

3.11 UTILITIES

This section evaluates the availability of existing utility and infrastructure systems (water, wastewater, electricity, natural gas, and telecommunications) to serve the Tahoe Cross-Country Lodge Replacement and Expansion Project and the impact of the Project on these systems. The primary issues raised during scoping that pertain to utilities include:

- ▶ capacity of the utility service systems to serve the Project, including in the TCPUD wastewater collection system;
- ▶ Tahoe-Truckee Sanitation Agency (T-TSA) capacity allocations; and
- ▶ general comments about potential impacts on utilities.

The evaluation is based information obtained from a number of utility providers, including TCPUD, Tahoe-Truckee Sanitation Agency, T-TSA, and Tahoe Truckee Sierra Disposal (TTSD).

Changing the pattern of ownership of parcels as part of the larger land exchange being contemplated by TCPUD and the Conservancy by itself would have no impact on utilities. The potential environmental effects from construction and operation of the proposed Project on a portion of APN 093-160-064, currently owned by the Conservancy, are assessed in this section and other resource sections in Chapter 3, "Environmental Setting, Environmental Impacts, and Mitigation Measures," and in Chapter 5, "Other CEQA-Mandated Sections," of this EIR. The purpose of the land exchange is to consolidate ownership and increase land management efficiencies for the agencies and no other physical changes are proposed for the affected parcels.

The Existing Lodge receives internet and telephone services from Spectrum Business. The Project would continue to receive services from this provider. The Project would not result in a substantial increase in demand for telecommunications services. With implementation of the proposed Project, potential new connections to existing, nearby telecommunications lines that are located in Polaris Road from the Project site could be required. Although it is possible that implementation of Alternative A could result in upgrading existing telecommunications lines, the Existing Lodge site already has existing telecommunications service and connections. Any potential site-specific construction-related impacts from installing utility lines, such as telecommunications lines, are assessed in the applicable resource sections of this EIR. No impacts related to telecommunications beyond those that could be associated with installation of telecommunications lines on the Project site would occur and impacts related to telecommunications services are not evaluated further in this EIR/EIS.

Water quality and stormwater issues are addressed in Section 3.10, "Hydrology and Water Quality."

3.11.1 Regulatory Setting

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 national waste discharge standards in Section 304 of the CWA. The 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. Those portions of the CWA that relate to wastewater discharges are discussed below.

Safe Drinking Water Act

As mandated by the Safe Drinking Water Act (42 US Code Section 300f et seq.; 40 Code of Federal Regulations, Parts 141, 142, 143; SDWA), passed in 1974, the U.S. Environmental Protection Agency (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 3 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.

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.

Goals and Policies

The Public Services and Facilities Element and Air Quality Element of the TRPA Regional Plan includes the following goals and policies related to the water supply, wastewater and solid waste collection and disposal, and energy:

- ▶ **Policy PS-1.3:** All new development shall employ appropriate devices to conserve water and reduce water consumption. Existing development shall be retrofitted with water conservation devices on a voluntary basis in conjunction with a public education program operated by the utility districts.
- ▶ **Policy PS-2.1:** No additional development requiring water should be allowed in any area unless it can be demonstrated that there is adequate water supply within an existing water right.
- ▶ **Policy PS-2.3:** No additional development requiring water shall be allowed in any area unless there exists adequate storage and distribution systems to deliver an adequate quantity and quality of water for domestic consumption and fire protection.
- ▶ **Policy PS-3.1:** The discharge of municipal or industrial wastewaters to the surface and groundwaters of the Tahoe Region is prohibited, except for Existing development discharging wastewaters under a state- or TRPA-approved disposal plan.
- ▶ **Policy PS-3.3:** Garbage pick-up service shall be mandatory throughout the region, and will be so structured as to encourage clean-ups and recycling.
- ▶ **Policy AQ-1.5:** Encourage the reduction of emissions through building efficiency.

Code of Ordinances

The TRPA Code of Ordinances (Code) includes requirements for basic water, wastewater, and electrical services in Chapter 32.

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.

Placer County Tahoe Basin Area Plan

The Placer County Tahoe Basin Area Plan (Area Plan) is a joint TRPA/Placer County plan that incorporates TRPA goals and regulations but also includes the following additional policies related to utilities that would be relevant to the Project.

