waste processing. The Eastern Regional MRF is a mixed waste processing facility.

AB 1826 (Chapter 727, Statutes of 2014 [Chesbro, AB 1826]; Mandatory Commercial Organics Recycling) requires businesses and multifamily residential dwellings of five or more units that generate a specified amount of organic waste per week to arrange for recycling services for that waste, requires jurisdictions to implement recycling programs to divert organic waste from businesses subject to the law, and requires periodic reporting to CalRecycle by jurisdictions on their progress in implementing the program. Organic waste includes food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste. Multifamily complexes are not required to recycle food waste. Effective April 1, 2016, businesses that generate 8 cubic yards of organic waste per week shall arrange for organic waste recycling services. Effective January 1, 2017, businesses that generate 4 cubic yards of organic waste per week shall arrange for organic waste recycling services. Placer County has established a mandatory commercial organics recycling program for the county.

ENERGY

California Environmental Quality Act

Under Appendix F of the State CEQA Guidelines, the State of California sets forth goals for energy conservation, including decreasing per capita energy consumption and reliance on fossil fuels and increasing reliance on renewable energy sources. CEQA requires EIRs to describe potential energy impacts of projects, with an emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy (Public Resources Code [PRC] Section 21100[b][3]).

California Code of Regulations, Energy Efficiency Standards

Energy consumption in new buildings in California is regulated by State Building Energy Efficiency Standards (CALGreen) contained in the California Code of Regulations, Title 24, Part 2, Chapter 2-53. Title 24 applies to all new construction of both residential and nonresidential buildings, and regulates energy consumed for heating, cooling, ventilation, water heating, and lighting. The 2013 Building Energy Efficiency Standards have improved efficiency requirements from previous codes and the updated standards are expected to result in a statewide energy consumption reduction.

Effective January 1, 2011, CALGreen became California's first green building standards code. It is formally known as the California Green Building Standards Code, Title 24, Part 11, of the California Code of Regulations. CALGreen establishes mandatory minimum green building standards and includes more stringent optional provisions known as Tier 1 and Tier 2. Cities and counties, at their discretion, may adopt Tier 1 or Tier 2 as mandatory, or adopt and enforce other standards that are more stringent than the CALGreen Code. Placer County has adopted several modifications to both the residential and non-residential CALGreen mandatory sections.

FIRE RESPONSE AND EMERGENCY SERVICES

Uniform Fire Code

The Uniform Fire Code (UFC) contains regulations related to construction, maintenance, and use of buildings. Topics addressed in the UFC include fire department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, hazardous materials storage and use, provisions intended to protect and assist fire responders, industrial processes, and many other general and specialized fire-safety requirements for new and existing buildings and the surrounding premises. The UFC contains specialized technical regulations related to fire and life safety.

California Occupational Safety and Health Administration

In accordance with California Code of Regulations, Title 8 Sections 1270 "Fire Prevention" and 6773 "Fire Protection and Fire Fighting Equipment," the California Occupational Safety and Health Administration has established minimum standards for fire suppression and emergency medical services. The standards include guidelines on the handling of highly combustible materials, fire hose sizing requirements, restrictions on the use of compressed air, access roads, and the testing, maintenance and use of all firefighting and emergency medical equipment.

California Health and Safety Code

State fire regulations are set forth in Sections 13000 et seq. of the California Health and Safety Code, which includes regulations for building standards (as set forth in the California Building Code), fire protection and notification systems, fire protection devices such as extinguishers, smoke alarms, high-rise building, childcare facility standards, and fire suppression training.

State Responsibility Areas Fire Safe Regulations

CAL FIRE implements statewide laws aimed at reducing wildfire hazards in wildland-urban interface areas. The laws are based on fire hazard assessment and zoning. The laws apply to State Responsibility Areas

(SRAs), which are defined as areas of the state in which the state has primary financial responsibility for preventing and suppressing fires, as determined by the State Board of Forestry pursuant to Sections 4125 and 4102 of the California PRC. The Plan area does contain SRAs (see Exhibit 18-1). The applicable regulations address fire prevention and minimum fire safety standards related to defensible space for new construction in SRAs (California Code of Regulations, Title 14, Sections 1270 through 1299). Fire safe regulations address road standards for fire equipment access, standards for signage, minimum water supply requirements for emergency fire use, and fuel breaks and greenbelts, among others. Fire protection outside SRAs is the responsibility of federal or local jurisdictions. These areas are referred to by CAL FIRE as Federal Responsibility Areas and Local Responsibility Areas, respectively.

Government Code Section 66474.02

Before approving a tentative map (or a parcel map where a tentative map is not required) for an area located in an SRA or a very high fire hazard severity zone, the legislative body of the county must find that: the design and location of each lot in the subdivision, and the subdivision as a whole, are consistent with any applicable regulations adopted by CAL FIRE pursuant to PRC Sections 4290 and 4291; structural fire protection and suppression services will be developed; and ingress and egress meets the road standards for fire equipment access adopted pursuant to PRC Section 4290 and any applicable local ordinance.

SCHOOLS

Leroy F. Greene School Facilities Act of 1998

The Leroy F. Greene School Facilities Act, passed as SB 50 in 1998, placed limitations on cities and counties with respect to mitigation requirements for school facilities. SB 50 permits school districts to levy fees, based on justification studies, for the purposes of funding construction of school facilities, subject to established limits. The limits were set in 2000, can be adjusted annually for inflation, and can be levied based on the square footage of residential (up to \$1.93 per square foot in 2000) and commercial-industrial square footage (up to \$0.31 per square foot in 2000).

16.2.4 Local

PLACER COUNTY GENERAL PLAN

The Placer County General Plan (2013) identifies goals, policies, and implementation measures that guide growth and development within Placer County. Goals and policies related to the provision of public services and utilities are included in the Public Facilities and Services Element.

The Public Facilities and Services Element of the Placer County General Plan includes a number of goals and policies intended to ensure the timely development of public facilities and maintenance of service levels for these facilities (Goal 4.A). Specific policies require the county to ensure that adequate public facilities are available to serve new development and that where new public facilities are required, that new development funds its fair share of the construction of those facilities (Policies 4.A.1, 4.A.2). Additionally, the county requires new development to pay its fair share of the cost of all existing public facilities or upgrades to existing public facilities it would use based on the demand for these facilities attributable to the new development (Policies 4.B.1, 4.B.2, 4.B.3). New development is required to demonstrate the availability of a long-term, reliable water supply (Policy 4.C.1) and development in rural and urban communities should rely on public water systems where available (Policy 4.C.2). The General Plan includes requirements for new developments to demonstrate that either existing services are available or needed improvements will be made prior to occupancy (Policy 4.D.3) and developments needing new connections shall pay their fair share of the cost for future public wastewater facilities based on the demand for facilities attributable to the new development (Policy 4.D.5).

The General Plan includes a series of policies that address solid waste collection and services. These goals and policies are intended to ensure safe and efficient disposal or recycling of solid waste (Goal 4.G and Policy 4.G.1), promote recycling and solid waste source reduction (Policy 4.G.2), and require new development to comply with the Placer County Integrated Waste Management Plan (Policy 4.G.7).

It is the goal of the county to provide adequate law enforcement and fire protection services in the county (Goals 4.H and 4.I). Specific policies require that the county strive to maintain staffing ratios, standards, and response times set forth in the General Plan and require new development to fund facilities that maintain these standards (Policies 4.H.1, 4.H.2, 4.H.4, 4.I.1, 4.I.2, 4.I.3).

It is the goal of the county to provide for the educational needs of Placer County residents (Goal 4.J). Specific policies encourage the county to plan and approve residential uses in areas that are most accessible to school sites and includes schools among those public facilities and services that are considered an essential part of the infrastructure that should be in place as development occurs, and should designate existing and future school sites in community plans and specific plans to accommodate school district needs (Policies 4.J.5, 4.J.6, 4.J.7).

PLACER COUNTY CODE

Placer County Code Section 15.04.710 includes minimum fire flow standards.

TAHOE CITY PUBLIC UTILITY DISTRICT CODE

In the Tahoe City Public Utility District (TCPUD) Code, the Water Ordinance provides standards for water system design, development, repair, and construction, including extension of water system facilities. The Water Ordinance also establishes charges for services and outlines the approval process for adding new service connections. The Water Conservation Requirements Ordinance requires the use of approved water-saving devices in all new and existing structures within the district, including hotels. The purpose of the TCPUD Sewer Ordinance is to provide the public with an accessible document that identifies requirements and guidelines applicable to all sanitary sewer facility construction and maintenance within the TCPUD boundaries. The Sewer Ordinance also establishes charges for services and provides a method for their collection.

NORTH TAHOE PUBLIC UTILITY DISTRICT CODE

In the North Tahoe Public Utilities District (NTPUD) Code, the Water Ordinance provides standards for water system design, development, repair, and construction, including extension of water system facilities. Water-saving devices are required in all new and existing structures served by the district. The Water Ordinance also establishes charges for services and outlines the approval process for adding new service connections. The NTPUD Sewer Ordinance identifies requirements and guidelines applicable to all sanitary sewer facility construction and maintenance within its boundaries. The Sewer Ordinance also establishes charges for services and provides a method for their collection.

NORTH TAHOE FIRE PROTECTION DISTRICT

The North Tahoe Fire Protection District (NTFPD) has adopted Ordinance 03-2013, which adopts the 2013 California Fire Code and some portions of the 2012 International Fire Code, with amendments applicable to the district and prescribes regulations for protecting life and property from fire, hazardous materials, or explosion. Included within the ordinance and fire code are requirements for number, spacing, and water systems for firefighting. Section 4905 of the ordinance identifies requirements for roof construction in wildland-urban interface fire areas.

NTFPD has also adopted National Fire Protection Association (NFPA) 1710 for the minimum acceptable requirements for how fire, emergency medical services, and special operations are organized and deployed

in departments that are substantially career. The NFPA 1710 recommended policy for career fire departments with urban/suburban population densities is four minutes of travel for the first-due fire apparatus and eight minutes of travel for multiple apparatus to serious incidents. The recommended staffing is four to fifteen firefighters for all of the needed units. NTFPD has committed to achieve the NFPA 1710 Assembly standard of having 14 firefighters and support personnel on the scene of a structure fire within eight minutes 90 percent of the time (NTFPD n.d.:14).

NTFPD receives mitigation fees associated with new construction that are used for costs associated with recovery of fire and life safety activities. Additional revenue is received through developer agreements and federal grants provide funding that are used for providing additional fire equipment and infrastructure that helps NTFPD in working to achieve the NFPA 1710 standards. NTFPD implements voter-approved Community Facilities District (CFD) No. 2012-1 (Ladder Truck O&M), which requires larger, taller buildings/structures and dense developments to join the CFD and provide funding. The purpose of this CFD is to provide funding of an aerial apparatus which is designed to provide greater fire suppression capabilities for these types of commercial developments (Schwartz, pers. comm., 2016).

16.3 ENVIRONMENTAL SETTING

16.3.1 Water

Drinking water for the Placer County portion of the Tahoe Basin comes primarily from Lake Tahoe itself, local streams, smaller nearby lakes, and groundwater. Lake Tahoe is the largest alpine lake in North America and the second deepest lake in the United States containing an estimated 40 trillion gallons of water (122 million acre-feet). The source of water for Lake Tahoe is precipitation that falls either directly into the Lake or drains from one of the 63 sub-watersheds located within the Tahoe Basin.

The two largest water providers in the Placer County portion of the Tahoe Basin are NTPUD and TCPUD. Additionally, a number of smaller public and private water companies provide drinking water to specific areas within district boundaries. These include:

- ▲ Agate
- ▲ Bay Water Company
- ▲ Fulton Water Company
- ▲ Lakeview Water Company
- ▲ Madden Creek Water Company
- ▲ McKinney Estates Water District (public)
- ▲ Skyland/Nielsen Water Company
- ▲ Tahoma Meadows Water Company
- ▲ Tahoe Park Water Company
- ▲ Tahoe Pines/Tahoe Swiss Village Water Company
- ▲ Tahoe Cedars Water Company
- ▲ Talmont Resort Improvement District (public)
- ▲ Ward Well Water Company
- ▲ Washoe Heights Water Company

As described above under Section 16.2.1, “Truckee River Operating Agreement,” diversions of water for use within the Tahoe Basin from all natural sources, including groundwater, and under all water rights in the Tahoe Basin are limited to 32,000 acre-feet per year (afy), with 22,700 afy allocated to users in California.

NORTH TAHOE PUBLIC UTILITY DISTRICT

NTPUD relies almost entirely on surface water for its drinking water supply. About 90 percent of water supplies come from surface water diversions from Lake Tahoe, with the remaining supply coming from groundwater wells. The NTPUD water supply system is comprised of three lake intakes, groundwater wells, eight storage facilities (with approximately 3.5 million gallons of storage), three booster systems, and forty-five miles of water lines. Only one of the lake intakes—National Avenue intake—is currently in operation (NTPUD 2013a:7). NTPUD currently serves 3,872 water connections and all water connections within NTPUD service area are metered.

The district operates three separate and independent water systems including Dollar Cove, Carnelian Bay, and the Tahoe Main system. The Tahoe Main system has 3,326 connections and serves the communities of Kings Beach and Tahoe Vista. It draws water from Lake Tahoe, as well as from a groundwater well located in the North Tahoe Regional Park. Water pumped from Lake Tahoe is treated at the National Avenue Water Treatment Plant, and provides approximately 90 percent of the water produced by the district. The Carnelian system serves the community of Carnelian Bay and receives its water from a groundwater well. The Carnelian system has 273 connections. The Dollar Cove system serves the community of Dollar Cove and purchases water from TCPUD. Dollar Cove has 273 connections.

As described above, the California Urban Water Management Planning Act (Division 6 Part 2.6 of the Water Code Section 10610-10656) requires each urban water supplier with 3,000 or more connections, or which supplies at least 3,000 afy of water, to submit an Urban Water Management Plan (UWMP) to the California Department of Water Resources (DWR) every five years. The Act requires urban suppliers to report, describe, and evaluate water deliveries and uses, water supply sources and reliability, efficient water uses, water shortage contingency planning, and demand management measures, including implementation schedules and strategy. The UWMP considers water demand and supply planning over a 20-year time horizon, including supply and demand comparisons for normal, single dry, and multiple dry years.

As reported in NTPUD's 2010 UWMP, gross water demand in the district was 1.8 million gallons per day (mgd), which is projected to increase to 3.2 mgd by 2030. In 2010, approximately 90 percent of water deliveries were for residential uses, 6 percent for commercial-hotel/resorts, 2 percent for irrigation, and 2 percent for fire. NTPUD plans to meet 2030 water demand using existing water supply sources. Additionally, the Dollar Cove Lake intake, which is currently inactive, can supply 240 gallons per minute (gpm), if necessary. NTPUD recently completed a new 1.3-million-gallon water storage tank off of SR 267 in Kings Beach at the end of Canterbury Drive. This tank serves as added water storage and supports wildfire suppression efforts. NTPUD's annual existing and planned water demand and sources of supply to meet that demand are shown in Table 16-1. NTPUD has combined surface and groundwater rights of 5,873 afy (Stelter, pers. comm. 2016).

Table 16-1 NTPUD Current and Planned Annual Water Demand and Sources of Supply¹

Water Supply Source	2010 (af [mg]) ²	2015 (af [mg])	2020 (af [mg])	2025 (af [mg])	2030 (af [mg])
National Avenue Lake Intake	1,322 (431)	1,586 (517)	1,903 (620)	2,284 (744)	2,741 (893)
Park (Well)	18 (6)	21 (7)	26 (9)	31 (10)	37 (12)
Carnelian System (Well)	67 (22)	81 (26)	97 (32)	116 (38)	140 (46)
Dollar Cove System (Well)	78 (25)	93 (30)	112 (36)	135 (44)	161 (52)
Total Supply by Source³	1,485 (484)	1,782 (580)	2,138 (697)	2,566 (836)	3,079 (1,003)
Additional Water Uses and Losses ⁴	515 (168)	618 (201)	742 (242)	890 (290)	1,068 (348)
Total Water Demand	2,000 (652)	2,400 (781)	2,880 (939)	3,456 (1,126)	4,147 (1,351)

¹ The annual water growth rate of 0.74% from the NTPUD Water Master Plan was used to determine planned water supplies for 2015-2030.

² af = acre-feet; mg = million gallons. 1 acre-foot = 325,851 gallons

³ Based on actual and projected deliveries only. NTPUD has combined surface and groundwater rights of 5,873 afy.

⁴ Includes system flushing, leak repair flushing, hydrant leaks, street sweeping, and known leaks that are subsequently repaired.

Source: Adapted from NTPUD 2013a.

TAHOE CITY PUBLIC UTILITY DISTRICT

In contrast to NTPUD, TCPUD relies almost entirely on groundwater sources for its drinking water supply. Until the late 1980s, TCPUD relied mostly on surface water diversions from Lake Tahoe; however, the district has since reduced its dependence on Lake Tahoe and now relies almost entirely on groundwater wells for its drinking water supply. About 95 percent of water supplies come from groundwater sources, with the remaining water supply coming from surface water diversions from Lake Tahoe (TCPUD 2011:4-1).

TCPUD currently serves water to approximately 3,910 connections and provides water to an area that extends from Dollar Point to Rubicon (near Meeks Bay). The TCPUD service area consists of five separate and distinct sub-regional water systems including Tahoe City Main, McKinney/Quail, Alpine Peaks, Tahoe-Truckee Forest Tract, and Rubicon (located in El Dorado County) (TCPUD 2011:2-1).