- ▶ **Policy PS-P-1:** Continue to manage public services and facilities in accordance with the Regional Plan.
- ▶ **Policy PS-P-7:** Ensure that all proposed developments are reviewed for fire safety standards by local fire agencies responsible for its protection, including providing adequate water supplies and ingress and egress.
- ▶ **Policy PS-P-8:** Encourage all water systems address fire suppression water needs.

STATE

Urban Water Management Plan

The Urban Water Management Planning Act (Water Code Sections 10610 through 10656) requires that every urban water supplier with a water supply system 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.

The TCPUD 2015 Urban Water Management Plan (UWMP), adopted in June 2016, incorporated planning information from the Lake Tahoe Regional Plan Update completed in 2012, which includes assumptions about growth in the region based on development rights (previously known as commodities). The growth assumptions used in the UWMP are adequate to include a project at the scale of the Tahoe Cross-Country Lodge Replacement and Expansion Project.

California Safe Drinking Water Act

The SWRCB-DDW is responsible for implementing the federal SDWA and its updates, as well as California statutes and regulations related to drinking water. State primary and secondary drinking-water standards are promulgated in Title 22 of the California Code of Regulations (CCR), Sections 64431–64501.

The California Safe Drinking Water Act (CA SDWA) was passed in 1976 to build on and strengthen the federal SDWA. The CA SDWA authorizes DHS to protect the public from contaminants in drinking water by establishing maximum contaminant levels (MCLs) that are at least as stringent as those developed by EPA, as required by the federal SDWA.

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 Lake Tahoe Basin. For the TCPUD service area, which includes the proposed Project and Alternative A sites, wastewater is transported out of the Basin in a sewer line along SR 89 to Truckee where it is treated at the T-TSA Water Reclamation Plant (WRP).

California Building Standards Code (Title 24)

Energy consumption of new buildings in California is regulated by State Building Energy Efficiency Standards contained in Title 24 of the CCR, 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 2016 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.

The 2016 California Green Building Standards Code (CALGreen; Title 24, Part 11, of the California Code of Regulations [CCR]) became effective January 1, 2017. CALGreen establishes mandatory minimum green building standards as well as more stringent voluntary measures, which are known as Tier 1 and Tier 2 measures, respectively. 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. Division 5.3 of CALGreen includes requirements for conserving water used indoors, outdoors, and in wastewater conveyance. Title 24, Part 6, Building Energy Efficiency Standards (California Energy Code) is discussed under Section 3.12.1, "Regulatory Setting," in Section 3.12, "Energy."

Where a local jurisdiction has not adopted a more stringent construction and demolition (C&D) ordinance, construction activities are required to implement Section 5.408 of the CALGreen Code. Under Section 5.408, construction activities are required to recycle and/or salvage for reuse a minimum of 65 percent of their nonhazardous C&D waste as of January 1, 2017. Applicable projects are required to prepare and implement a Construction Waste Management Plan, which is submitted to the local jurisdiction before issuance of building permits. The City of South Lake Tahoe does not currently have an adopted C&D waste management ordinance.

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 unincorporated Placer County, including the location of the Project, the One Big Bin program collects commingled garbage and recycling. Recyclable materials are separated from the garbage at the Eastern Regional Materials Recovery Facility (One Big Bin 2019). Additionally, as of the last reporting year, Placer County is meeting its mandated diversion targets pursuant to AB 939. The per capita disposal targets for unincorporated Placer County required to meet and sustain the 50 percent diversion requirement is 6.3 pounds per person per day (lb/person/day); in 2017 per capita disposal for the county was measured at 5.2 lb/person/day (CalRecycle 2019a).

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 2019b) 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. 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.

Local

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 TCPUD Sewer Ordinance provides 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 Fire Protection District Fire Code

The North Tahoe Fire Protection District (NTFPD) Fire Code (Ordinance No. 03-2016) incorporates by reference the 2016 California Fire Code. An approved water supply capable of supplying the required fire flow for fire protection shall be provided to the premises upon which facilities or buildings are constructed or moved into the NTFPD jurisdiction (Fire Code Section 507). Project applicants are required to submit to NTFPD for review a set of water improvement plans showing that the development will be provided with a water system for firefighting and proper fire flows (Fire Code Section 507.5.7[6]). The NTFPD Fire Code Section B105 includes fire flow minimum standards for all buildings. The Project would be required to install automatic sprinklers in the building (Conradson, pers. comm., 2019).