In 2017, TCPUD anticipates constructing a permanent, year-round drinking water treatment plant to replace the temporary seasonal treatment plant located at Chambers Landing. The new water treatment plant will provide a reliable, drought-resistant, and safe drinking water source to the TCPUD McKinney-Quail Water Service Area and, potentially, other water systems on the West shore. The West Lake Tahoe Regional Water Treatment Plant will use water from Lake Tahoe, the same source used by the temporary treatment plant it is replacing (TCPUD 2016b).

Other planned projects for TCPUD that would upgrade existing infrastructure, provide additional water storage, and allow for additional backup water supplies include (TCPUD 2016a:3 - 8, 10, 14):

- ▲ Bunker Water Tank Replacement
- ▲ Tahoe City Well Replacement
- ▲ Tahoe City Main Emergency Water Supply
- ▲ Service Line Replacements
- ▲ Lower Highlands Booster Pump Station Improvements

In 2010, the district's gross water demand was 462 million gallons (approximately 1.3 mgd), which is projected to increase to 493 mg (approximately 1.4 mgd) by 2030. Future surface water supply development is planned for the Tahoe City Main system, which will include a reconstructed lake intake and treatment plant that will supply approximately 1,000 gpm. TCPUD's annual existing and planned water demand and sources of supply are shown in Table 16-2. TCPUD maintains legal water rights to divert over 1,000 af of surface water from Lake Tahoe and surrounding areas (Lalotis, pers. comm. 2016).

Table 16-2 TCPUD Current and Planned Annual Water Demand and Sources of Supply

Water Supply Source	2010 (af [mg]) ¹	2015 (af [mg])	2020 (af [mg])	2025 (af [mg])	2030 (af [mg])
Groundwater	1,341 (437)	1,341 (437)	1,341 (437)	1,341 (437)	1,341 (437)
Surface Water ²	68 (22)	107 (35)	552 (180)	552 (180)	552 (180)
Purchased	9 (3)	9 (3)	9 (3)	9 (3)	9 (3)
Total Water Supply by Source³	1,417 (462)	1,458 (475)	1,902 (620)	1,902 (620)	1,902 (620)
Water Deliveries	1,148 (374)	1,163 (379)	1,182 (385)	120 (391)	1,218 (397)
Sales to Other Water Agencies ⁴	77 (25)	83 (27)	89 (29)	95 (31)	101 (33)
Additional Water Uses and Losses ⁵	193 (63)	193 (63)	193 (63)	193 (63)	193 (63)
Total Water Demand	1,417 (462)	1,439 (469)	1,464 (477)	1,488 (485)	1,513 (493)

¹ af = acre-feet; mg = million gallons. 1 acre-foot = 325,851 gallons.

² The increase in surface water supply between 2015 and 2020 is a result of the planned surface water source addition to the Tahoe City Main System.

³ Based on actual and projected deliveries only. TCPUD maintains legal water rights to divert over 1,000 af of surface water from Lake Tahoe and surrounding areas.

⁴ Includes water supplied to Lake Forest Water Company (only through 2010) and NTPUD.

⁵ Includes system flushing, leak repair flushing, hydrant leaks, leaking valves and leaking pipes.

Source: TCPUD 2011: 3-6 through 3-8, 4-1, 4-2

With the exception of summer surface water diversions to augment supply in the McKinney/Quail System, TCPUD currently relies on groundwater to meet normal demands. Due to restricted growth in the service area, future demands are expected to increase only slightly due to growth restrictions in the service area (TCPUD 2011:3-5). TCPUD anticipates that there is sufficient supply to meet future water demand, including during single dry and multiple dry years (TCPUD 2011:5-2).

16.3.2 Wastewater

Wastewater in the Placer County portion of the Tahoe Basin is collected by NTPUD, TCPUD, and T-TSA. T-TSA also provides wastewater treatment services.

Within the Tahoe Basin, the use of septic tanks is prohibited. All sewage generators in the Tahoe Basin are required to be connected to an existing wastewater system. Currently, all collected raw sewage is conveyed out of the Tahoe Basin through a large diameter gravity pipeline known as TRI, which is owned and operated by T-TSA.

NORTH TAHOE PUBLIC UTILITY DISTRICT

The NTPUD Utility Operations Department provides wastewater collection and conveyance services to an area covering 6.5 square miles, including Kings Beach, Brockway, Tahoe Vista, and surrounding areas. The NTPUD sanitary sewer collection system consists of approximately 75 miles of gravity sewer pipe, 7 miles of force main, and 20 pump stations (NTPUD 2013b:8-1). Numerous pumping stations are required to transport the sewage from a number of small communities. Sewage flows in gravity collection lines toward the Lake where it is collected and pumped east to west through one or more main pump stations.

NTPUD serves over 5,000 customers with 4,010 sewer line connections. In 2014, the average daily flow to the T-TSA Water Reclamation Plant (WRP) (the wastewater treatment plant, see discussion below) was 0.72 mgd. The maximum flow to the WRP is 6 mgd (NTPUD 2016). The existing collection system pipeline network has pipeline diameters large enough to convey historic and future sewage flows based on potential growth (NTPUD 2013b:8-8).

TAHOE CITY PUBLIC UTILITY DISTRICT

TCPUD provides wastewater collection and conveyance services to an area covering 22 square miles stretching from D.L. Bliss State Park to the Dollar Point area, extending north from Tahoe City to the Placer/Nevada County line just south of Truckee town limits. The district's sanitary sewer collection system consists of over 150 miles of sewer pipe, 2,300 manholes, and 20 lift stations (TCPUD 2014:4-1). TCPUD serves 7,540 sewer connections within the district. The average daily flow to WRP between 2005 and 2013 was 0.8 mgd (TCPUD 2014:8-9).

Over time the flows appear to be decreasing, particularly since 2006. According to the *TCPUD Risk-Based Sewer System Management Plan*, there are no known hydraulic capacity limitations within the collection system during dry weather or during peak wet weather events. Due to the growth limitations established by TRPA, TCPUD anticipates its collection system will not be exceeded by the current or projected buildout flows (TCPUD 2014:8-10 – 8-11).

TAHOE-TRUCKEE SANITATION AGENCY

T-TSA is located in Martis Valley, east of the town of Truckee in Nevada County. T-TSA plans, administers, and coordinates wastewater treatment and disposal services throughout the North Shore and West Shore of Lake Tahoe, as well as the town of Truckee. T-TSA works with five-member sewage collection districts including TCPUD and NTPUD within the Placer County portion of the Tahoe Basin and Alpine Springs County Water District, Squaw Valley Public Service District, and Truckee Sanitary District outside of the Tahoe Basin.

T-TSA operates the 17-mile Truckee River Interceptor pipeline (TRI), which transports wastewater to the WRP, also located in Martis Valley. The TRI is composed of a series of segments of pipelines of different sizes and depths resulting in varying capacities throughout the TRI extending from Tahoe City to the WRP. The reinforced concrete pipe sewer that comprises the TRI varies in diameter from 18 inches to 42 inches (T-TSA 2016). Currently, there is limited capacity in the Truckee River Interceptor in the section that collects

flows from the North Shore, West Shore, and customers in the vicinity of Squaw Valley; this could lead to capacity issues in the TRI in the future (Parker, pers. comm., 2015a).

The T-TSA WRP provides primary and secondary wastewater treatment, phosphorus removal, biological nitrogen removal, disinfection, and filtration. The facility has a capacity of 9.6 mgd based on a seven-day dry weather average flow basis (Parker, pers. comm., 2015b). To date, the maximum recorded 7-day average flow over the summer months was 6.4 mgd in July of 2011. Based on this information, the remaining available capacity at the treatment plant is estimated to be 3.2 mgd. Additional wastewater storage capacity is provided in the T-TSA system by the storage ponds located between Riverview Park and the Truckee River, which store excess wastewater flows during peak periods (T-TSA 2009).

16.3.3 Solid Waste

Tahoe Truckee Sierra Disposal (TTSD) provides solid waste collection services in the Plan area and operates the Eastern Regional Materials Recovery Facility (MRF) and Transfer Station under contract with Placer County. TTSD collects residential recycling through their Blue Bag Program and takes it to the MRF, with all solid waste loads collected in eastern Placer County. The MRF, located 3 miles south of Truckee on Cabin Creek Road, separates and recycles marketable materials from the waste stream, such as paper, cardboard, plastics, wood waste, metals, and glass, from municipal solid waste and construction waste. The facility also receives and recycles source-separated wood waste, pine needles, white goods (refrigerators, freezers, washers, ranges, water heaters), and inert materials. The MRF includes a buy-back facility, where source-separated recyclables from residents and commercial recyclers are accepted, and a permanent Household Hazardous Waste Facility that accepts hazardous wastes from households and other small-quantity generators. The MRF also acts as a transfer station. After separation of recyclables, residual solid waste is transported to the Lockwood Regional Landfill in Storey County, Nevada (TTSD 2015).

The MRF is permitted to receive 800 tons of material and 832 vehicles daily (White, pers. comm., 2015). The entire facility receives an average of 257 tons of material per day (Wallace, pers. comm., 2015). TTSD sends six to nine loads per day on transfer trucks to Lockwood Landfill. Each truck has a capacity of 108 yards. An estimated 20 to 22 tons per day are sent to Lockwood from the MRF (Carollo, pers. comm., 2015).

The Lockwood Regional Landfill covers approximately 856 acres and accepts Class 1 solid waste (municipal solid waste) and Class III solid waste (waste tires and certain types of construction waste). The most recent permit for the Lockwood Regional Landfill was issued by the Nevada Department of Environmental Protection (NDEP) in December 2013. The permitted design summary indicates a total of 865.5 acres of Class I disposal area and 40 acres of Class III disposal area with a combined disposal capacity of 265 million cubic yards (NDEP 2013). As permitted, the remaining life of the landfill is 150 years. Currently, the landfill receives an average of 4,000 tons of solid waste each day, but this can vary depending on the season (Anderson, pers. comm., 2015).

16.3.4 Energy

Liberty Utilities provides electricity for the Placer County portion of the Tahoe Basin, including the Tahoe City Lodge project site. The lodge project site contains two electrical transformers.

The California Pacific Electric Company, LLC, an element of Liberty Utilities, has received approval to upgrade infrastructure between the North Shore, Truckee, and Martis Valley to improve reliability of electricity supply. Construction of this project began in summer 2015 and will be constructed in three phases over an estimated 6-year period. Phase 1 includes upgrading the 650 line, located between Martis Valley and the Northstar Substation and generally following SR 267, from 60 kilovolts (kV) to 120 kV. Additionally, Phase 1 will include replacing old wooden poles with steel poles. Phase 2 would involve modifications to the Truckee, Northstar, and Kings Beach Substations to accommodate the higher voltage in the 650 line, which are

scheduled for construction after Phase 1 is completed. Phase 3, which would involve rebuilding the 625 line between Kings Beach and Tahoe City and modifications to the Squaw Valley and Tahoe City substations, is not yet approved. Approval and permitting of this phase would be sought at such time as warranted by demand (Liberty Utilities 2015b).

Southwest Gas Corporation provides natural gas services to over 14,000 connections in the Plan area. High pressure distribution pipelines are generally located along State Route (SR) 267, SR 89, and down SR 28 extending to Homewood. Additional natural gas distribution pipelines are located throughout the developed portions of the Plan area (Dagerman, pers. comm., 2016).

16.3.5 Telecommunications

Charter Spectrum and AT&T provides telecommunications services, including telephone, internet, and television, in the Plan area.

16.3.6 Fire Protection

NORTH TAHOE FIRE PROTECTION DISTRICT

The Placer County portion of the Tahoe Basin is served by NTFPD, which provides service to an area that covers 20 square miles (Tahoe Fire and Fuels Team [TFFT] 2015:5 – 6). The service area includes the communities of Kings Beach, Tahoe Vista, Carnelian Bay, Dollar Point, Tahoe City, Sunnyside, Homewood and a portion of Tahoma. Most residences in the NTFPD are within 3 miles of a staffed fire station (TFFT 2015:7). The exceptions are Talmont, Pineland, King's Way, and the west side of Ward Creek Boulevard.

NTFPD is an all-risk fire protection district with structure fire, wildland fire, emergency medical services, water rescue, and high angle rescue capabilities. The NTFPD has six fire stations, located in Alpine Meadows, Tahoe City, Homewood, Dollar Hill, Carnelian Bay, and Kings Beach. These stations are staffed by 50 uniformed and support personnel.

The fragmented water systems serving communities in the NTFPD are a primary limiting factor for the NTFPD's fire response capability. As described above, there are multiple water purveyors serving the NTFPD; however, many of these have inadequate infrastructure (e.g., no fire hydrants) to reliably deliver required flows for firefighting (TFFT 2015:7). Therefore, NTFPD uses water tenders to bring in water for fire suppression in these areas (Schwartz, pers. comm., 2016).

Additionally, many of the communities served by NTFPD are surrounded by wildland fuels on multiple sides and often have a single road for ingress and egress. These isolated communities with poor access present particular challenges to fire suppression personnel. Even evacuating the community during an event is very difficult. NTFPD has begun to address this problem by completing fuels reduction projects around most of the at-risk communities and by assisting with the creation of defensible space (TFFT 2015:7).

The district's current Insurance Services Office (ISO) rating within the new Public Protection Classifications established in 2014 is 4/4y, which is equivalent to the former rating of 8. (Similar to the former ISO ratings system, a rating of 1 means superior service and 10 means minimum standards are not met.) For the split classification, the first number is the class that applies to properties within 5 road miles of the responding fire station and 1,000 feet of a creditable water supply, such as a fire hydrant. The second number is the class that applies to properties within 5 road miles of a fire station but beyond 1,000 feet of a creditable water supply (ISO 2014). ISO ratings are challenging for the district to maintain because the rating is based on fire department capacity and response, water supply, and dispatch and the district only has control over one of these factors (Schwartz, pers. comm., 2016).

NTPFD participate in automatic aid agreements with surrounding fire districts, which include Squaw Valley Fire Department and North Lake Tahoe Fire Protection District. These automatic aid agreements allow neighboring districts to respond to emergencies that are within the service area of another service provider without having to get additional approval. These agreements are very important in addressing fire protection and emergency services needs within NTPFD and these neighboring districts (Schwartz, pers. comm., 2016).

16.3.7 Law Enforcement

Law enforcement in the Placer County portion of the Tahoe Basin is provided by the Placer County Sheriff's Office. The Tahoe Substation is located in Tahoe City (2501 North Lake Boulevard). The Tahoe Substation covers the portion of Lake Tahoe from the California/Nevada state line on SR 28 west to the Nevada County line in Truckee and south on SR 89 to the El Dorado County line in Tahoma. The station also covers SR 267 from Kings Beach to the Nevada County line in Truckee, as well as a small portion of Donner Lake.

The Tahoe Substation has over 40 positions, including one field operations lieutenant, 18 patrol deputies, six patrol sergeants, four detectives, one detective sergeant, and one problem-oriented deputy (neighborhood disputes and Placer County code violations), and is commanded by a Sheriff's Captain. Some services provided by the Tahoe Substation include search and rescue coordination, boat patrol, and bike patrol during special events (Placer County Sheriff's Office 2016). There are typically three deputies and one sergeant on patrol from this station. To address the increase in visitors to the area, an additional officer is on patrol from this station on the 4th of July (Weaver, pers. comm., 2015). Additional officers are also added for large special events (e.g., concerts). Response times for service calls can range between five and 30 minutes, depending on the time of year and the location of an officer in proximity to the call (Walsh, pers. comm., 2015). In practice, staffing needs for a substation are based on existing operational need instead of adhering to the 1.2:1,000 staffing ratio used by the department for planning purposes throughout the county (Giacomini, pers. comm., 2016).

Average response times to emergency calls vary depending on location in the Placer County portion of the Tahoe Basin. Currently, response times to high priority calls range between approximately 5 minutes and 10 minutes for the areas between Sunnyside and the California and Nevada state line, which meets the county standard for calls in rural areas. The average response time to high priority calls in the portion of the county south of Sunnyside is just under 16 minutes, which meets the county standard for calls in remote rural areas (Giacomini, pers. comm., 2016).

16.3.8 Schools

The Plan area is served by the Tahoe Truckee Unified School District (TTUSD). Schools in the Plan area are identified in Table 16-2. These schools currently have substantial available student enrollment capacity.

Table 16-2 Public Schools that Serve the Area Plan

School	Total Enrollment (2013-2014)	Total Capacity	Remaining Available Capacity
Kings Beach Elementary School	375	432	57
Tahoe Lake Elementary School	322	356	34
North Tahoe School	406	588	182
North Tahoe High School	326	591	265
Cold Stream Alternative School	14	80	66

Source: TTUSD 2014:17-18; Education Data Partnership 2015

16.4 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

16.4.1 Methods and Assumptions

The following analysis considers how implementation of the Area Plan and Tahoe City Lodge project alternatives would affect the above-referenced public services and utilities. Stormwater drainage and water quality are addressed in Chapter 15, “Hydrology and Water Quality.” Recreation-related issues are addressed in Chapter 17, “Recreation.”