3.11.2 Environmental Setting

Public utilities in the Project area are provided by various entities, as identified in Table 3.11-1 and discussed in detail below.

Table 3.11-1 Utilities Providers for the Project Area

Utility	Agency/Provider
Water Supply	Tahoe City Public Utility District
Wastewater Collection and Conveyance	Tahoe City Public Utility District, Tahoe-Truckee Sanitation Agency
Wastewater Treatment	Tahoe-Truckee Sanitation Agency
Solid Waste Collection	Tahoe Truckee Sierra Disposal
Electrical Service	Liberty Utilities
Natural Gas	Southwest Gas

Source: Data compiled by Ascent Environmental in 2019

WATER

TCPUD relies almost entirely on groundwater sources for its drinking water supply, and throughout its 31 square mile service boundary, the TCPUD owns and operates seven distinct and separately licensed water service areas serving over 5,700 municipal water connections. The TCPUD service area extends from Dollar Point to Alpine Meadows Road on the north shore and from Tahoe City to Emerald Bay along the west shore. The proposed Project and Alternative A would be supplied by the TCPUD's Tahoe City Main system.

In 2015, TCPUD's gross water demand was 334 million gallons (approximately 0.9 million gallons per day [mgd]), which is projected to increase to 375 million gallons (approximately 1.0 mgd) by 2035 (TCPUD 2016). Future surface water supply development includes the West Lake Tahoe Regional Water Treatment Plant and the Tahoe City Main system. As shown in Table 3.11-2, TCPUD has existing and future water supplies to meet, and exceed, water demands in their service area.

Table 3.11-2 TCPUD Current and Planned Annual Water Demand and Sources of Supply

Water Supply Source	2015 (mg)	2020 (mg)	2025 (mg)	2030 (mg)	2035 (mg)
Groundwater	331	658	658	658	658
Surface Water ¹	0	260	780	780	780
Purchased	3	4	4	4	4
Total Water Supply by Source	334	922	1,442	1,442	1,442
Water Deliveries	273	275	286	298	310
Sales to Other Water Agencies ²	23	24	25	27	28
Additional Water Uses and Losses ³	38	38	38	38	38
Total Water Demand	334	337	349	363	375

Notes: mg = million gallons

¹ Based on actual and projected deliveries only. TCPUD maintains legal water rights to divert over 1,000 acre-feet per year (over 325 million gallons per year) of surface water from Lake Tahoe and surrounding areas.

² Includes water supplied to NTPUD.

³ Includes system flushing, leak repair flushing, hydrant leaks, leaking valves, unmetered use, and leaking pipes.

Source: TCPUD 2016:4-22 – 4-23, 6-56, 6-63, 7-64

WASTEWATER

Wastewater Conveyance

Tahoe City Public Utility District provides wastewater collection services to approximately 7,800 connections spanning from the Dollar Point area, south to Emerald Bay. TCPUD's wastewater collection system consists of over 180 miles of gravity and forced sewer mains and 22 sewer pumping stations. All collected raw sewage is conveyed out of the Lake Tahoe Basin through a large diameter gravity pipeline known as the Truckee River Interceptor (TRI), which is owned and operated by T-TSA. The TRI conveys all raw sewage from the north and west shores of Lake Tahoe approximately 17 miles to Truckee and is treated there by the T-TSA Water Reclamation Plant (WRP). Future improvement needs have been identified to address future capacity deficiencies along the TRI.

On average, TCPUD's sewer collection service area conveys approximately 0.8 mgd of raw wastewater to the T-TSA treatment facility (TCPUD 2016:6-57). Over time the flows appear to be decreasing, particularly since 2006. The design daily flow (the allocated maximum flow to T-TSA) for TCPUD is 7.8 mgd (TCPUD 2014:8-9). 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 through 8-11).

Wastewater Treatment and Disposal

The T-TSA offices and WRP are 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.

The WRP provides tertiary level treatment which consists of influent screening, grit removal, primary sedimentation, pure oxygen activated sludge, biological phosphorus removal, chemical treatment, mixed media filtration, biological nutrient removal, ion exchange ammonia removal, and final chlorination. Organic sludge is digested anaerobically,

dewatered and transported to the Lockwood Regional Landfill and Bently Farm in Nevada. The WRP has a treatment capacity of 9.6 mgd and can accommodate between 400 to 800 new connections per year. However, the rate of new connections has not increased as originally anticipated. As a result, T-TSA anticipates the WRP treatment capacity of 9.6 mgd is sufficient to serve the participating districts through 2025. In 2017, the daily average treatment plant influent was 3.18 million gallons. The maximum instantaneous flow rate was 5.49 million gallons and the average annual flow volume was 4.0 mgd (Nevada LAFCo 2018). The estimated remaining available capacity at the treatment plant is 5.6 mgd.

ENERGY

Electricity

Electricity is provided to the Existing Lodge site and surrounding area by Liberty Utilities. There are existing electrical lines along Polaris Road and Country Club Drive.

Natural Gas

Natural gas is supplied to the Existing Lodge site and surrounding area by Southwest Gas Corporation. There are existing natural gas distribution lines in Polaris Road and Country Club Drive.

SOLID WASTE

Commercial and residential solid waste is collected and processed by TTSD. TTSD operates the Eastern Regional Landfill Material Recovery Facility (MRF) and Transfer Station, which is located approximately halfway between Truckee and Squaw Valley. TTSD collects household and commercial waste and recyclables and transports the refuse to the Eastern Regional Landfill MRF and Transfer Station where items are sorted. Non-recyclable solid waste is transported to the Lockwood Regional Landfill (Placer County 2019).

The Eastern Regional Landfill MRF and Transfer Station separates and recycles marketable materials such as paper, cardboard, plastics, metals, and glass. The facility also recycles source-separated wood waste, pine needles, and inert materials. Wood waste is chipped for mulch, woodchips, or biomass fuel, pine needles are used for slope stabilization, and inert materials are crushed for reuse as aggregate or in onsite land remediation (Placer County 2015). The Eastern Regional Landfill MRF and Transfer Station is permitted to receive 800 tons of material each day, has a processing capacity of approximately 40 tons of material per hour, and the daily processing capacity for an 8-hour period is approximately 320 tons per day (Placer County 2017, CalRecycle 2018).

The Lockwood Regional Landfill, located in Nevada, covers 856 acres and has a total waste volume of 302 million cubic yards (NDEP 2013). In 2016, the Lockwood Regional Landfill accepted an average of 2,960 tons of solid waste per day. The volume of waste conveyed to the Lockwood Regional Landfill from California communities accounts for 7.5 percent of municipal solid waste. The Lockwood Regional Landfill has a remaining capacity of 267 million cubic yards and an estimated closure date of 2150 (NDEP 2017).

3.11.3 Environmental Impacts and Mitigation Measures

METHODS AND ASSUMPTIONS

Water Demand

Additional water demand resulting from implementation of the Project was conservatively estimated. The average annual water demand was derived from the average annual water demand at the Existing Lodge from 2014 through 2018, which was provided by the water supplier, TCPUD (Boyd, pers. comm., 2019). There is currently no irrigation at the Existing Lodge; thus, the existing water demand is associated with water consumed during operation of the facility, including restrooms, drinking water, and kitchen operations.

Table 3.11-3 Existing Water Demand at the Cross-Country Lodge (gallons)

	2014	2015 ¹	2016	2017	2018	Average
January	1,376	2,732	13,605	7,744	430	5,177
February	4,342	378	11,707	9,627	1,932	5,597
March	1,704	1,509	6,569	8,038	5,261	4,616
April	208	51	1,044	4,392	4,268	1,993
May	585	163	132	134	72	217
June	8,525	1,450	1,619	825	614	2,607
July	2,992	207	1,639	1,173	5,374	2,277
August	2,968	397	1,244	1,095	2,175	1,576
September	1,978	2,655	2,064	427	2,520	1,929
October	729	143	1,280	2,258	1,056	1,093
November	936	445	650	452	415	580
December	465	4,244	799	399	2,658	1,713
Total	26,808	14,374	42,352	36,564	26,775	29,375

¹ The drop in water demand in 2015 is associated with the drought.

Source: Boyd, pers. comm., 2019

The existing annual average water demand (29,375 gallons) and the size of the Existing Lodge (2,723 square feet [sq. ft.]) were used to determine the water demand factor of 11 gallons/sq. ft. (rounded) to estimate future water demand with implementation of the Project.