Auerbach Engineering was contracted by the applicant of the Tahoe City Lodge to provide public utilities demand estimates for water, wastewater, electricity, and natural gas (Auerbach Engineering 2016). Auerbach Engineering performed an analysis of the utility service impacts expected from the proposed improvements. To complete the analysis, Auerbach reviewed the Tahoe City Lodge project documents dated February 1, 2016, reviewed existing site conditions, building and systems, and researched historical comparative energy consumption data for similar projects. Estimates used industry standard data, combined with comparative analysis to similar projects in the area.

WATER SUPPLY

Additional water demand at buildout of each of the Area Plan alternatives was conservatively estimated. Area Plan Alternatives 1 and 3 would have the highest levels of growth with regard to population and residential units, including full-time occupied units. Owing to the potential CFA to TAU conversion, Alternatives 2 and 4 would have the highest amount of CFA, and Alternative 1 would have the highest number of TAUs (see Chapter 6, “Population and Housing, Table 6-8). Water demand factors were derived from the TCPUD and NTPUD UWMPs and other recent water demand studies.

Water demand for the Tahoe City Lodge buildings was calculated using the projected number and type of fixtures expected in each program area of the project. Loading factors for cold water fixture units (CWFUs) were taken from the 2013 California Plumbing Code (CPC) and applied to the projected number of fixtures to find the total CWFUs and demands.

Anticipated building water usage for the project was estimated using historical comparative analysis of similar facilities in the North Lake Tahoe Area. Unit demands for the hotel lodging were modeled after the Village at Squaw Valley Water Supply Assessment dated July 2015 (Farr West Engineering et al. 2015). Unit demands for typical restaurant usage were based on historic metered demand data compiled from comparable restaurants in the Tahoe City area.

An additional analysis was performed using the Uniform Plumbing Code daily usage standards. These estimates are developed based on area use, occupancy type, meals per day, and unit type. The calculated values were essentially identical to the results obtained from the comparative analysis. The values calculated are based on 100 percent occupancy and do not reflect the variability of seasonal occupancy.

Irrigation use for the lodge project site is based on industry standard values. The source for irrigation and recreation (pool) demands is proposed to be the private onsite well, therefore, these facilities would place no additional burden on external utility services.

WASTEWATER

Sewer flows are assumed to mirror domestic water usage without irrigation; except as stated, there is no assumed loss between water use and wastewater generation.

ENERGY

Auerbach Engineering prepared the electricity and natural gas demand estimates for the lodge project. The gas demand analysis assumed typical quantities of appliances per unit, with consumption rates as recommended by the CPC (space peak heating gas consumption rate of 18 British thermal units per hour per square feet [Btu/h/sq. ft.] and water peak heating gas consumption rate of 12 Btu/h/sq. ft.). The pool heating gas consumption is based on uncovered, winter use.

The annual gas consumption was analyzed by performing month by month calculations over the course of a year. The space heating and pool heating was calculated using annual heating degree-day data from the State of California for the town of Tahoe City. The appliance usage was estimated using typical hours of operation per month. The water heating usage was based on an assumption of 50 percent of daily water usage.

Industry standard data for the electrical demand were used for annual kilowatt-hours per square foot (kWh/sq. ft.) in order to calculate the anticipated electrical usage.

The greenhouse gas analysis uses the California Emissions Estimator Model (CalEEMod) Version 2013.2 computer program; construction emission estimates based on project-specific information (e.g., size, area to be graded, area to be paved); reasonable assumptions based on typical construction activities; and default values in CalEEMod based on the project's location and land use types where project specific information was not available. Operational GHG emissions were estimated using the California Air Resources Board's Emission Factors (EMFAC) model and estimates of project-generated daily vehicle miles traveled that were developed from the analysis presented in Chapter 10, "Transportation and Circulation."

16.4.2 Significance Criteria

Significance criteria relevant to public services and utilities are summarized below.

TRPA CRITERIA

The "Public Services," "Energy," and "Utilities" criteria from the TRPA Initial Environmental Checklist were used to evaluate the Public Services and Utilities impacts of the alternatives. Impacts to public services and utilities would be significant if it would:

- ▲ have an unplanned effect upon, or result in a need for new or altered governmental services related to fire protection, police protection, schools, maintenance of public facilities, including roads, or other governmental services;
- ▲ use substantial amounts of fuel or energy;
- ▲ substantial increase in demand upon existing sources of energy, or require the development of new sources of energy;
- ▲ result in the need for new systems or substantial alterations to power and gas utility facilities;
- ▲ result in the need for new systems or substantial alterations to solid waste and disposal;
- ▲ utilize additional water at an amount which will exceed the maximum permitted capacity of the service provider;
- ▲ utilize additional sewage treatment capacity at an amount which will exceed the maximum permitted capacity of the sewage treatment provider; or

- ▲ result in the need for new systems or substantial alterations to telecommunication facilities.

CEQA CRITERIA

In accordance with Appendix G of the State CEQA Guidelines and the Placer County CEQA Checklist, impacts relative to air quality would be significant if the project would:

- ▲ exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;
- ▲ require or result in the construction of new water or wastewater facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- ▲ have sufficient water supplies available to serve the project from existing entitlements and resources or require new or expanded entitlements;
- ▲ result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments;
- ▲ be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs in compliance with all applicable laws;
- ▲ result in inefficient and wasteful consumption of energy during construction or operations or require new or expanded energy facilities that could cause significant environmental effects; or
- ▲ result in substantial adverse physical impacts associated with the provision of or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for any public services including fire protection and law enforcement, schools, or other public facilities.

16.4.3 Environmental Effects of the Project Alternatives

Impact 16-1: Increased demand for water supply

Water supply in the Plan area is provided by surface water from Lake Tahoe and groundwater. Implementation of any Area Plan alternatives would result in increased demand for water supply associated with buildout of the existing residential, tourist accommodation units (TAUs), and commercial floor area (CFA) commodities allocations established by the Regional Plan and assessed in the RPU EIS and RTP EIR/EIS (TRPA 2012a:3.13-11 – 3.13-14; TMPO and TRPA 2012:3.13-15 – 3.13-16). With the limited conversion of CFA to TAUs, implementation of Area Plan Alternatives 1 and 3 would change the amount of types of uses that would use water, reducing the CFA water demand and increasing TAU water demand. The general amount of development that would occur under any of the Area Plan alternatives would not change from that allowed under the Regional Plan, and water supply was determined to be sufficient in the RPU EIS analysis. Future new development projects would be required to undergo project-level analysis to demonstrate sufficient supply, treatment capacity (as applicable), and conveyance capacity by the water purveyor serving a given project. Implementation of the Area Plan would result in a net increase in annual water demand over existing conditions that ranges between 554 af (180 mg) and 797 af (260 mg). Conservatively estimated water demand for each alternative at buildout is well within projections of the TCPUD and NTPUD UWMPs, and combined with existing demand, well below the volume of water supplies available to the districts. Water supply impacts would be **less than significant** for all Area Plan alternatives.

Implementation of Tahoe City Lodge Alternatives 1 through 3 would result in a net increase in water demand over existing conditions that ranges between 6,962 gpd (2.5 mgd) and 14,700 gpd (5.4 mgd). TCPUD has sufficient water supply to meet the demands of the lodge project and has indicated that it will serve the project (Gustafson, pers. comm., 2015). With implementation of lodge Alternative 4, the improvements to the existing commercial buildings on the lodge site would result in a net increase in water demand over existing conditions by 5,016 gpd (1.8 mgd), which could be accommodated under existing conditions. This impact would be **less than significant** for Tahoe City Lodge Alternatives 1 through 3. There would be **no impact** under Alternative 4.

Placer County Tahoe Basin Area Plan Program-Level Analysis

Alternative 1: Proposed Area Plan

The Area Plan under Alternative 1 would implement Regional Plan standards for building height, density, land coverage, and development transfers that would incentivize development in existing developed areas in town centers and mixed-use areas. Alternative 1 could result in the limited conversion of CFA to TAUs, resulting in a reduction of up to 180,000 square feet of CFA and an increase of up to 400 TAUs over what is currently allowable by the Regional Plan in the Placer County portion of the Tahoe Basin. The Area Plan also includes the Kings Beach Center design concept, a combination of hotel (which could include condominiums or privately-owned units), commercial, professional office, and retail uses; a government service building; public plaza; community park; and parking on 4 acres on SR 28 generally between Fox and Coon streets in Kings Beach. Implementation of Alternative 1 would not increase the number of residents or CFA that would increase water demand in the Plan area beyond that assessed in the RPU EIS and RTP EIR/EIS (TRPA 2012a:3.13-11 – 3.13-14; TMPO and TRPA 2012:3.13-15 – 3.13-16). However, with implementation of the CFA to TAU conversion program, Alternative 1 could facilitate an increase of overnight visitors associated with the additional TAUs. Consequently, implementation of the Area Plan under Alternative 1 would increase the amount of demand for water supply and conveyance in the Plan area.

Water supply within the Tahoe Basin as a whole is limited to 32,000 afy, as stipulated in the TROA. As of preparation of the RPU EIS, the existing water demand within the basin is estimated at 28,079 afy and the additional demand generated by development of the remaining commodities allocations was estimated to be 1,725 afy (TRPA 2012a:3.13-12 – 3.13-13). It is reasonable to assume that, because there has been limited development since then, existing water demand in the Tahoe Basin is similar to that presented in the RPU EIS. Total demand would, therefore, be less than 30,000 afy. Given the remaining water supply availability, the additional water demand that would occur under buildout of Area Plan Alternative 1, including the CFA to TAU conversion program, and the Regional Plan could be accommodated with existing supplies.

As compared to baseline conditions, Alternative 1 could result in an increase in annual water demand within the Plan area by 797 af (260 mgd) at buildout (Table 16-3). Neither the distribution of future development in accordance with the Area Plan nor proportion of development within each public utility district can be precisely known at this time. However, in their respective UWMPs, both the NTPUD and TCPUD project the ability to reliably supply water for future growth. In 2030, NTPUD expects to accommodate a water demand of approximately 4,147 af, an increase of 1,747 af over existing conditions, and TCPUD expects to accommodate a water demand of approximately 1,513 af, an increase of 74 af over existing conditions. This relatively low level of projected growth in the TCPUD service area is based on the fact that the district is largely built out, commercial growth is expected to be flat, and most new development would be through redevelopment, which would not translate to substantial, increased demand (Lalotias, pers. comm. 2016). In addition to groundwater, TCPUD has additional, largely unused surface water rights of 981 afy (Lalotias, pers. comm. 2016). NTPUD has combined surface and groundwater rights of 5,873 afy (Stelter, pers. comm. 2016). Therefore, have ample water supplies to accommodate buildout of any of the Area Plan alternatives.

Table 16-3 Water Demand for the Increase in Development over Existing Conditions

	Increase from Existing Conditions ¹	Water Demand Factors ²	Daily Water Demand (gallons)	Annual Water Demand (af [mg])
Alternative 1: Proposed Area Plan				
Population	375	350 gallons per capita per day (gpcpd)	131,250	147 (48)
Housing Units	1,016	325 gallons per day (gpd)	330,200	370 (121)
Tourist Accommodation Units	571	400 gpd/unit ³	228,400	256 (83)
Commercial Floor Area (sq. ft.)	90,318	0.24 gpd/sq ft	21,676	24 (8)
Total			250,076	797 (260)
Alternative 2: Area Plan with No Substitute Standards				
Population	375	350 gallons per capita per day	131,250	147 (48)
Housing Units	1,016	325 gpd	330,200	370 (121)
Tourist Accommodation Units	171	400 gpd/unit ³	68,400	77 (25)
Commercial Floor Area (sq. ft.)	270,318	0.24 gpd/sq ft	64,876	73 (24)
Total			133,276	666 (217)
Alternative 3: Reduced Intensity Area Plan				
Population	186	350 gallons per capita per day	65,100	73 (24)
Housing Units	1,016	325 gpd	330,200	370 (121)
Tourist Accommodation Units	371	400 gpd/unit ³	148,400	166 (54)
Commercial Floor Area (sq. ft.)	180,318	0.24 gpd/sq ft	43,276	48 (16)
Total			191,676	657 (214)
Alternative 4: No Project				
Population	88	350 gallons per capita per day	30,800	35 (11)
Housing Units	1,016	325 gpd	330,200	370 (121)
Tourist Accommodation Units	171	400 gpd/unit ³	68,400	77 (25)
Commercial Floor Area (sq. ft.)	270,318	0.24 gpd/sq ft	64,876	73 (24)
Total			133,276	554 (180)

¹ Based on Table 6-8 in Chapter 6, "Population and Housing."

² Conservatively assumes full occupancy of all residential units (including second homes) throughout the year. Conservatively sums demand factors for both population and residential units; likely double counting some water use. Conservatively assumes two bedrooms per TAU and full occupancy throughout the year. Water demand factor for TAUs derived from (2 bedrooms/unit) x (2.0 capita/bedroom) x (100 gpd/capita) = 400 gpd/unit.

Source: Compiled by Ascent Environmental in 2016

Because the specific types and locations of new development consistent with the Area Plan are not yet known, it is also not known where new water infrastructure would be required to serve new development under Alternative 1. Based on existing and proposed land use policies of Alternative 1 (aimed at concentrating development within town centers and mixed-use areas), new development and redevelopment projects would be expected within existing urbanized areas, close to existing water infrastructure.

Buildout of Alternative 1 would result in levels of development that are generally consistent with the Regional Plan. New development would be constructed over the planning horizon of the Area Plan, with sufficient time for planning by water purveyors in future updates to their UWMPs. Based on existing supplies and water rights, projected water demand could be reliably supplied over the long term. In addition, Section 32.4 of the TRPA Code of Ordinances does not allow project approval unless adequate water quantity and

quality for domestic consumption and fire protection is available, which would need to be demonstrated on a project-by-project basis through the acquisition of a will serve letter from the applicable water purveyor. For these reasons, impacts related to water supply would be **less than significant**.

Alternative 2: Area Plan with No Substitute Standards

Implementation of Alternative 2 would not increase the amount of allowable development, and therefore water demand, in the Plan area beyond that assessed in the RPU EIS and RTP EIR/EIS (TRPA 2012a:3.13-11 – 3.13-14; TMPO and TRPA 2012:3.13-15 – 3.13-16). As compared to baseline conditions, Alternative 2 could result in an increase in annual water demand within the Plan area by 666 af (217 mg) at buildout (see Table 16-3). Because this additional demand could be reliably accommodated by the water suppliers in the Plan area, and for reasons described above for Alternative 1, this impact would be **less than significant**.

Alternative 3: Reduced Intensity Area Plan

Implementation of the Area Plan under Alternative 3 would include the same project components identified for Alternative 1 above. Under Alternative 3, CFA to TAU conversion would be limited to 200 TAUs, resulting in a modest increase in the number of visitors accommodated, as compared to that assessed in the RPU EIS and RTP EIR/EIS. Alternative 3 would result in fewer additional visitors than Alternative 1. However, the CFA to TAU conversion program would result in an increase in water demand of 20.6 afy compared to Alternative 2. As compared to baseline conditions, Alternative 3 could result in an increase in annual water demand within the Plan area by 657 af (214 mg) at buildout (see Table 16-3). As described above for Alternative 1, there is sufficient available capacity to meet this additional demand. Because this additional demand could be reliably accommodated by the water suppliers in the Plan area, because Alternative 3 would include the same types of project components and would be subject to the same TRPA requirements for demonstrating sufficient water supply from the applicable water purveyor as described for Alternative 1, the potential increase in water demand for additional visitors not previously considered in the RPU EIS and RTP EIR/EIS would be reduced. This impact would be **less than significant**.

Alternative 4: No Project

Implementation of Alternative 4 would be a continuation of existing conditions under the Regional Plan and existing plan area statements and community plans. As compared to baseline conditions, Alternative 4, the no-project alternative, could result in an increase in annual water demand within the Plan area by 554 af (180 mg) at buildout (see Table 16-3). The additional water demand generated under Alternative 4 would be similar to that assessed for the Regional Plan in the RPU EIS and RTP EIR/EIS (TRPA 2012a:3.13-11 – 3.13-14; TMPO and TRPA 2012:3.13-15 – 3.13-16). Implementation of Alternative 4 would result in no new impacts that were not previously considered. This impact would be **less than significant**.

Tahoe City Lodge Project-Level Analysis

Alternative 1: Proposed Lodge

Implementation of Alternative 1 would result in water demand for 118 hotel units, restaurant, landscape irrigation, swimming pool, and golf course clubhouse. Existing water demand for the commercial use on the lodge project site is estimated to be 3,561 gpd (1.3 mgy), which is met by water from an onsite well (see Table 16-4). The clubhouse existing water demand is estimated at 654 gpd (0.2 mgy) water and is served by TCPUD. The combined existing water demand, though supplied from separate sources, is 4,215 gpd (1.5 mgy). It is noted that, because the well is private and not part of TCPUD's supply, it could continue to operate for other uses.

Total water demand for full occupancy of the lodge and clubhouse is shown in Table 16-4. These estimates are conservative since they assume full occupancy at the lodge; however, the anticipated average occupancy rate for the year is 69 percent (Placer County 2015). Water demand for the lodge and clubhouse under Alternative 1 would be 18,915 gpd (6.9 mgy) under full occupancy, which includes water demand for irrigation. This would be a net increase in water demand at the lodge project site of 14,700 (5.4 mgy) over existing conditions.

Table 16-4 Tahoe City Lodge Project Water Demand and Wastewater Flows

Alternative	Water Demand		Wastewater Flows	
	Estimated Demand (gpd/mgy)	Net Change from Existing Conditions (gpd/mgy)	Estimated Flows ¹ (gpd/mgy)	Net Change from Existing Conditions (gpd/mgy)
Existing Conditions ²	4,215 (1.5)	NA	4,215 (4.7)	NA
Alternative 1: Proposed Lodge	18,915 (6.9)	14,700 (5.4)	18,315 (6.7)	14,100 (5.1)
Alternative 2: Reduced Scale Lodge ³	11,423 (4.2)	7,208 (2.6)	10,823 (3.9)	6,608 (2.4)
Alternative 3: Reduced Height Lodge ⁴	18,915 (6.9)	14,700 (5.4)	18,315 (6.7)	14,100 (5.1)
Alternative 4: No Project	9,231 (3.4)	5,016 (1.8)	9,231 (3.4)	5,016 (1.8)

¹ Sewer flows are assumed to mirror domestic water usage without irrigation.

² Estimated existing water demand and wastewater flows for the commercial uses on the project site are 3,561 gpd (1.3 mgy). Existing flows for the golf course clubhouse are 654 gpd (0.2 mgy). The golf course clubhouse demand does not include golf course irrigation.

³ Demand is based on ratio of gross square footage between Alternatives 1 and 2 of 68,950:116,683 gross square feet.

⁴ Assumes same amenities and fixture counts leading to equal water demand for Alternatives 1 and 3.

Source: Auerbach Engineering 2016; Tuma, pers. comm., 2016

Water demand for irrigation and the pool at the lodge would be served by the onsite well and would represent a net decrease in demand of 3,615 gpd (1.3 mgy) for water from this source. Alternative 1 would result in a reduction in use of the water from the onsite well over existing conditions.

Water supply for lodge Alternative 1 would be provided by TCPUD. Water supplies at the existing golf course clubhouse are currently provided by TCPUD. Construction of the lodge Alternative 1 would include installation of a new water supply connection to the existing TCPUD water supply line along North Lake Boulevard. Additionally, a new water supply connection and fire hydrant would be constructed to serve the reconstructed clubhouse. This connection would tie into the TCPUD water supply line that extends through the southwestern portion of the golf course. The lodge project's plans for new water connections are shown in the "Conceptual Utility Plan" in Appendix D of this EIR/EIS.

The net increase in water demand at the lodge site would be 14,700 gpd (5.1 mgy), 600 gpd of which would come from a private well, which is not part of TCPUD's supply. The remaining demand of 14,100 gpd would be provided by TCPUD. TCPUD has reviewed the preliminary water demand for the lodge project and has indicated it would be able to meet the water demands of the project (Gustafson, pers. comm., 2015). As described in Chapter 3, "Alternatives," the lodge project is seeking Leadership in Energy and Environmental Design (LEED) certification, which would include incorporating water-saving features into the project. The project buildings would include low flow toilets, showers, and lavatories. The landscaping on the project site would use high efficiency irrigation and would plant native, drought resistant species consistent with TRPA requirements and defensible space requirements.

Because there is sufficient water supply available to meet the water demands of lodge Alternative 1, TCPUD has indicated it will serve the project, and the project would include construction of necessary additional water connections, this impact would be **less than significant**.

Alternative 2: Reduced Scale Lodge

Implementation of Alternative 2 would result in construction of a 56-unit hotel with associated amenities, similar to what would occur under Alternative 1. Alternative 2 would not include reconstruction of the golf course clubhouse. Water demand for lodge Alternative 2, including irrigation demand, which would be supplied from well water outside of TCPUD supplies, would be 11,423 gpd (4.2 mgy), which would be a net increase in water demand at the project site of 7,208 gpd (2.5 mgy) over existing conditions. Alternative 2 would have a lower demand for water than described above for lodge Alternative 1. TCPUD has indicated it

would serve the project (Gustafson, pers. comm., 2016) and there is sufficient available supply. For these reasons and as described above for lodge Alternative 1, this impact would be **less than significant**.

Alternative 3: Reduced Height Lodge

Implementation of Alternative 3 would result in the same water demand as that described above for Alternative 1. For the same reasons described above in regard to lodge Alternative 1, implementation of Alternative 3 would have a **less than significant** impact on demand for water supply.

Alternative 4: No Project

Implementation of lodge Alternative 4 would be limited to renovation of the existing commercial center to increase occupancy. There would be no changes to the types of uses that could occur on the Lodge project site under existing conditions. This alternative could result in a net increase in water demand equal to 5,016 gpd (1.8 mgd). Water supply under Alternative 4 would continue to be provided by an onsite well. Future water demand from uses on the lodge project site would not change over that which could occur under existing conditions. Therefore, lodge Alternative 4 would have **no impact** on demand for water supply.

Mitigation Measures

No mitigation is required.

Impact 16-2: Increased demand for wastewater collection and conveyance

Wastewater collection in the Tahoe Basin is provided by three service providers: NTPUD, TCPUD, and T-TSA. All wastewater is exported out of the basin via the T-TSA TRI. Because of the limited conversion of CFA to TAUs, Area Plan Alternatives 1 and 3 would result in a modest increase in the number of visitors in the Tahoe Basin over that assessed in the RPU EIS and RTP EIR/EIS (TRPA 2012a:3.13-15 – 3.13-16; TMPO and TRPA 2012:3.13-18 – 3.13-19). NTPUD, TCPUD, and T-TSA currently has capacity in their wastewater collection systems. However, a bottleneck could lead to capacity issues in the TRI in the future. 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. All future development projects under the Area Plan would be required to coordinate with utility providers, including NTPUD, TCPUD, and T-TSA, to undergo project-level analysis of each utility's ability to serve the project. For these reasons, this impact would be **less than significant** for Area Plan Alternatives 1 through 3. Alternative 4 for the Area Plan would have **no impact**.

Implementation of Alternatives 1 through 3 for the lodge project would result in a net increase in wastewater flows over existing conditions that ranges between 6,608 gpd and 14,100 gpd. TCPUD and T-TSA have confirmed there is currently sufficient infrastructure to serve the project (Gustafson, pers. comm., 2015; Parker, pers. comm., 2016). With implementation of Alternative 4, the improvements to the existing commercial buildings on the lodge project site would result in a net increase in wastewater flows over existing conditions by 5,016 gpd, which could occur under existing conditions. This impact would be **less than significant** for Alternatives 1 through 3. Alternative 4 would have **no impact**.

Placer County Tahoe Basin Area Plan Program-Level Analysis

Alternative 1: Proposed Area Plan

The Area Plan under Alternative 1 would implement Regional Plan standards for building height, density, land coverage, and development transfers that would incentivize development in existing developed areas in town centers and mixed-use areas. Alternative 1 could result in the limited conversion of CFA to TAUs, resulting in a reduction of up to 180,000 square feet of CFA and an increase of up to 400 TAUs over what is currently allowable by the Regional Plan in the Placer County portion of the Tahoe Basin. The Area Plan also includes the Kings Beach Center design concept, a combination of hotel (which could include condominiums or privately-owned units), commercial, professional office, and retail uses; a government service building; public plaza; community park; and parking on 4 acres on SR 28 generally between Fox and Coon streets in Kings Beach. Implementation of Alternative 1 would not increase the number of residents or CFA that would

require wastewater collection and conveyance in the Plan area beyond that assessed in the RPU EIS and RTP EIR/EIS (TRPA 2012a:3.13-15 – 3.13-16; TMPO and TRPA 2012:3.13-18 – 3.13-19). However, with implementation of the CFA to TAU conversion program, Alternative 1 could facilitate an increase of overnight visitors associated with the additional TAUs. Because sewer flows are assumed to mirror domestic water usage without irrigation, wastewater demand for the Area Plan alternatives are assumed to mirror the water demand shown in Table 16-3. The CFA to TAU conversion program under Alternative 1 would result in an increase in wastewater flows of 36,800 gpd (approximately 0.04 mgd) compared to Alternative 2.

TRPA Code Section 32.5 requires that all projects be served by facilities that provide treatment and export of wastewater from the Tahoe Region and Code Section 50.4.1(C) prohibits distribution of allocations to jurisdictions with insufficient wastewater to support residential development. NTPUD has indicated there is generally adequate capacity in their sewer collection system considering the limited anticipated growth expected to occur (Stelter, pers. comm., 2016). Additionally, TCPUD anticipates its collection system would not be exceeded by the current or projected buildout flows due to the growth limitations established by TRPA (TCPUD 2014:8-10 – 8-11). The TRI, which conveys wastewater from the Placer County portion of the Tahoe Basin to the WRP in Truckee, currently has the capacity to serve development; however, the bottleneck in the TRI in the vicinity of Squaw Valley could lead to capacity issues in the TRI in the future (Parker, pers. comm., 2015a).

All future development under the Area Plan would be required to coordinate with utility providers, including NTPUD, TCPUD, and T-TSA, to undergo project-level analysis of each utility's ability to serve the project. While these overall systems currently have capacity to serve future development, there may be locations in the system that are undersized to meet the demand of higher density development. As required by Placer County, proponents of new development within a sewer service area are required to provide written certification from the service provider that either existing services are available or needed improvements will be made prior to occupancy (Policy 4.D.3) and shall pay their fair share cost of the necessary improvements (Policy 4.D.5). It would be expected that any sewer line upgrades would be within roadway rights-of-way, and thus would not involve effects on sensitive resources.

Additionally, as identified in the RTP EIR/EIS, future projects under the Area Plan, which include the construction of new bicycle paths and other recreation facilities that could require additional public restrooms, shall implement RTP EIR/EIS Mitigation Measure 3.13-4. This mitigation measure would minimize potential impacts on wastewater collection infrastructure because it would require project proponents of new bicycle paths and other recreation facilities to obtain authorization by the applicable public utility district or agency (e.g., NTPUD, TCPUD, T-TSA) for improvements to, or increased need for, wastewater collection.

For these reasons, this impact would be **less than significant**.

Alternative 2: Area Plan with No Substitute Standards

Implementation of 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 RPU EIS and RTP EIR/EIS (TRPA 2012a:3.13-15 – 3.13-16; TMPO and TRPA 2012:3.13-18 – 3.13-19). The EIR and EIR/EIS concluded that it is reasonable to assume that sufficient capacity would be available to accommodate the anticipated population increase and levels of the new commercial facilities and tourist accommodation units. In addition, as described above for Alternative 1, because future projects would be required to demonstrate sufficient wastewater conveyance capacity from the district serving the given Plan area, this impact would be **less than significant**.

Alternative 3: Reduced Intensity Area Plan

Implementation of the Area Plan under Alternative 3 would include the same project components identified for Alternative 1 above. Under Alternative 3, CFA to TAU conversion would be limited to 200 TAUs, resulting in a modest increase in the number of visitors accommodated, as compared to that assessed in the RPU EIS and RTP EIR/EIS. Alternative 3 would result in generating an increase in wastewater flows over Alternative 2 by 18,400 gpd (approximately 0.02 mgd). Wastewater flows from Alternative 3 would be less than those

from Alternative 1. Sewer flows are assumed to mirror domestic water usage without irrigation, wastewater demand for Alternative 3 is assumed to mirror the water demand shown in Table 16-3. Because Alternative 3 would include the same types of project components and would be subject to the same TRPA and county requirements for demonstrating sufficient wastewater conveyance capacity from the district serving the given Plan area as described for Alternative 1, the potential increase in demand for wastewater collection and conveyance for additional visitors not previously considered in the RPU EIS and RTP EIR/EIS would be reduced. This impact would be **less than significant**.

Alternative 4: No Project

Implementation of Alternative 4 would be a continuation of existing conditions under the Regional Plan and existing plan area statements and community plans. The additional demand for wastewater collection and conveyance generated under Alternative 4 would be similar to Alternative 3 assessed in the RPU EIS and RTP EIR/EIS (TRPA 2012a:3.13-15 – 3.13-16; TMPO and TRPA 2012:3.13-18 – 3.13-19). Implementation of Alternative 4 would result in no new impacts that were not previously considered. There would be **no impact**.

Tahoe City Lodge Project-Level Analysis

Alternative 1: Proposed Lodge

The Tahoe City Lodge project site currently includes commercial uses, the Tahoe City Golf Course, and its access, parking, and accessory uses. Wastewater collection at the project site is provided by TCPUD infrastructure, which carries wastewater flows to the TRI for export out of the basin. Existing wastewater generated on the lodge project site from commercial use is 3,561 gpd and from the golf course clubhouse is 654 gpd for a total existing wastewater demand of 4,215 gpd (see Table 16-4). Implementation of Alternative 1 would result in construction of 118 hotel units, a restaurant, and reconstructed golf course clubhouse, resulting in an increase in demand for wastewater conveyance facilities. The peak day wastewater discharge generated by the lodge would be approximately 18,315 gpd (Auerbach Engineering 2016). Lodge Alternative 1 would result in a net increase in wastewater flows of 14,100 gpd at the project site.

The new lodge would connect to existing sewer lines on the project site. A new sewer line connecting the reconstructed golf course clubhouse to an existing sewer main located in the project site would be constructed as part of the project. In the TCPUD wastewater collection system, there are no known hydraulic capacity limitations during dry weather or during peak wet weather events. Due to the growth limitations established by TRPA, TCPUD anticipates its collection system will not be exceeded by the current or projected buildout flows (TCPUD 2014:8-10 – 8-11). Additionally, TCPUD has indicated they would provide wastewater collection services to the lodge project (Gustafson, pers. comm., 2016).

Because the TRI varies in diameter throughout its length, available capacity in the TRI varies. However, based on preliminary modeling analysis conducted by T-TSA based on the number and types of connections proposed as part of the lodge project, there is currently sufficient capacity to convey flows from the lodge project (Parker, pers. comm., 2016). T-TSA does not issue will serve letters and capacity allocations are made on a first-come, first-serve basis; therefore, the project proponent would be required to submit a formal application for service and capacity allocation prior to county approval in accordance with General Plan Policy 4.A.2.

There is currently sufficient wastewater collection capacity in the TCPUD collection system and TRI to carry flows generated by the lodge project. For the reasons described above and because a new sewer line for the reconstructed golf course clubhouse would be constructed as part of the project, this impact would be **less than significant**.

Alternative 2: Reduced Scale Lodge

Implementation of Alternative 2 would result in construction of a 56-unit hotel with associated amenities, similar to what would occur under Alternative 1. Alternative 2 would not include reconstruction of the golf course clubhouse. Wastewater flows generated by Alternative 2 would be 10,823 gpd, which would be a net increase in wastewater generated at the project site of 6,608 gpd over existing conditions. Alternative 2 would have a lower demand for wastewater collection than described above for lodge Alternative 1. TCPUD

has indicated they would serve the project (Gustafson, pers. comm., 2016). In addition, T-TSA has indicated there is currently capacity in the TRI that could meet the wastewater collection demand from the lodge project (Parker, pers. comm., 2016). For these reasons and as described above for lodge Alternative 1, this impact would be **less than significant**.

Alternative 3: Reduced Height Lodge

Implementation of Alternative 3 would generate the same amount of wastewater as that described above for Alternative 1. For the same reasons described above in regard to wastewater collection for lodge Alternative 1, implementation of Alternative 3 would have a **less-than-significant** impact on demand for wastewater collection and conveyance.

Alternative 4: No Project

Implementation of lodge Alternative 4 would be limited to renovation of the existing commercial center to increase occupancy. There would be no changes to the types of uses that could occur on the lodge project site under existing conditions. This alternative could result in a net increase in wastewater flows equal to 5,016 gpd. Wastewater collection under Alternative 4 would continue to be provided by existing TCPUD infrastructure and the TRI. Future wastewater flows from uses on the lodge project site would not change over that which could occur under existing conditions. Therefore, lodge Alternative 4 would have **no impact** on demand for wastewater collection.

Mitigation Measures

No mitigation is required.

Impact 16-3: Increased demand for wastewater treatment

Wastewater treatment for the Tahoe Basin occurs at the T-TSA WRP in Truckee. Because of the limited conversion of CFA to TAUs, Area Plan Alternatives 1 and 3 would result in a modest increase in the number of visitors in the basin over that assessed in the RPU EIS and RTP EIR/EIS (TRPA 2012a:3.13-15 – 3.13-16; TMPO and TRPA 2012:3.13-18 – 3.13-19). Currently, the remaining available capacity at the WRP is estimated to be 3.2 mgd. Potential development resulting from Alternatives 1 through 3 would be required to comply with TRPA Code and local policies to obtain certification from T-TSA that either existing services are available or needed improvements will be made prior to occupancy. All future development under the Area Plan would be required to coordinate with utility providers, including T-TSA, to undergo project-level analysis of their ability to serve the project. For these reasons, this impact would be **less than significant** for Area Plan Alternatives 1 through 3. Alternative 4 for the Area Plan would have **no impact**.

Implementation of Alternatives 1 through 3 for the lodge project would result in a net increase in wastewater flows over existing conditions that ranges between 6,608 gpd and 14,100 gpd. T-TSA has confirmed there is currently sufficient wastewater treatment capacity to serve the project (Parker, pers. comm., 2016). This impact would be **less than significant**. With implementation of Alternative 4, the improvements to the existing commercial buildings on the lodge project site would result in a net increase in wastewater flows over existing conditions by 5,016 gpd, which could occur under existing conditions. Alternative 4 would have **no impact**.