Wastewater Treatment and Disposal

In general, wastewater flows are assumed to mirror water supply user because there is no assumed loss between water use and wastewater generation; thus, wastewater flows are estimated to be similar to those shown in Table 3.11-3. Because a wastewater demand factor for a project like the Tahoe Cross-Country Lodge Replacement and Expansion Project was not readily available to estimate future wastewater demand, reasonable assumptions were made about future wastewater demand based on existing facility data provided by TCPUD (see Table 3.11-3). To develop estimates of wastewater demand from the Project that can be used to assess impacts on TCPUD's and T-TSA's wastewater conveyance capacity and T-TSA's WRP treatment capacity, an estimate of the rate of wastewater flows on an average day based on the existing water demand was developed (annual average demand ÷ number of days in the year = 29,375 gallons ÷ 365 days = 80 gallons per day [gpd] on an average day). The average day wastewater flows per square foot is equal to the average wastewater generated per day divided by the size of the existing facility (80 gpd ÷ 2,723 sq. ft. = 0.03 gallons per day per square foot [gpd/sq. ft.]). Additionally, the wastewater flow rate on a peak day was developed from the month with the highest demand, which was January 2016 (total demand from the month with the highest demand ÷ the number of days in a month = 13,605 gallons ÷ 31 days = 439 gpd). The peak day wastewater flows per square foot is equal to the wastewater flow on a peak day divided by the size of the existing facility (439 gpd ÷ 2,723 sq. ft. = 0.16 gpd/sq. ft.).

Energy

The analysis of energy use for the Project is qualitative based on comparison between the increase in size and visitation at the Schilling Lodge and the size and visitation at the Existing Lodge throughout the year.

Solid Waste

The amount of solid waste that would be generated by the Project was estimated based on assumptions used in the air quality modeling conducted using California Emissions Estimator Model (CalEEMod), such as the Schilling Lodge building square footage.

SIGNIFICANCE CRITERIA

CEQA Criteria

In accordance with Appendix G of the State CEQA Guidelines, a utilities and service systems impact would be considered significant if implementation of the Project would:

- ▶ require or result in the relocation or construction of new or expanded water, wastewater treatment, electric power, or natural gas facilities, the construction or relocation of which could cause significant environmental effects;
- ▶ result in water demand that would exceed the ability of the provider to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years;
- ▶ result in a determination by the wastewater treatment provider that it has inadequate capacity to serve projected demand, in addition to the provider's existing commitments;
- ▶ generate solid waste in excess of state or local standards, in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals; or
- ▶ fail to comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

TRPA Criteria

Based on the TRPA Initial Environmental Checklist, impacts related to utilities would be significant if the Project would:

- ▶ utilize additional water at an amount that would exceed the maximum permitted capacity of the service provider;
- ▶ utilize additional sewage treatment capacity at an amount that would exceed the maximum permitted capacity of the sewage treatment provider;
- ▶ result in a 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; or
- ▶ result in the need for new systems or substantial alterations to solid waste and disposal.

ENVIRONMENTAL EFFECTS OF THE PROJECT

Impact 3.11-1: Increased Demand for Water Supply and Water Conveyance

The estimated annual water demand for the proposed Project and Alternative A would be 111,694 gallons. With implementation of the proposed Project, there would also be some water demand associated with continuing operations at the Existing Lodge. TCPUD has indicated there would be adequate water supply and conveyance infrastructure to serve the Project. Because TCPUD has sufficient water supply to meet water demand for the proposed Project and water conveyance infrastructure would be adequate, this impact would be **less than significant** for the proposed Project. Although there would be sufficient water supply to meet water demand for Alternative A, TCPUD has indicated that the ability of the 6-inch water line in Country Club Drive to meet fire flow requirements for this alternative is uncertain, requiring additional analysis. This impact would be **potentially significant** for Alternative A.

Proposed Project

The water demand at the Existing Lodge is associated with year-round operations of Tahoe XC and includes demand associated with restroom facilities and water use for operations at the Free Heel Café. There is currently no irrigation at the Existing Lodge. From 2014 through 2018, the average annual water demand at the Existing Lodge was 29,375 gallons (see Table 3.11-4).