Placer County Tahoe Basin Area Plan Program-Level Analysis

Alternative 1: Proposed Area Plan

The Area Plan under Alternative 1 would implement Regional Plan standards for building height, density, land coverage, and development transfers that would incentivize development in town centers and mixed-use areas. Alternative 1 could result in the limited conversion of CFA to TAUs, resulting in a reduction of up to 180,000 square feet of CFA and an increase of up to 400 TAUs over what is currently allowable by the Regional Plan in the Plan area. The Area Plan also includes the Kings Beach Center design concept, a hotel, commercial, professional office, and retail uses; a government service building; public plaza; community park; and parking in Kings Beach. Implementation of Alternative 1 would not increase the number of

residents or CFA that would require wastewater treatment in the Plan area beyond that assessed in the RPU EIS and RTP EIR/EIS (TRPA 2012a:3.13-15 – 3.13-16; TMPO and TRPA 2012:3.13-18 – 3.13-19). However, with implementation of the CFA to TAU conversion program, Alternative 1 could facilitate an increase of overnight visitors associated with the additional TAUs. The CFA to TAU conversion program under Alternative 1 would result in an increase in wastewater flows of 36,800 gpd (approximately 0.04 mgd) over those generated by Alternative 2.

TRPA Code Section 32.5 requires that all projects be served by facilities that provide treatment and export of wastewater from the Tahoe Region and Code Section 50.4.1(C) prohibits distribution of allocations to jurisdictions with insufficient wastewater to support residential development. In addition to TRPA requirements, Placer County requires that proponents of new development within a sewer service area are required to provide written certification from the service provider that either existing services are available or needed improvements will be made prior to occupancy (Policy 4.D.3) and shall pay their fair share cost of the necessary improvements (Policy 4.D.5).

All future development under the Area Plan would be required to coordinate with utility providers, including T-TSA, to undergo project-level analysis of their ability to serve the project. The T-TSA WRP has a capacity of 9.6 mgd based on a 7-day dry weather average flow basis (Parker, pers. comm., 2015b). As described above, the remaining available capacity at the treatment plant is estimated to be 3.2 mgd. Currently, there is ample available capacity to serve future development.

Additionally, as identified in the RTP EIR/EIS, future projects under the Area Plan that include the construction of new bicycle paths and other recreation facilities that could require additional public restrooms shall implement RTP EIR/EIS Mitigation Measure 3.13-4. This mitigation measure would minimize potential impacts on wastewater treatment facilities because it would require project proponents of new bicycle paths and other recreation facilities to obtain authorization by the applicable public utility district or agency (e.g., T-TSA) for improvements to, or increased need for, wastewater treatment.

For these reasons, this impact would be **less than significant**.

Alternative 2: Area Plan with No Substitute Standards

Implementation of 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 RPU EIS and RTP EIR/EIS (TRPA 2012a:3.13-15 – 3.13-16; TMPO and TRPA 2012:3.13-18 – 3.13-19). The EIR and EIR/EIS concluded that it is reasonable to assume that sufficient wastewater treatment capacity would be available to accommodate the anticipated population increase and levels of the new commercial facilities and tourist accommodation units. In addition, as described above for Alternative 1, because future projects would be required to demonstrate sufficient wastewater treatment capacity from the district serving the given Plan area, this impact would be **less than significant**.

Alternative 3: Reduced Intensity Area Plan

Implementation of the Area Plan under Alternative 3 would include the same project components identified for Alternative 1 above. Under Alternative 3, CFA to TAU conversion would be limited to 200 TAUs, resulting in a modest increase in the number of visitors accommodated, as compared to that assessed in the RPU EIS and RTP EIR/EIS. Alternative 3 would generate an increase in wastewater flows over Alternative 2 by 18,400 gpd (approximately 0.02 mgd). Wastewater flows from Alternative 3 would be less than those from Alternative 1. Sewer flows are assumed to mirror domestic water usage without irrigation, wastewater demand for Alternative 3 is assumed to mirror the water demand shown in Table 16-3. Because Alternative 3 would include the same types of project components and would be subject to the same TRPA and county requirements for demonstrating sufficient wastewater treatment capacity from T-TSA as described for Alternative 1, the potential increase in demand for wastewater treatment for additional visitors not previously considered in the RPU EIS and RTP EIR/EIS would be reduced. This impact would be **less than significant**.

Alternative 4: No Project

Implementation of Alternative 4 would be a continuation of existing conditions under the Regional Plan and existing plan area statements and community plans. The additional demand for wastewater treatment generated under Alternative 4 would be similar to Alternative 3 assessed in the RPU EIS and RTP EIR/EIS (TRPA 2012a:3.13-15 – 3.13-16; TMPO and TRPA 2012:3.13-18 – 3.13-19). Implementation of Alternative 4 would result in no new impacts that were not previously considered. There would be **no impact**.

Tahoe City Lodge Project-Level Analysis**Alternative 1: Proposed Lodge**

The Tahoe City Lodge project site currently includes commercial uses and the Tahoe City Golf Course. Wastewater treatment for the project site occurs at the T-TSA WRP in Truckee. Implementation of Alternative 1 would result in construction of 118 hotel units, a restaurant, and reconstructed golf course clubhouse, resulting in an increase in demand for wastewater treatment. The peak day wastewater treatment demand for the lodge would be approximately 18,315 gpd (Auerbach Engineering 2016). Lodge Alternative 1 would result in a net increase in wastewater flows of 14,100 gpd at the project site.

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). As described above, the remaining available capacity at the treatment plant is estimated to be 3.2 mgd.

T-TSA has indicated that, based on preliminary modeling analysis for the lodge project, there is currently sufficient capacity to treat wastewater generated by the lodge project (Parker, pers. comm., 2016). T-TSA does not issue will serve letters and capacity allocations are made on a first-come, first-serve basis; therefore, the project proponent would be required to submit a formal application for service and capacity allocation prior to county approval in accordance with General Plan Policy 4.A.2.

Because there is adequate wastewater treatment capacity in the T-TSA WRP to serve the lodge project, this impact would be **less than significant**.

Alternative 2: Reduced Scale Lodge

Implementation of Alternative 2 would result in construction of a 56-unit hotel with associated amenities, similar to what would occur under Alternative 1. Alternative 2 would not include reconstruction of the golf course clubhouse. Wastewater flows generated by Alternative 2 would be 10,823 gpd, which would be a net increase in wastewater generated at the project site of 6,608 gpd over existing conditions. Alternative 2 would have a lower demand for wastewater collection than described above for lodge Alternative 1. T-TSA has indicated they have available capacity in the wastewater treatment plant to serve the project (Parker, pers. comm., 2015b). As described above for Alternative 1, the project proponent would be required to submit a formal application for wastewater treatment capacity allocation prior to county approval in accordance with General Plan Policy 4.A.2. For these reasons and as described above for lodge Alternative 1, this impact would be **less than significant**.

Alternative 3: Reduced Height Lodge

Implementation of Alternative 3 would generate the same amount of wastewater as that described above for Alternative 1. For the same reasons described above in regard to wastewater treatment for lodge Alternative 1, implementation of Alternative 3 would have a **less-than-significant** impact on demand for wastewater treatment.

Alternative 4: No Project

Implementation of lodge Alternative 4 would be limited to renovation of the existing commercial center to increase occupancy. There would be no changes to the types of uses that could occur on the lodge project site under existing conditions. This alternative could result in a net increase in wastewater flows equal to 5,016 gpd. Wastewater treatment under Alternative 4 would continue to be provided by the T-TSA WRP. Future wastewater flows from uses on the lodge project site would not change over that which could occur

under existing conditions. Therefore, lodge Alternative 4 would have **no impact** on demand for wastewater treatment.

Mitigation Measures

No mitigation is required.

Impact 16-4: Increased demand for solid waste collection and disposal

Solid waste collection and disposal for the Plan area is provided by TTSD, Eastern Regional MRF, and Lockwood Regional Landfill. Because of the limited conversion of CFA to TAUs, Area Plan Alternatives 1 and 3 would result in a modest increase in the number of visitors in the Tahoe Basin, and thus the amount of solid waste generated, over that assessed in the RPU EIS and RTP EIR/EIS (TRPA 2012a:3.13-18 – 3.13-19; TMPO and TRPA 2012:3.13-12, 3.13-16 - 17). Currently, the MRF and Lockwood Regional Landfill have available capacity for receiving additional solid waste. Additionally, future individual projects under the Area Plan would be required to undergo project-level environmental review to identify and mitigate any potential impacts associated with an increase in demand for solid waste collection and disposal. For these reasons, this impact would be **less than significant** for Area Plan Alternatives 1 through 3. Alternative 4 for the Area Plan would have **no impact**.

Implementation of Alternatives 1 through 3 for the lodge project would generate up to approximately 190 cubic yards (cu. yd.) of construction and demolition debris. These alternatives would also result in a net increase in solid waste generation between approximately 160 and 380 pounds per day and between approximately 200 and 480 cu. yd. per year. The Eastern Regional MRF and Lockwood Regional Landfill both have sufficient capacity to meet the additional construction and operation solid waste generated by the project. This impact would be **less than significant**. With implementation of Alternative 4, the improvements to the existing commercial buildings on the lodge project site would result in a net increase in solid waste generated over existing conditions by approximately 280 pounds per day and approximately 230 cu. yd. per year, which could occur under existing conditions. Alternative 4 would have **no impact**.

Placer County Tahoe Basin Area Plan Program-Level Analysis

Alternative 1: Proposed Area Plan

The Area Plan under Alternative 1 would implement Regional Plan standards for building height, density, land coverage, and development transfers that would incentivize development in existing developed areas in town centers and mixed-use areas. Alternative 1 could result in the limited conversion of CFA to TAUs, resulting in a reduction of up to 180,000 square feet of CFA and an increase of up to 400 TAUs over what is currently allowable by the Regional Plan in the Placer County portion of the Tahoe Basin. The Area Plan also includes the Kings Beach Center design concept, a hotel, commercial, professional office, and retail uses; a government service building; public plaza; community park; and parking in Kings Beach. Implementation of Alternative 1 would not increase the number of residents or CFA that would require solid waste collection and disposal for the Plan area beyond that assessed in the RPU EIS and RTP EIR/EIS (TRPA 2012a:3.13-18 – 3.13-19; TMPO and TRPA 2012:3.13-12, 3.13-16 - 17). With implementation of the CFA to TAU conversion program, Alternative 1 could facilitate an increase of overnight visitors associated with the additional TAUs. However, as shown in Table 16-5, buildout of TAUs under Alternative 1 of the Area Plan would the amount of solid waste generated by future development under the Area Plan compared to Alternatives 2 and 4.

As described above, the MRF currently has permitted available capacity to receive additional solid waste for sorting and transfer to the landfill. Additionally, the Lockwood Regional Landfill has a disposal capacity of 265 million cubic yards and a remaining life of 150 years.

Future development in the Area Plan would be subject to General Plan policies that address the safe and efficient disposal or recycling of solid waste, promote recycling and solid waste source reduction, and require new development to comply with the Placer County Integrated Waste Management Plan. These policies would reduce the amount of solid waste that future development disposes of in the landfill.

Table 16-5 Solid Waste Generation for TAUs and CFA

	Total Commodities (number of TAUs/ sq ft) ¹	Waste Generation Factors	Estimated Waste (lb/day)	Estimated Waste (lb/year)	Estimated Waste (cu yd/year) ²
Alternative 1: Proposed Area Plan					
Tourist Accommodation Units	1,911	2 lb/room/day	3,822.0	1,395,030.0	6,200.1
Commercial Floor Area	1,396,882	13 lb/1,000 sq ft/day	18,159.5	6,628,205.1	14,729.3
Total					20,929.4
Alternative 2: Area Plan with No Substitute Standards					
Tourist Accommodation Units	1,511	2 lb/room/day	3,022.0	1,103,030.0	4,902.4
Commercial Floor Area	1,576,882	13 lb/1,000 sq ft/day	20,499.5	7,482,305.1	16,627.3
Total					21,529.7
Alternative 3: Reduced Intensity Area Plan					
Tourist Accommodation Units	1,711	2 lb/room/day	3,422.0	1,249,030.0	5,551.2
Commercial Floor Area	1,486,882	13 lb/1,000 sq ft/day	19,329.5	7,055,255.1	15,678.3
Total					21,229.5
Alternative 4: No Project					
Tourist Accommodation Units	1,511	2 lb/room/day	3,022.0	1,103,030.0	4,902.4
Commercial Floor Area	1,576,882	13 lb/1,000 sq ft/day	20,499.5	7,482,305.1	16,627.3
Total					21,529.7

Source: CalRecycle 2013a; CalRecycle 2013b; Recyclemania 2016

lb = pound, sq ft = square feet, cu yd = cubic yard

¹ Based on numbers of units and average sizes shown in Table 6-8 in Chapter 6, "Population and Housing."

² Per Recyclemania, cubic yards per year was calculated using residential waste = 225 pounds/cubic yard for TAUs and commercial/industrial waste = 450 pounds/cubic yard for CFA.

Because there is available solid waste disposal capacity, individual projects would be subject to requirements for waste reduction, and future individual projects under the Area Plan would assess and mitigate any project-level impacts on solid waste collection and disposal. For these reasons, this impact would be **less than significant**.

Alternative 2: Area Plan with No Substitute Standards

Implementation of Alternative 2 would not increase the amount of allowable development that would increase solid waste collection and disposal demand in the Plan area beyond that assessed in the RPU EIS and RTP EIR/EIS (TRPA 2012a:3.13-18 – 3.13-19; TMPO and TRPA 2012:3.13-12, 3.13-16 - 17). For the reasons described above for Alternative 1 and because Alternative 2 would result in the same amount of allowable development assessed in the RPU EIS and RTP EIR/EIS, this impact would be **less than significant**.

Alternative 3: Reduced Intensity Area Plan

Implementation of the Area Plan under Alternative 3 would include the same project components identified for Alternative 1 above. Under Alternative 3, CFA to TAU conversion would be limited to 200 TAUs, resulting in a modest increase in the number of visitors accommodated, as compared to that assessed in the RPU EIS and RTP EIR/EIS. Alternative 3 would result in fewer additional visitors than Alternative 1. Because there is sufficient solid waste disposal capacity, Alternative 3 would include the same types of project components, would be subject to the same local requirements for solid waste reduction, and future individual projects would assess and mitigate their potential individual impacts on solid waste collection and disposal as described for Alternative 1, the potential solid waste collection and disposal associated with additional

visitors not previously considered in the RPU EIS and RTP EIR/EIS would be reduced compared to Alternatives 2 and 4. This impact would be **less than significant**.

Alternative 4: No Project

Implementation of Alternative 4 would be a continuation of existing conditions under the Regional Plan and existing plan area statements and community plans. The additional solid waste collection and disposal demand generated under Alternative 4 would be similar to Alternative 3 assessed in the RPU EIS and RTP EIR/EIS (TRPA 2012a:3.13-18 – 3.13-19; TMPO and TRPA 2012:3.13-12, 3.13-16 - 17). Implementation of Alternative 4 would result in no new impacts that were not previously considered. There would be **no impact**.

Tahoe City Lodge Project-Level Analysis

Alternative 1: Proposed Lodge

The Tahoe City Lodge project site includes existing commercial uses and the Tahoe City Golf Course. Solid waste collection for the project site is provided by TTSD and waste is disposed of at the Lockwood Regional Landfill. Implementation of Alternative 1 would result in construction of 118 hotel units, a restaurant, and reconstructed golf course clubhouse. These project components would result in an increase in demand for solid waste collection and disposal. Additional solid waste collection and disposal would be required for demolition of existing structures and construction of the new lodge and clubhouse.

The estimated solid waste generated by construction of the project is shown in Table 16-6. Approximately 314 cu yd of construction waste would be generated over the construction period. The construction waste that goes to the landfill would account for much less than 1 percent (0.0001 percent) of the total capacity of Lockwood Regional Landfill.

Table 16-6 Estimated Waste Generated by Tahoe City Lodge Construction

Waste Type	Waste Generation Rate (lb/sq ft)	Building Size (sq ft)	Total Waste (lb)	Total Waste (cu yd)
Demolition of Commercial Buildings	4.3	26,304	113,107	283
Demolition of Golf Course Clubhouse	4.3	2,880	12,384	31
Total		29,184	125,491	314

Notes: lb = pound, cu yd = cubic yard

Source: CalRecycle 2004, EPA 2003

At buildout and assuming full occupancy, operation of lodge Alternative 1 would generate approximately 384 pounds of solid waste per day, or about 470 cu yd of solid waste per year (Table 16-7). Solid waste generated during operation of the proposed project would first go to the Eastern Regional MRF where solid waste is sorted to recover recyclable materials. The MRF receives an average of 250 tons (500,000 pounds) per day and has available capacity to receive an additional 550 tons (1.1 million pounds) per day. Daily solid waste generated by the lodge project would represent less than 1 percent (0.035 percent) of the remaining available capacity at the MRF. Lockwood Regional Landfill receives an estimated 4,000 tons (8 million pounds) of waste per day. If none of the solid waste generated by the proposed project is recycled, the project would account for far less than 1 percent (0.0048 percent) increase in daily waste received at Lockwood Landfill.

Solid waste collection services in Tahoe City are provided by TTSD. TTSD has indicated they are able to serve the Tahoe City Lodge (Hadzicki, pers. comm., 2016). TTSD can serve construction waste disposal needs with roll off containers. The project proponent would work with TTSD to provide a sufficient number of these containers on the construction site, including separate containers to facilitate appropriate sorting of construction waste. Additionally, there is sufficient available capacity in the Lockwood Landfill for disposal of solid waste generated by lodge Alternative 1. The Tahoe City Lodge would not cause the MRF or landfill to exceed permitted capacities. The project would also comply with all federal, state, and local statutes and regulations related to solid waste reduction and recycling. This impact would be **less than significant**.

Table 16-7 Tahoe City Lodge Alternatives Solid Waste Generation

	Total Size (number of rooms/ sq ft) ¹	Waste Generation Factors	Estimated Waste (lb/day)	Estimated Waste (lb/year)	Estimated Waste (cu yd/year) ²
Existing Conditions					
Commercial Floor Area ³	14,839	13 lb/1,000 sq ft/day	193	70,409	156.5
Total			193	70,409	156.5
Alternative 1: Proposed Lodge					
Hotel Rooms/Suites	118	2 lb/room/day	236	86,140	382.8
Restaurant	3,981	0.005 lb/sq ft/day	20	7,300	4.9
Food and Beverage Deck	1,163	0.005 lb/sq ft/day	6	2,190	1.5
Lobby	636	13 lb/1,000 sq ft/day	8	2,920	6.5
Terrace/Pool/Bar	6,587	0.005 lb/sq ft/day	33	12,045	8.0
Golf Course Clubhouse ⁴	6,738	13 lb/1,000 sq ft/day	88	32,120	71.4
Total			391	142,715	475.1
Alternative 2: Reduced Scale Lodge					
Hotel Rooms/Suites	56	2 lb/room/day	112	40,880	181.7
Restaurant	2,625	0.005 lb/sq ft/day	13	4,745	3.2
Lobby	1,762	13 lb/1,000 sq ft/day	23	8,395	18.7
Terrace/Pool/Bar	1,304	0.005 lb/sq ft/day	7	2,555	1.7
Total			155	56,575	205.3
Alternative 3: Reduced Height Lodge					
Hotel Rooms/Suites	118	2 lb/room/day	236	86,140	382.8
Restaurant	2,625	0.005 lb/sq ft/day	13	4,745	3.2
Lobby	1,762	13 lb/1,000 sq ft/day	23	8,395	18.7
Terrace/Pool/Bar	0	0.005 lb/sq ft/day	0	0	0
Golf Course Clubhouse ⁴	6,738	13 lb/1,000 sq ft/day	88	32,120	71.4
Total			272	131,400	476.1
Alternative 4: No Project					
Commercial Floor Area	26,304	13 lb/1,000 sq ft/day	342	124,830	277.4
Total			342	124,830	277.4

Notes: lb = pound, sq ft = square feet, cu yd = cubic yard

¹ Square footage for components of each alternative are based on numbers of units and average sizes shown in Table 3-5 in Chapter 3, "Alternatives."

² Calculated using mixed food waste = 1,500 pounds/cubic yard, residential waste = 225 pounds/cubic yard, and commercial/industrial waste = 450 pounds/cubic yard per Recyclemania 2014.

³ Calculations for existing commercial uses on the Lodge project site are based on square footage for occupied space.

⁴ The proposed clubhouse would be an expansion of 3,858 square feet over existing conditions.

Source: CalRecycle 2013a; CalRecycle 2013b; Recyclemania 2016

Alternative 2: Reduced Scale Lodge

Implementation of lodge Alternative 2 would result in construction of a 56-unit hotel with associated amenities, similar to what would occur under lodge Alternative 1. Alternative 2 would not include reconstruction of the golf course clubhouse and, therefore, would not generate construction debris from demolition of the existing clubhouse. Alternative 2 would generate approximately 160 cu. yd. of construction waste, less than Alternative 1. At buildout and assuming full occupancy, operation of lodge

Alternative 2 would generate approximately 155 pounds of solid waste per day, or about 205 cu. yd. of solid waste per year (see Table 16-6), which is less than would be generated by Alternative 1.

The construction and operation solid waste generated under Alternative 2 would be less than generated by Alternative 1, there is sufficient capacity at the MRF and landfill to handle waste from the project, and TTSD has indicated they would be able to serve the project (Hadzicki, pers. comm., 2016). For these reasons in addition to those described above for lodge Alternative 1, this alternative would have a **less-than-significant** impact on solid waste demand.

Alternative 3: Reduced Height Lodge

Implementation of lodge Alternative 3 would generate the same amount of solid waste during construction and operation as that described above for lodge Alternative 1. For the same reasons described above in regard to wastewater collection for Alternative 1, implementation of Alternative 3 would have a **less-than-significant** impact on solid waste demand.

Alternative 4: No Project

Implementation of lodge Alternative 4 would be limited to renovation of the existing commercial center to increase occupancy. There would be no changes to the types of uses that could occur on the lodge project site under existing conditions. This alternative could result in a net increase in solid waste generated at the project site equal to approximately 280 pounds per day and approximately 230 cu. yd. per year (see Table 16-6). Solid waste collection and disposal under Alternative 4 would continue to be provided by TTSD and the Lockwood Regional Landfill. Future solid waste generation from uses on the lodge project site would not change over that which could occur under existing conditions. Therefore, lodge Alternative 4 would have **no impact** on demand for wastewater collection.

Mitigation Measures

No mitigation is required.

Impact 16-5: Result in inefficient and wasteful consumption of energy

In the Plan area, electricity is provided by Liberty Utilities and natural gas is provided by Southwest Gas. Because of the limited conversion of CFA to TAUs, Area Plan Alternatives 1 and 3 would result in a modest increase in the number of visitors in the Tahoe Basin, and thus the demand for energy, over that assessed in the RPU EIS and RTP EIR/EIS (TRPA 2012a:3.13-18 – 3.13-19; TMPO and TRPA 2012:3.13-12, 3.13-16 - 17). Liberty Utilities and Southwest Gas have available capacity to meet energy demand. Future projects would be required to meet state standards for energy efficiency, and comply with the Conservation Element of the Area Plan. Projects could also take advantage of the mPOWER incentive program to reduce energy use and GHG emissions from buildings and other site improvements, and use the tools offered through the Lake Tahoe Sustainable Communities Program, specifically the Sustainability Action Plan, to further improve energy efficiency. With respect to energy use associated with transportation, the Area Plan would result in a reduction in vehicle miles traveled (VMT) as compared to existing plans. Energy use related to transportation is directly related to VMT. Thus, transportation energy demand would be less than if no action were taken. Future individual projects under the Area Plan would be required to undergo project-level environmental review to identify and mitigate any potential impacts associated with an increase in energy demand and inefficient or wasteful energy consumption. For these reasons, implementation of the Area Plan would not result in inefficient and wasteful consumption of energy. This impact would be **less than significant** for Area Plan Alternatives 1 through 3. Alternative 4 for the Area Plan would have **no impact**.

Implementation of Tahoe City Lodge Alternatives 1, 2, and 3 would result in increased demand for electricity and natural gas. The lodge site is already served by electricity and natural gas infrastructure, and Liberty Utilities and Southwest Gas have indicated they would be able to serve the project. The project applicant is planning to build the project to Leadership in Energy and Environmental Design (LEED) standards, including those for energy efficiency (e.g., insulation, weatherization, high-efficiency appliances and lighting), so energy use would be similar to, or lower than that typical of hotel and commercial projects. The project would

be constructed in accordance with various energy conservation code requirements, and energy conservation features and practices would be implemented in the Tahoe City Lodge buildings and operations, respectively. With respect to energy use associated with transportation, Tahoe City Lodge Alternatives 1, 2, and 3 would result in a reduction in VMT as compared to existing plans. Thus, transportation energy demand would be less than if no action were taken. For these reasons, lodge Alternatives 1, 2, and 3 would not result in an inefficient or wasteful consumption of energy. The potential increase in occupancy of the commercial center proposed under Alternative 4 could occur under existing conditions. Renovation of the existing commercial buildings proposed for lodge Alternative 4 would be in accordance with local and state building code requirements that would result in energy efficiency improvements. Though VMT would be higher under Alternative 4 than the other lodge alternatives, there is no evidence to suggest that transportation energy demand would be wasteful or inefficient. The impact would be **less than significant**.

Placer County Tahoe Basin Area Plan Program-Level Analysis

Alternative 1: Proposed Area Plan

The Area Plan under Alternative 1 would implement Regional Plan standards for building height, density, land coverage, and development transfers that would incentivize development in existing developed areas in town centers and mixed-use areas. The Area Plan also includes the Kings Beach Center design concept, a combination of hotel, commercial, professional office, and retail uses; a government service building; public plaza; community park; and parking on 4 acres on SR 28 in Kings Beach. Implementation of Alternative 1 would not increase the number of residents or CFA to the point that would require electricity or natural gas in the Plan area beyond that assessed in the RPU EIS and RTP EIR/EIS (TRPA 2012a:3.13-20 – 3.13-21; TMPO and TRPA 2012:3.13-12). However, with implementation of the CFA to TAU conversion program, Alternative 1 could facilitate an increase of overnight visitors associated with the additional TAUs. Consequently, implementation of the Area Plan under Alternative 1 would increase the amount of demand for electricity and natural gas in the Plan area.

TRPA Code Section 32.6 requires that projects must be served with adequate electrical supply. Any new development would be located within close proximity to existing electric and gas infrastructure, and projects requiring new or modified utility installation, connections, and expansion would be subject to the requirements of the applicable utility providers, Liberty Utilities and Southwest Gas Corporation. Additionally, the RPU EIS concluded that electricity and natural gas capacity will substantially exceed any future demand that could be generated by the Regional Plan (TRPA 2012a:3.13-20 – 3.13-21).

To ensure that energy implications are considered in project decisions, Appendix F of the State CEQA Guidelines requires a discussion of the potential energy implications of a project, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy (Public Resources Code Section 21100, subdivision (b)(3)).

Future projects implemented in accordance with the Area Plan would be required to comply with California's Title 24 Energy Efficiency Standards to reduce energy use, and with the Conservation Element of the Area Plan. Area Plan Policy AQ-P-7 requires implementation of building design standards and design of capital improvements in a manner that reduces energy consumption, and incorporation of alternative energy production, where feasible. Projects could take advantage of the mPOWER incentive program (also included in the Conservation Element) to reduce energy use and GHG emissions from buildings and other site improvements. mPOWER is a financing mechanism that allows property owners to install energy and water efficiency retrofits and renewable energy systems.

In addition to the energy-efficiency features of the Area Plan, the Lake Tahoe Sustainable Communities Program is a basin-wide, multi-agency program that encompasses a variety of initiatives to help communities in the Tahoe Basin become more sustainable through the wise use and protection of natural resources. These initiatives include the Sustainability Framework and Vision, Sustainability Action Plan, Sustainability Indicators Reporting Plan, and Economic Development Strategy, among others. Each of these programs provides safeguards against inefficient and wasteful energy use and removes barriers to clean, sustainable

energy consumption. The Sustainability Action Plan, in particular, is a collection of sustainability actions developed over many years of visioning and planning. It helps local governments, agencies, utilities, and organizations in the Tahoe Basin identify GHG reduction targets, choose from a menu of appropriate GHG reduction and sustainability action items, identify climate change readiness actions, and understand how to effectively implement sustainability actions into municipal operations. While these programs are voluntary and not necessary to demonstrate that the Area Plan would not result in wasteful or inefficient use of energy, they are evidence that agencies in the Tahoe Basin are committed to sustainability, and are taking steps to provide effective tools to improve energy efficiency and reduce GHG emissions from all sources: energy production and use, mobility and goods movement, solid waste and recycling, water resources and conservation, air quality, forest resources and management, and other areas. Some of the recommended actions related to energy use and efficiency include:

- ▲ adopt a Green Building Ordinance, including incentives for energy efficiency;
- ▲ implement a Clean Energy Financing Program;
- ▲ develop capital improvements to reduce energy consumption;
- ▲ adopt efficient indoor and outdoor lighting standards for new development;
- ▲ require Energy Star appliances in public facilities and where appliances are provided in construction;
- ▲ launch a social marketing campaign to influence behaviors that reduce energy demand and promote conservation;
- ▲ adopt a Community Choice Aggregation (CCA) Ordinance and/or work with the local utility to offer green power/renewable energy purchasing to customers;
- ▲ require or incentivize renewable energy (e.g., solar PV, solar water heating, solar thermal spa or swimming pool heaters) in new development where solar access is available; and
- ▲ consider opportunities for alternative energy generation when appropriate.

The Regional Plan program for the transfer of development rights to town centers would facilitate expedited redevelopment of parcels located in town centers as projects aim to take advantage of new development standards allowed under the Regional Plan. New development and redevelopment would be required to implement the goals and policies of the Regional Plan relating to energy conservation and improved air quality. Specifically, developments would be required to consider alternative energy sources where technologically and environmentally practical (TRPA 2012b:4-29) either at the project level, or at the infrastructure level, and evaluate implementation of energy-efficient appliances within buildings, as well as methods of building construction (TRPA 201b2:2-32), which would increase energy efficiency as compared to older construction.

In addition to operation and maintenance of facilities and projects, energy would be required for their initial construction: to operate and maintain construction equipment, produce and transport construction materials, and transport workers to and from work sites. One-time energy expenditure required to construct needed physical infrastructure for a given project would be non-recoverable. The construction phase of each project would be temporary and given the types and amounts of allowable development in the Plan area (e.g., residential, commercial, and recreational developments) would not likely require significant additional capacity or significantly increase peak or base period demands for electricity and other forms of energy from providers. These energy needs would exist even without implementation of the Area Plan because projects and developments would occur in any case.

With respect to energy use associated with transportation, the Area Plan would result in a reduction in vehicle miles traveled (VMT) as compared to existing plans. Because energy use related to transportation is

directly related to VMT, transportation energy demand would be less than if no action were taken. For this reason, the Area Plan would not result in the wasteful, inefficient or unnecessary use of energy in connection with transportation. For additional information on VMT, please see Chapter 10, "Transportation and Circulation."

Actual energy consumption for any project would depend project-specific design and development. Ultimately, all projects would have to undergo project-level review for evaluation of their specific environmental impacts. Components would be assessed to ascertain the degree to which energy-efficiencies could be achieved and renewable energy sources used.

Because there is sufficient energy supply and future projects would be required to undergo project-level environmental review to identify and mitigate any potential impacts associated with the provision of electricity or natural gas, Area Plan Alternative 1 would not have an adverse effect on demand for electricity and natural gas. Additionally, future projects would not result in inefficient and wasteful consumption of energy because they would be required to meet state standards for energy efficiency, comply with the Conservation Element of the Area Plan, and could take advantage of local sustainability programs to further reduce energy consumption and improve energy efficiency. These requirements and opportunities would be in addition to the requirements for future projects to assess and mitigate any potential impacts associated with inefficient and wasteful consumption of energy. This impact would be **less than significant**.

Alternative 2: Area Plan with No Substitute Standards

Implementation of Alternative 2 would not increase the amount of allowable development that would increase energy demand in the Plan area beyond that assessed in the RPU EIS and RTP EIR/EIS (TRPA 2012a:3.13-20 – 3.13-21; TMPO and TRPA 2012:3.13-12). Future projects under Alternative 2 would be required to meet energy efficiency standards and implement measures to reduce energy use as those described for Alternative 1. For the reasons described above for Alternative 1 and because Alternative 2 would result in the same amount of allowable development assessed in the RPU EIS and RTP EIR/EIS, this impact would be **less than significant**.

Alternative 3: Reduced Intensity Area Plan

Implementation of the Area Plan under Alternative 3 would include the same project components identified for Alternative 1 above. Under Alternative 3, CFA to TAU conversion would be limited to 200 TAUs, resulting in a modest increase in the number of visitors accommodated, as compared to that assessed in the RPU EIS and RTP EIR/EIS. Alternative 3 would result in fewer additional visitors than Alternative 1. As described above, there is sufficient electricity and natural gas capacity to serve future development energy demand. Additionally, Alternative 3 would include the same types of project components, would be required to meet energy efficiency standards, and implement measures to reduce energy use as those described for Alternative 1. For these reasons, in addition to those described for Alternative 1, this alternative would not result in inefficient and wasteful consumption of energy. This impact would be **less than significant**.

Alternative 4: No Project

Implementation of Alternative 4 would be a continuation of existing conditions under the Regional Plan and existing plan area statements and community plans. The additional energy demand generated under Alternative 4 would be similar to Alternative 3 assessed in the RPU EIS and RTP EIR/EIS (TRPA 2012a:3.13-20 – 3.13-21; TMPO and TRPA 2012:3.13-12). Implementation of Alternative 4 would result in no new impacts that were not previously considered. There would be **no impact**.

Tahoe City Lodge Project-Level Analysis

Alternative 1: Proposed Lodge

At buildout, the annual electrical demand for operation of the proposed project is estimated to be approximately 2 million kilowatt hours per year (kWh/year). Natural gas demand for the lodge project is estimated to be approximately 118,900 therms per year (Auerbach Engineering 2016). (One therm is a unit of heat measurement.) Both Liberty Utilities (electricity) and Southwest Gas have indicated that each utility has sufficient capacity to serve the lodge project (Echeverria, pers. comm., 2016; Madrid, pers. comm.,

2016). Because the lodge project site is already in use, the lodge and relocated golf course clubhouse would connect to existing natural gas and electricity infrastructure. Prior to construction of this alternative, the project proponent would be required to submit an application for electric and natural gas service to these providers, which would also include payment of connection fees.