The increase in water demand at the Schilling Lodge with implementation of the proposed Project would be associated with restrooms, the café (includes service counter and kitchen), and showers. Landscape irrigation could occur for up to the first 5 years of the proposed Project operation to help with plant establishment as part of revegetation efforts; water demand for irrigation is considered to be a minor contribution to the water demand over the life of the Project because water-efficient landscaping (i.e., xeriscaping) would be used. Implementation of the proposed Project would result in an increase in the number of events at the Schilling Lodge, but would not result in an increase in size of the events compared to existing conditions. The annual water demand associated with the Schilling Lodge would be up to 111,694 gallons (see Table 3.11-4), based on the size of the facility and the methodology used to conservatively estimate projected water demand. See “Methods and Assumptions,” above, for a description of how water demand was estimated. Likely, water demand would be substantially less than estimated here and closer to existing water demands. Implementation of the proposed Project would include construction of a new water service connection to the existing 12-inch water line in Polaris Road.

Water demand associated with operation of the Existing Lodge, under the proposed Project would be limited to restroom use when the building is in use for community meetings, recreation classes, and special events and would be much less than the existing water demand. For the purposes of this analysis, water demand at the Existing Lodge under the proposed Project is conservatively assumed to be similar to or less than existing water demand during the spring through fall months when the cross-country ski operations are typically closed but the facility is still in use for bike rentals, the junior mountain bike program, and community meetings (May through November). The average monthly water demand based on the 5-year averages for May through November for the Existing Lodge included in Table 3.11-3 would be 1,468 gallons per month. The annual average water demand for the Existing Lodge under the proposed Project would be up to 17,621 gallons. The total future annual average water demand associated with implementation of the proposed Project, including operation of the Schilling Lodge and the Highlands Community Center would be 129,315 gallons. This would be an increase in water demand at Tahoe XC of up to 99,940 gallons per year.

Table 3.11-4 Existing Water Demand Compared to that Estimated for the Proposed Project

	Building Size (sq. ft.)	Water Demand Factor ¹ (gallons/sq. ft.)	Annual Average Water Demand (gallons/year)
Existing Conditions			
Existing Lodge	2,723	11	29,375
Proposed Project			
Schilling Lodge ²	10,154	11	111,694
Highlands Community Center	2,723	NA ³	17,621
Total Water Demand for the Proposed Project	--	--	129,315
Increase in Water Demand Relative to Existing Conditions	--	--	99,940

¹ As described under the header “Methods and Assumptions,” above, the water demand factor was derived from the existing annual average water demand at the Existing Lodge from 2014 – 2018 and the size of the lodge building.

² The Schilling Lodge would be the same size and operated in the same way under the proposed Project and Alternative A.

³ A water demand factor was not used to estimate future water demand at the Highlands Community Center because it would not be in use full time. Instead the annual average water demand is based on the existing average water use at the Existing Lodge during spring through fall months (May through November) as shown in Table 3.11-3, when the cross-country ski operations are typically closed but the facility is in use for bike rentals, the junior mountain bike program, and small community meetings.

Source: Compiled by Ascent Environmental in 2019

TCPUD has sufficient water supplies to meet current and projected water demands in their service area during normal, single dry, and multiple dry water years (TCPUD 2016:7-69 through 7-70). Additionally, TCPUD has combined estimated surface and groundwater supplies of 922 million gallons per year (mgy) in 2020 and 1,442 mgy in 2035 (see Table 3.11-2), which substantially exceeds the estimated District-wide water use of 334 mgy in 2015 and the estimated cumulative demand of 375 mgy in 2035. The increase in water demand associated with implementation of the proposed Project (99,940 gallons per year) would be a 0.03-percent increase over existing TCPUD water demand and would represent 0.01 percent of TCPUD's total water supplies in 2020 and 0.007 percent of supply in 2035. Additionally, TCPUD has indicated that the water supply infrastructure that the proposed Project would connect to would be sufficient to serve the proposed Project, including meeting fire flow requirements (Homolka, pers. comm., 2017). The proposed Project would be required to obtain authorization from TCPUD for the water connection, which would be subject to engineering analysis to determine the size of the connection that would be needed.

Because TCPUD has sufficient water supplies and sufficient water infrastructure to meet the water supply needs of the proposed Project, this impact would be **less than significant**.