Appendix F of the State CEQA Guidelines requires consideration of the potentially significant energy implications of a project. CEQA requires mitigation measures to reduce “wasteful, inefficient and unnecessary” energy usage (Public Resources Code Section 21100, subdivision (b)(3)). However, neither the law nor the State CEQA Guidelines establish thresholds that define wasteful, inefficient, or unnecessary use. Compliance with California’s Title 24 Energy Efficiency Standards would generally promote energy efficiency of structures during operation. However, compliance with building codes does not adequately address all potential energy impacts during project construction and operation. For example, energy would be required to transport people to and from the Tahoe City Lodge project site. The following analysis evaluates the lodge project in the context of existing and similar developments.

Energy would be required to construct project elements, operate and maintain construction equipment, and produce and transport construction materials. The one-time energy expenditure required to construct the physical infrastructure associated with the project would be non-recoverable. Most energy consumption would result from operation of construction equipment and actual indirect energy consumption (e.g., waste transport and disposal) may vary from the modeled values, depending on the final design of individual structures. The energy needs for project construction would be temporary and are not anticipated to require significant additional capacity or significantly increase peak or base period demands for electricity and other forms of energy. Construction equipment use and associated energy consumption would be typical of that associated with hotel and commercial projects in a mountainous area. Non-renewable energy would not be consumed in a wasteful, inefficient, or unnecessary manner when compared to other construction sites in the region.

Operation of the lodge project would be typical of hotel and commercial uses requiring electricity and natural gas for lighting, climate control, and day-to-day activities. Operational energy use would also include: landscape maintenance, snow removal equipment, and swimming pool operation. Indirect energy use would include wastewater treatment and solid waste removal. The project would be required to meet Title 24 standards for energy efficiency. Implementation of the California Building Efficiency Standards (Title 24, Section 6) would result in the lodge project buildings requiring 30 percent less energy than buildings constructed before 2008 (California Energy Commission 2014).

In addition to energy efficiency measures required by the state, energy-saving features would be incorporated into the design of the lodge buildings. As described in Chapter 3, “Alternatives,” the Lodge project applicant is planning to incorporate Green Building Design features and build to LEED standards. Some components of the lodge buildings that are included to achieve LEED standards and reduce energy use include increasing heating and cooling efficiencies through the use of LED lighting, high efficiency boilers and chillers, and building management systems to optimize that equipment. The project proponent also proposes to use construction materials in the building exterior that would exceed code requirements for roof and wall insulation and double paned glazing, which would further reduce the heating and cooling loads of the buildings (Kila Tahoe, LLC 2015). Green buildings use on average 26 percent less energy, emit 33 percent less carbon dioxide, use 30 percent less indoor water, and send 50 to 75 percent less solid waste to landfills and incinerators (USGBC n.d.). Construction to LEED standards would further demonstrate that the project is designed to be energy efficient and not wasteful.

With respect to energy use associated with transportation, the central location of the project in Tahoe City would provide increased mobility for visitors via transit and pedestrian and bike trails. A multi-use path along the lake side of North Lake Boulevard connects to a multi-use paths along the Truckee River and along State Route 89 to the south of Tahoe City. An existing transit stop for Tahoe Area Regional Transit (TART) is located near Swigard’s Hardware across the street from the project site and the Tahoe City Transit Center is located 0.3 mile to the southwest of the project site. TART provides bus routes that extend to Incline Village, Tahoma, and Truckee. The lodge would also be within walking distance of shopping and restaurants for its

visitors. With many multi-modal transportation opportunities in close proximity to the lodge project site, visitors would be encouraged to minimize automobile use and fuel consumption associated with vehicle trips generated by the lodge project would be reduced. Tahoe City Lodge Alternative 1 would result in a reduction in VMT as compared to existing plans. Thus, transportation energy demand would be less than if no action were taken. For this reason, the Tahoe City Lodge would not result in the wasteful, inefficient or unnecessary use of energy in connection with transportation. For additional information on VMT, please see Chapter 10, "Transportation and Circulation."

According to Appendix F of the CEQA Guidelines, the means to achieve the goal of conserving energy include decreasing overall per capita energy consumption, decreasing reliance on natural gas and oil, and increasing reliance on renewable energy sources. The electricity provider for the lodge project, Liberty Utilities, secures approximately 20 percent of its energy from renewable resources (Liberty Utilities 2015a) and would be required to increase that amount to 33 percent by 2020 to meet Renewable Energy Portfolio Standards promulgated by the California Air Resources Board. While the lodge project would increase the overall energy demand on the project site, the project components described herein would reduce per capita energy use, thereby providing a relatively energy efficient hotel and commercial project, and would encourage use of renewable energy sources and alternatives to travel by personal vehicle. With the implementation of various energy conservation code requirements and energy conservation features and practices in the lodge buildings and operations described above, the lodge project would not result in an inefficient or wasteful consumption of energy. This impact would be **less than significant**.

Alternative 2: Reduced Scale Lodge

Lodge Alternative 2 would result in construction of a 56-unit hotel with associated amenities, similar to what would occur under Alternative 1. Because there would be fewer units than Alternative 1, Alternative 2 would result in a lower demand for electricity and natural gas and reduced VMT. As with Alternative 1, Alternative 2 would also incorporate Green Building Design features and would seek LEED certification. Alternative 2 would not include reconstruction of the golf course clubhouse. Liberty Utilities and Southwest Gas have indicated they have sufficient supply to accommodate the demands of the lodge project (Echeverria, pers. comm., 2016; Madrid, pers. comm., 2016). With the implementation of various energy conservation code requirements and energy conservation features and practices in the lodge buildings and operations, the lodge Alternative 2 would not result in an inefficient or wasteful consumption of energy. This impact would be **less than significant**.

Alternative 3: Reduced Height Lodge

Lodge Alternative 3 would include the same number of hotel units, amenities, and relocation of the golf course clubhouse as that for lodge Alternative 1 and, thus, Alternative 3 would result in the same increase in demand for electricity and natural gas as that described for Alternative 1 above and would be able to be served by Liberty Utilities and Southwest Gas. With the implementation of various energy conservation code requirements, energy conservation features and practices in the lodge buildings and operations as described above, and reduced VMT as compared to that which would occur under existing plans, lodge Alternative 3 would not result in an inefficient or wasteful consumption of energy. This impact would be **less than significant**.

Alternative 4: No Project

Implementation of Alternative 4 would be limited to renovation of the existing commercial center to increase occupancy. The potential increase in occupancy of the commercial center could occur under existing conditions and would not generate additional demand for electricity or natural gas. Furthermore, the renovations proposed for lodge Alternative 2 would be in accordance with local and state building standards, which could result in improvements in energy efficiency. VMT would be higher than the other lodge alternatives but there is no evidence to suggest that transportation energy demand would be wasteful or inefficient. This impact would be **less than significant**.

Mitigation Measures

No mitigation is required.

Impact 16-6: Result in the need for new or expanded telecommunications facilities

Implementation of the lodge Alternatives 1, 2, and 3 would result in an increased demand for telecommunications services. AT&T has indicated that it would be able to serve the lodge project. Because lodge Alternative 4 could result in additional demand for telecommunications services, which could occur under existing conditions. This impact is **less than significant** for Alternatives 1, 2, 3, and 4.

Tahoe City Lodge Project-Level Analysis

Alternative 1: Proposed Lodge

Implementation of lodge Alternative 1 would result in an increased demand for telecommunications services (e.g., telephone, data, and television) for the new lodge. The project site is already served by AT&T. AT&T has indicated that it would be able to provide telecommunications services to the lodge project (Kellett, pers. comm., 2016). Because AT&T would provide telecommunications service and no improvements would be necessary to establish service, this impact would be **less than significant**.

Alternative 2: Reduced Scale Lodge

Lodge Alternative 2 would result in a similar impact as that described above for lodge Alternative 1.

Implementation of Alternative 2 would result in construction of a 56-unit hotel with associated amenities, similar to what would occur under Alternative 1. The demand for telecommunication services with Alternative 2 would be similar to that of Alternative 1 because service is not dependent upon the number of TAUs proposed; rather it is based on service location. As with Alternative 1, there would be adequate supplies and infrastructure available and AT&T has confirmed that it would be able to provide service to the site (Kellett, pers. comm., 2016). This impact would be **less than significant**.

Alternative 3: Reduced Height Lodge

Lodge Alternative 3 would include the same number of hotel units, amenities, and relocation of the golf course clubhouse as that for lodge Alternative 1 and, thus, Alternative 3 would result in the same increase in demand for telecommunications services as that described for Alternative 1 above and would be able to be served by AT&T (Kellett, pers. comm., 2016). This impact would be **less than significant**.

Alternative 4: No Project

Implementation of Alternative 4 would be limited to renovation of the existing commercial center to increase occupancy. The potential increase in occupancy of the commercial center could occur under existing conditions and would not result in creating a new source of demand for telecommunications services. This impact would be **less than significant**.

Mitigation Measures

No mitigation is required.

Impact 16-7: Increased demand for fire protection and emergency medical services

Because of the limited conversion of CFA to TAUs, Area Plan Alternatives 1 and 3 would result in a modest increase the number of visitors in the Tahoe Basin, and thus an increase in demand for fire protection and emergency medical services over that assessed for the Regional Plan in the RPU EIS and RTP EIR/EIS (TRPA 2012a:3.13-21 – 3.13-22; TRPA 2012b:3.13-12). Future development resulting from Alternatives 1 through 3 would be required to comply with local and state regulations for fire protection, including mitigation fees and consultation with NTFPD for minimizing potential impacts from specific projects. Therefore, implementation of Alternatives 1 through 3 would reduce the impacts associated with the need for improved or expanded facilities for fire protection and emergency services provided by NTFPD and this impact would be **less than significant**. Alternative 4, the No Project Alternative, would be a continuation of existing conditions under the Regional Plan and existing plan area statements and community plans. Implementation of Alternative 4 would

result in no new impacts that were not previously considered in the RPU EIS and RTP EIR/EIS (TRPA 2012a:3.13-21 – 3.13-22; TRPA 2012b:3.13-12). Alternative 4 for the Area Plan would have **no impact**.

The lodge Alternatives 1 through 4 would result in a modest increase in the demand for fire protection and emergency response services. NTFPD has indicated they have adequate staffing and equipment to provide service to the lodge project. Lodge Alternative 4 would not result in an increase in demand for fire protection and emergency services over that which could occur under existing conditions. This impact would be **less than significant** for all alternatives.

Placer County Tahoe Basin Area Plan Program-Level Analysis

Alternative 1: Proposed Area Plan

The Area Plan under Alternative 1 would implement Regional Plan standards for building height, density, land coverage, and development transfers that would incentivize development in existing developed areas in town centers and mixed-use areas. Alternative 1 could result in the limited conversion of CFA to TAUs, resulting in a reduction of up to 180,000 square feet of CFA and an increase of up to 400 TAUs over what is currently allowable by the Regional Plan in the Placer County portion of the Tahoe Basin. The Area Plan does not propose specific projects, but does include programs and policies that would move the Plan area toward attainment and maintenance of environmental thresholds. The Area Plan also includes the Kings Beach Center design concept, a combination of hotel (which could include condominiums or privately-owned units), commercial, professional office, and retail uses; a government service building; public plaza; community park; and parking on 4 acres on SR 28 generally between Fox and Coon streets in Kings Beach. Implementation of Alternative 1 would not increase the number of residents or CFA that would require fire protection or emergency response services in the Plan area beyond that assessed in the RPU EIS and RTP EIR/EIS (TRPA 2012a:3.13-21 – 3.13-22; TRPA 2012b:3.13-12). However, with implementation of the CFA to TAU conversion program, Alternative 1 could facilitate an increase of overnight visitors associated with the additional TAUs. Consequently, implementation of the Area Plan under Alternative 1 would increase the number of people requiring fire protection or emergency response services in the Plan area.

As described above, the ISO rating system was revised and the NTFPD ISO rating under this new system is 4/4y (Schwartz, pers. comm., 2016), which is equivalent to the former ISO 8 rating. Therefore, NTFPD is meeting the Placer County General Plan goal for ISO 8 in rural areas. However, fire response to existing development in some portions of the NTFPD service area is currently challenged by limited access and inadequate water supply for fire suppression. Future development in the Area Plan would be required by TRPA and the California Fire Code to ensure there is sufficient water supply to serve fire suppression needs. Chief Schwartz confirmed that new development cannot proceed without providing water for fire suppression. So, while there is an existing fire water supply issue for existing development in areas outside of town centers and other areas served by TCPUD or NTPUD, any new development would have adequate fire water supply. This is further supported by Area Plan Policy PS-P-8 that encourages all water systems address fire suppression water needs.

An additional existing challenge is the ability of NTFPD to meet NFPA 1710 standards for amount of personnel and response time for service calls, which is caused by the linear-shape of the district, personnel that fulfill dual roles as firefighters and paramedics, and the rural nature of the district (Schwartz, pers. comm., 2016). Chief Schwartz also recognized that there is a need in the district to upgrade and expand fire station facilities, specifically in Homewood, Dollar Point, and Kings Beach where those stations already have limited capacity to meet fire and emergency response services in those communities. NTFPD works towards meeting NFPA 1710 standards for fire equipment and infrastructure through implementation of the mitigation fee program, NTFPD Aerial Apparatus CFD, developer agreements, and federal grants that provide funding (Schwartz, pers. comm., 2016). Fire and emergency response needs in the Placer County portion of the Tahoe Basin will also continue to be served by automatic aid agreements with neighboring fire departments.

Future development is subject to General Plan policies for maintaining staffing ratios, standards, and response times set forth in the General Plan and requiring new development to fund facilities that maintain these standards (Policies 4.H.1, 4.H.2, 4.H.4, 4.I.1, 4.I.2, and 4.I.3). Additionally, with implementation of Area Plan Policy PS-P-7, the development under the Area Plan would be reviewed for fire safety standards by local fire agencies responsible for its protection, including providing adequate water supplies and ingress and egress.

Any new construction under the Area Plan would result in population increases that, depending on the location, could require improved or expanded facilities for fire protection and emergency services provided by NTFPD, the construction of which could result in adverse environmental effects. However, project-level environmental review for specific projects subsequent to adoption of the Area Plan under Alternative 1 would be required to have adequate water supply for fire suppression, would be subject to applicable mitigation and CFD fees, and would assess and mitigate any additional potential future adverse impacts on fire protection and emergency services in consultation with NTFPD. For these reasons, this impact would be **less than significant**.

Alternative 2: Area Plan with No Substitute Standards

Implementation of Alternative 2 would not increase the amount of allowable development that would require fire protection or emergency response services in the Plan area beyond that assessed in the RPU EIS and RTP EIR/EIS (TRPA 2012a:3.13-21 – 3.13-22; TRPA 2012b:3.13-12). The EIR and EIR/EIS concluded that the RPU and RTP would result in new development and a population increase that, depending on the location, could require improved or expanded facilities for fire protection. As described above for Alternative 1, specific development projects would be required to undergo environmental review and would be subject to applicable mitigation fees and any other mitigation necessary to minimize potential impacts on fire protection and emergency services as determined through consultation with NTFPD. For these reasons, this impact would be **less than significant**.

Alternative 3: Reduced Intensity Area Plan

Implementation of the Area Plan under Alternative 3 would include the same project components identified for Alternative 1 above. Under Alternative 3, CFA to TAU conversion would be limited to 200 TAUs, resulting in a modest increase in the number of visitors accommodated, as compared to that assessed in the RPU EIS and RTP EIR/EIS. Alternative 3 would result in fewer additional visitors than Alternative 1. Because Alternative 3 would include the same types of project components and would be subject to the same local and state regulations and mitigation fees for fire protection and emergency services as described for Alternative 1, the potential increase in demand for fire protection and emergency services for additional visitors not previously considered in the RPU EIS and RTP EIR/EIS would be reduced. This impact would be **less than significant**.

Alternative 4: No Project

Implementation of Alternative 4 would be a continuation of existing conditions under the Regional Plan and existing plan area statements and community plans. The additional demand for fire protection and emergency services generated under Alternative 4 would be similar to Alternative 3 assessed in the RPU EIS and RTP EIR/EIS (TRPA 2012a:3.13-21 – 3.13-22; TRPA 2012b:3.13-12). Implementation of Alternative 4 would result in no new impacts that were not previously considered. There would be **no impact**.

Tahoe City Lodge Project-Level Analysis

Alternative 1: Proposed Lodge

Implementation of lodge Alternative 1 would result in replacement of existing commercial uses with a 118-unit hotel with associated amenities and a reconstructed golf course clubhouse with additional meeting space. The new lodge and reconstructed golf course clubhouse would have the potential to result in an incremental increase in demand for fire protection and emergency services associated with an increase in visitation and use anticipated at the project site. As noted above, a fragmented water systems serving communities in the NTFPD are a primary limiting factor for the NTFPD's fire response capability. Portions of the West Shore within the Plan area has imperfect infrastructure (e.g., no fire hydrants) to reliably deliver required flows for firefighting (TFFT 2015:7). Therefore, NTFPD uses water tenders to bring in water for fire suppression in these areas (Schwartz, pers. comm., 2016). The project would actually provide additional infrastructure for fire

suppression in the area. As noted elsewhere, water supply for lodge Alternative 1 would be provided by TCPUD. Although the lodge project site does not have limitations related to firefighting infrastructure, construction of the lodge Alternative 1 would enhance fire suppression infrastructure on the project site with installation of a new water supply connection to the existing TCPUD water supply line along North Lake Boulevard. Additionally, a fire hydrant would be constructed to serve the reconstructed clubhouse.

NTPFD Station 51 is located less than one-half mile southwest of the lodge project site. One emergency access point is provided for the project site via North Lake Boulevard. NTPFD has issued a will serve letter for the lodge project (Alameda, pers. comm., 2016). NTPFD would conduct additional project review as part of the county's approval of building permits. The lodge project would be subject to the NTPFD mitigation fees for a commercial property per square foot of new conditioned and storage space per Placer County estimates and NTPFD Aerial Apparatus CFD fees (Alameda, pers. comm., 2016). Construction of new facilities or additional personnel would not be required as a result of implementing the Tahoe City Lodge. For these reasons, this impact would be **less than significant**.

Alternative 2: Reduced Scale Lodge

Implementation of Alternative 2 would result in construction of a 56-unit hotel with associated amenities, similar to what would occur under Alternative 1. Alternative 2 would not include reconstruction of the golf course clubhouse. The new lodge would have the potential to result in an incremental increase in demand for fire protection and emergency services associated with an increase in visitation and use anticipated at the lodge project site. As described for Alternative 1, Alternative 2 would be subject to NTPFD mitigation fees and Aerial Apparatus CFD fees. Similar to Alternative 1, Alternative 2 would be able to be served by NTPFD and would not require construction of new facilities or additional personnel. For these reasons, this impact would be **less than significant**.

Alternative 3: Reduced Height Lodge

Lodge Alternative 3 would include the same number of hotel units, amenities, and relocation of the golf course clubhouse as that for lodge Alternative 1 and, thus, Alternative 3 would result in the same incremental increase in demand for fire protection and emergency services as that described for Alternative 1 above and would be able to be served by NTPFD. As described for Alternative 1, Alternative 2 would be subject to NTPFD mitigation fees and Aerial Apparatus CFD fees. For these reasons, Alternative 3 would not require construction of new facilities or additional personnel. This impact would be **less than significant**.

Alternative 4: No Project

Implementation of Alternative 4 would be limited to renovation of the existing commercial center to increase occupancy. The potential increase in occupancy of the commercial center could occur under existing conditions and would not generate additional demand for fire protection and emergency services. For these reasons, Alternative 4 would not require construction of new or require additional personnel. For these reasons, this impact would be **less than significant**.

Mitigation Measures

No mitigation is required.

Impact 16-8: Increased demand for law enforcement services

Implementation of any of the Area Plan alternatives would result in some new development that could increase the demand for law enforcement services that, in turn, could require additional personnel and new or expanded facilities, the construction of which could result in adverse effects on the environment. However, as with other project development, environmental review of specific projects would be required to ensure that impacts are identified and mitigated. Based on consultation with the Placer County Sheriff's Department, the lodge alternatives would not result in the need for additional or expanded law enforcement service facilities and would not result in decreased law enforcement service levels. This impact would be **less than significant** for all alternatives.

The Placer County Sheriff Tahoe Substation is approximately two miles northeast of the Tahoe City Lodge project site. Because of the small scale of the project, none of the alternatives would have the potential to increase demand for law enforcement such that new facilities or additional personnel would be required. The impact would be **less than significant** for all Tahoe City Lodge alternatives.

Placer County Tahoe Basin Area Plan Program-Level Analysis

Alternative 1: Proposed Area Plan

Potential effects related to increased demand for law enforcement services are the same as those assessed in the RPU EIS; therefore, the analysis of demand for law enforcement services under Area Plan Alternative 1 tiers from and is consistent with the conclusions in the RPU EIS and RTP EIR/EIS (TRPA 2012a:3.13-21 – 3.13-22; TMPO and TRPA 2012:3.13-12) regarding impacts on law enforcement.

Implementation of Alternative 1 would result in development subject to commodities limitations set forth by the Regional Plan. Alternative 1 could result in the limited conversion of CFA to TAUs, resulting in a reduction of up to 180,000 square feet of CFA and an increase of up to 400 TAUs over what is currently allowable in the Placer County portion of the Tahoe Basin as identified by the Regional Plan. Any new construction could result in population increases that could require improved or expanded facilities for law enforcement, the construction of which could result in adverse environmental effects. The Kings Beach Center design concept would include environmental redevelopment within Kings Beach in an area containing some existing uses. The potential mix of hotel, commercial, professional office, and retail uses that could occur as part of these conceptual plans could result in an incremental increase in demand for law enforcement services; however, this conceptual project does not propose any residential uses, would be located within an existing developed area, and the conceptual mix of uses would not represent a public safety concern. For these reasons, the Kings Beach Center design concept would not be expected to require the addition of law enforcement personnel or construction of additional facilities.

Project-level environmental review for future projects subsequent to adoption of the Area Plan under Alternative 1, including the Kings Beach Center design concept, would be required to assess and mitigate any potential future adverse impacts on law enforcement. For the reasons identified above for Alternative 1, this impact would be **less than significant**.

Alternative 2: Area Plan with No Substitute Standards

Implementation of Alternative 2 would result in development subject to commodities limitations set forth by the Regional Plan. Unlike Alternative 1, Alternative 2 would not include any substitute standards and would not result in the conversion of CFA to TAUs. Any new construction could result in population increases that could require improved or expanded facilities for law enforcement, the construction of which could result in adverse environmental effects. Impacts on law enforcement services demand from the Kings Beach Center design concept under Alternative 2 would be the same as that described above for Alternative 1. Project-level environmental review for specific projects subsequent to adoption of the Area Plan under Alternative 2 would be required to assess and mitigate any potential future adverse impacts on law enforcement. For these reasons, this impact would be **less than significant**.

Alternative 3: Reduced Intensity Area Plan

Implementation of Alternative 3 would result in development subject to commodities limitations set forth by the Regional Plan. Alternative 3 could result in the limited conversion of CFA to TAUs, resulting in a reduction of up to 90,000 square feet of CFA and an increase of up to 200 TAUs over what is currently allowable in the portion of Placer County within the Tahoe Basin as identified in the Regional Plan. Any new construction could result in population increases that could require improved or expanded facilities for law enforcement, the construction of which could result in adverse environmental effects. Impacts on law enforcement services demand from the Kings Beach Center design concept under Alternative 3 would be the same as that described above for Alternative 1. Project-level environmental review for specific projects subsequent to adoption of the Area Plan under Alternative 3 would be required to assess and mitigate any potential future adverse impacts on law enforcement. For these reasons, this impact would be **less than significant**.

Alternative 4: No Project

Under Alternative 4, new development would be limited by existing allocations and development rights established in the Regional Plan as well as existing plan area statements and community plans. The additional demand for law enforcement generated under Alternative 4 would be similar to that assessed in the RPU EIS for Alternative 3 (TRPA 2012b:3.13-22) and in the RTP/SCS EIR/EIS (TMPO and TRPA 2012:3.13-12). Any new construction could result in population increases that could require improved or expanded facilities for law enforcement, the construction of which could result in adverse environmental effects. Project-level environmental review for specific projects subsequent to adoption of the Area Plan under Alternative 4 would be required to assess and mitigate any potential future adverse impacts on law enforcement. For these reasons, this impact would be **less than significant**.

Tahoe City Lodge Project-Level Analysis**Alternative 1: Proposed Lodge**

Implementation of lodge Alternative 1 would result in replacement of existing commercial uses with a 118-unit hotel with associated amenities and a reconstructed golf course clubhouse with additional meeting space. The new lodge and reconstructed golf course clubhouse would have the potential to result in an incremental increase in demand for law enforcement services associated with an increase in visitation and use anticipated at the project site.

The Placer County Sheriff Tahoe Substation is approximately two miles northeast of the lodge project site. The addition of the lodge Alternative 1 would not be a safety concern for the Tahoe City area and the Placer County Sheriff would be able to serve the project (Walsh, pers. comm., 2016). Construction of new facilities or additional personnel would not be required as a result of implementing the Tahoe City Lodge. This impact would be **less than significant**.

Alternative 2: Reduced Scale Lodge

Implementation of Alternative 2 would result in construction of a 56-unit hotel with associated amenities, similar to what would occur under Alternative 1. Alternative 2 would not include reconstruction of the golf course clubhouse. The new lodge would have the potential to result in an incremental increase in demand for law enforcement services associated with an increase in visitation and use anticipated at the project site. Similar to Alternative 1, Alternative 2 would be able to be served by the Placer County Sheriff Tahoe Substation and would not require construction of new facilities or additional personnel. This impact would be **less than significant**.

Alternative 3: Reduced Height Lodge

Lodge Alternative 3 would include the same number of hotel units, amenities, and relocation of the golf course clubhouse as that for lodge Alternative 1 and, thus, Alternative 3 would result in the same incremental increase in demand for law enforcement services as that described for Alternative 1 above and would be able to be served by the Placer County Sheriff. For these reasons, Alternative 3 would not require construction of new law enforcement facilities or additional personnel. This impact would be **less than significant**.

Alternative 4: No Project

Implementation of Alternative 4 would be limited to renovation of the existing commercial center to increase occupancy. The potential increase in occupancy of the commercial center could occur under existing conditions and would not generate additional demand for law enforcement services. For these reasons, Alternative 4 would not require construction of new law enforcement facilities or additional personnel. This impact would be **less than significant**.

Mitigation Measures

No mitigation is required.

Impact 16-9: Increased demand for public schools

Public schools that serve the Plan area include Kings Beach Elementary School, Tahoe Lake Elementary School, North Tahoe School, North Tahoe High School, and Cold Stream Alternative School. Because of the limited conversion of CFA to TAUs, Area Plan Alternatives 1 and 3 would result in a modest increase in the number of visitors in the Tahoe Basin and an associated decrease in employment relative to Alternatives 2 and 4; therefore, Alternatives 1 and 3 would not result in an indirect increase in demand for schools, over that assessed in the RPU EIS and RTP EIR/EIS (TRPA 2012a:3.13-15 – 3.13-16; TMPO and TRPA 2012:3.13-18 – 3.13-19). Currently, the schools serving the Plan area have available capacity for additional students. For these reasons, this impact would be **less than significant** for Area Plan Alternatives 1 through 3. Alternative 4 for the Area Plan would have **no impact**.

The Tahoe City Lodge alternatives have limited potential for generating new students since no new residences would be constructed and a small number of new employees would be created. Additionally, there is available capacity at nearby schools. The lodge alternatives would not result in any substantial adverse physical impacts associated with the provision of or need for new or physically altered school facilities the construction of which could cause significant environmental impacts. Thus, this impact would be **less than significant** for all lodge alternatives.

Placer County Tahoe Basin Area Plan Program-Level Analysis

Alternative 1: Proposed Area Plan

The Area Plan under Alternative 1 would implement Regional Plan standards for building height, density, land coverage, and development transfers that would incentivize development in town centers and mixed-use areas. Alternative 1 could result in the limited conversion of CFA to TAUs, resulting in a reduction of up to 180,000 square feet of CFA and an increase of up to 400 TAUs over what is currently allowable by the Regional Plan in the Plan area. The Area Plan also includes the Kings Beach Center design concept, a hotel, commercial, professional office, and retail uses; a government service building; public plaza; community park; and parking in Kings Beach. Implementation of Alternative 1 would not increase the number of residents or CFA that would require public school services in the Plan area beyond that assessed in the RPU EIS and RTP EIR/EIS (TRPA 2012a:3.13-21 – 3.13-22; TMPO and TRPA 2012:3.13-12). However, with implementation of the CFA to TAU conversion program, Alternative 1 could facilitate an increase of overnight visitors associated with the additional TAUs. However, as discussed in Impact 6-1 in Chapter 6, “Population and Housing,” implementation of the Area Plan under Alternative 1 would result in fewer jobs compared to Alternatives 2 and 4, which do not include conversion of CFA to TAUs. Implementation of the Area Plan under Alternative 1 would not result in an indirect increase in the demand for schools associated with additional employment provided by the TAU conversion program.

TTUSD schools that serve the Plan area currently have available capacity (see Table 16-2). As applicable, future development would be subject to development fees for schools. Additionally, individual future projects would be required to undergo project-level environmental review to assess, and mitigate to the extent feasible, any potential impacts on demand for schools and any physical impacts associated with the provision of new or physically altered school facilities. For these reasons, this impact would be **less than significant**.

Alternative 2: Area Plan with No Substitute Standards

Implementation of Alternative 2 would not increase the amount of allowable development that would increase demand for schools in the Plan area beyond that assessed in the RPU EIS and RTP EIR/EIS (TRPA 2012a:3.13-15 – 3.13-16; TMPO and TRPA 2012:3.13-12). For the reasons described above for Alternative 1 and because Alternative 2 would result in the same amount of allowable development assessed in the RPU EIS and RTP EIR/EIS, this impact would be **less than significant**.

Alternative 3: Reduced Intensity Area Plan

Implementation of the Area Plan under Alternative 3 would include the same project components identified for Alternative 1 above. Under Alternative 3, CFA to TAU conversion would be limited to 200 TAUs, resulting

in a modest increase in the number of visitors accommodated, as compared to that assessed in the RPU EIS and RTP EIR/EIS. Alternative 3 would result in fewer additional visitors than Alternative 1. Because the schools serving the Plan area have sufficient capacity, Alternative 3 would include the same types of project components as described for Alternative 1, and Alternative 3 would result in fewer new employees compared to Alternative 2 and 4, the potential increase in demand for schools not previously considered in the RPU EIS and RTP EIR/EIS would be reduced. This impact would be **less than significant**.

Alternative 4: No Project

Implementation of Alternative 4 would be a continuation of existing conditions under the Regional Plan and existing plan area statements and community plans. The additional demand for schools generated under Alternative 4 would be similar to Alternative 3 assessed in the RPU EIS and RTP EIR/EIS (TRPA 2012a:3.13-11 – 3.13-14; TMPO and TRPA 2012:3.13-15 – 3.13-16). Implementation of Alternative 4 would result in no new impacts that were not previously considered. There would be **no impact**.

Tahoe City Lodge Project-Level Analysis

Alternative 1: Proposed Lodge

Construction of Alternative 1 would occur over 16 to 18 months and would employ an estimated 100 to 120 construction workers. Operation of Alternative 1 would employ up to 40 employees during peak periods, an increase of 9 employees over existing conditions, and up to 26 employees during the shoulder seasons to help operate the lodge (see Table 6-9 in Chapter 6, “Population and Housing”). The expanded clubhouse to include new meeting facilities would temporarily increase the number of contract or temporary workers for special events using the meeting facilities, the number of which could range between five and 16 workers. Alternative 1 would not result in the construction of new residences. While some families with children could relocate to the region for employment opportunities, it is unlikely that the project would substantially increase the demand on local schools. The construction and operation employment needs generated by Alternative 1 would likely be fulfilled with existing area residents. In the event that new students are generated by implementation of Alternative 1, nearby schools have available capacity to accept new students (see Table 16-2). Because Alternative 1 has limited potential for generating new students and because there is available capacity at nearby schools there would not be any substantial adverse physical impacts associated with the provision of or need for new or physically altered school facilities the construction of which could cause significant environmental impacts. This impact would be **less than significant**.

Alternative 2: Reduced Scale Lodge

Implementation of Alternative 2 would result in a reduced number of new employees needed for construction and operation compared to employee needs identified for Alternative 1 due to the reduced scale of the lodge and new restaurant and no changes to the golf course clubhouse. Alternative 2 would result in a similar demand for schools as that described above for Alternative 1. Because Alternative 2 would have limited potential for generating new students and because there is available capacity at nearby schools there would not be any substantial adverse physical impacts associated with the provision of or need for new or physically altered school facilities the construction of which could cause significant environmental impacts. This impact would be **less than significant**.

Alternative 3: Reduced Height Lodge

This impact is the same as that described above for Alternative 1. Operation of Alternative 3 would employ up to 35 employees during peak periods, an increase of 4 employees over existing conditions, and up to 22 employees during shoulder seasons, a reduction in employees over existing conditions, to help operate the lodge (see Table 6-9 in Chapter 6, “Population and Housing”). Because the project would result in a small increase in new employment, similar to that identified for Alternative 1, which would be met by existing local residents, Alternative 3 would have limited potential for generating new students. Additionally, as described above, there is available capacity at nearby schools to accept new students. Alternative 3 would not result in a substantial adverse physical impact associated with the provision of or need for new or physically altered school facilities the construction of which could cause significant environmental impacts. This impact would be **less than significant**.

Alternative 4: No Project

Implementation of Alternative 4 would be limited to renovation of the existing commercial center to increase occupancy. Alternative 4 would not result in the construction of new residences, similar to Alternative 1. Because Alternative 4 would increase the occupancy of the commercial center a small increase in the number of employees over existing conditions would be expected, which could occur under existing conditions. Alternative 4 would be estimated to employ up to 51 employees during peak periods, an increase of 20 employees over existing conditions, and up to 43 employees during should seasons, an increase of 17 employees over existing conditions. The employment needs generated by Alternative 4 would likely be fulfilled with existing area residents. In the event that new students are generated by implementation of Alternative 4, nearby schools have available capacity to accept new students (see Table 16-2). Alternative 4 would not result in a substantial adverse physical impact associated with the provision of or need for new or physically altered school facilities the construction of which could cause significant environmental impacts. This impact would be **less than significant**.

Mitigation Measures

No mitigation is required.

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