Alternative A

Impacts on water demand from operation of the new lodge under Alternative A would be similar to that of the proposed Project because the size of the Schilling Lodge building and operations for Alternative A would be the same as those for the proposed Project. However, the overall water demand with implementation of Alternative A would be incrementally less than the proposed Project since the Existing Lodge would be demolished and operations there would cease under Alternative A; whereas, in addition to constructing the Schilling Lodge, the proposed Project would retain the Existing Lodge that could generate water demand associated with restroom use during community meetings, recreation classes, and special events. The total estimated water demand for the Schilling Lodge under Alternative A would be 111,694 gallons per year, which would be an increase in water demand at Tahoe XC of 82,319 gallons per year. This would be a 0.02-percent increase over existing TCPUD water demand and would represent 0.009 percent of TCPUD's total water supplies in 2020 and 0.006 percent of their water supplies in 2035.

TCPUD has indicated that the ability of the 6-inch water line in Country Club Drive to meet fire flow requirements for the Alternative A is unlikely and additional analysis to determine the extent of the improvements in the water conveyance for this alternative would be required (Homolka, pers. comm., 2017). The Project applicant would be required to provide a set of water improvement plans to NTFPD for review and approval that shows Alternative A would be provided with a water system that meets fire flow standards.

Although there would be sufficient water supply to meet the demand of Alternative A, because this alternative could require improvements in the water conveyance system to meet fire flow requirements this impact would be **potentially significant**.

Mitigation Measures

Mitigation Measure 3.11-1: Ensure Sufficient Capacity in TCPUD Water Supply Infrastructure to Meet Fire Flow Requirements

This mitigation measure is required for Alternative A.

As part of the process for TCPUD to authorize the water connection for Alternative A and before NTFPD plan review, the Project applicant shall coordinate with TCPUD to determine any necessary water system improvements in Country Club Drive that would be required to meet current fire flow requirements for the Schilling Lodge. The Project applicant shall coordinate with TCPUD to develop plans for and fund construction of improvements that would allow for conveyance of water supply to the site that meets fire flow requirements. The types of improvements that could be required include replacement of the existing water supply line in Country Club Drive or adding a new line parallel to the existing water line. The specific types of improvements that could be required would be determined in coordination with TCPUD as part of the analysis for the water connection authorization. The Project applicant shall be responsible for covering the cost of improvements that would be needed to serve Alternative A. The improvements shall be constructed to meet fire

flow requirements identified in the NTFPD Fire Code. The improvements would be required before construction of the Schilling Lodge.

The Project applicant shall provide a will-serve letter from TCPUD that indicates their water supply infrastructure has adequate capacity to meet fire flow requirements for Alternative A and that any necessary improvements to the system have been completed before the issuance of occupancy permits by Placer County.

Significance after Mitigation

Implementation of Mitigation Measure 3.11-1 would reduce potentially significant impacts related to sufficient capacity in the TCPUD water supply system to meet fire flow requirements because the Project applicant would coordinate with TCPUD to determine the extent of water system improvements would be needed to meet those requirements for Alternative A. The applicant would pay for TCPUD or its contractors to construct the necessary improvements to provide adequate fire flows to the site prior to when the capacity would be needed for the Schilling Lodge.

Increasing water supply conveyance capacity in Country Club Drive, either through replacement and upsizing of the existing line, adding a new line, or some other improvement, would likely include trenching activities within the existing roadway, which is outside of the Alternative A site boundaries. The construction activities associated with implementing the potential water supply improvements would adhere to typical construction practices (including construction outside of noise-sensitive times of day). Construction-related impacts associated with these infrastructure improvements would be short-term in nature and similar to the types of short-term impacts associated with construction of the lodge as described in Sections 3.2 through 3.15 of this EIR. Impacts associated with trenching are summarized here:

- ▶ **Biological Resources:** The water system improvements would not include any above-ground components; thus, there would be no permanent effects on biological resources. Because the upgrade would occur within an existing paved roadway (i.e., Country Club Drive) and would not result in ground disturbance of any previously undisturbed areas, it would not be anticipated to result in impacts to biological resources.
- ▶ **Transportation:** Because the water system improvements would not result in any operational changes there would not be any long-term transportation impacts. Construction-related transportation impacts would be similar to those discussed for Alternative A under Impact 3.5-6 and construction of the water system improvements would include preparation and implementation of a traffic control plan as identified in Mitigation Measure 3.5-6, which would address maintaining access for residences and emergency vehicles. Construction of the water system improvements would result in some temporary construction vehicles accessing the construction site and working within Country Club Drive, which could result in short-term closure of one travel lane. Construction of the water system improvement would only close one lane of traffic at a time to retain residential access and emergency vehicle access in the neighborhood. Because of the short duration of construction of these improvements and implementation of a traffic control plan, transportation impacts would be less than significant.
- ▶ **Archaeological, Historical, and Tribal Cultural Resources:** Potential construction-related impacts on archaeological, historical, and tribal cultural resources from construction of offsite water supply infrastructure would be similar to those discussed for the proposed Project and Alternative A as discussed in Impacts 3.4-1 through 3.4-4 in Section 3.4, "Cultural, Historical, and Tribal Cultural Resources." These offsite improvements would be required to implement Mitigation Measures 3.4-2 and 3.4-3, which would reduce potentially significant impacts related to previously undiscovered archaeological and tribal cultural resources because mitigation would avoid, move, record, or otherwise treat a discovered resource appropriately, in accordance with pertinent laws and regulations.
- ▶ **Air Quality:** Because of the limited amount of construction activities that would be associated with construction of the water system improvements in Country Club Drive involving ground disturbance, trenching, and installation, construction-related emissions of criteria air pollutants or precursors would not be anticipated to exceed construction-related emissions of Alternative A shown in Table 3.6-5, which range between 1.8 – 3.0 lb/day ROG,

12.7 – 21.0 lb/day NO_x, and 1.0 – 6.3 lb/day PM₁₀. For this reason, and because the PCAPCD significance criteria is 82 lb/day for each of these criteria pollutants and precursors, the construction-related emissions associated with the water system improvements would not exceed this significance criteria. There would be no operational emissions of criteria air pollutants or precursors associated with the water system improvements. Construction of the water system improvements would result in less-than-significant air quality impacts.

- ▶ Greenhouse Gases and Climate Change: Construction of the water system improvements would result in emission of construction-related GHG emissions similar to that described for Alternative A under Impact 3.7-1. As identified in Impact 3.7-1, because the construction and operational GHG emissions from Alternative A would not achieve the zero net emissions goal of the Tahoe Basin Area Plan or the Linking Tahoe RTP/SCS goal of reducing VMT within the region, Alternative A would result in a potentially significant impact. Construction-related GHG emissions from the water system improvements would contribute to this impact; thus, as a component of Alternative A, the water system improvements would also be required to implement feasible measures to reduce GHGs identified in Mitigation Measure 3.7-1, which could include enforcing idling time restrictions for construction vehicles and use of electric-powered construction equipment rather than operating temporary gasoline/diesel powered generators. Also required by Mitigation Measure 3.7-1, the applicant would be required to offset the remaining levels of unmitigated GHG emissions by purchasing carbon offsets as described in the mitigation measure. Construction-related GHG emissions from construction of the water system improvements would be reduced to a less-than-significant level after implementation of Mitigation Measure 3.7-1.
- ▶ Noise: Construction of the water system improvements could result in similar noise and vibration impacts as described for Alternative A under Impacts 3.8-1 and 3.8-2. Because construction activity for the water system improvements would occur between 8:00 a.m. and 6:30 p.m. daily (during hours where construction activities are exempt from local noise standards) and be temporary in nature, existing nearby sensitive receptors would not be substantially affected by construction noise. Thus, construction of the water system improvements would not result in a substantial temporary increase in noise that exceeds a local (i.e., TRPA, Placer County) noise standard and this impact would be less than significant.

Construction vibration impacts associated with the water supply improvements would be similar to the analysis of vibration impacts for Alternative A. Impact 3.8-2 describes that construction activities involving dozers or similar construction equipment could exceed Caltrans's recommended standards vibration levels with respect to the prevention of structural building damage (0.2 in/sec PPV for normal) for structures within 15 feet and could exceed FTA's maximum acceptable level of 80 VdB with respect to human response (i.e., would result in human disturbance) within 45 feet of construction activities. The nearest residential structures are over 30 feet from the edge of pavement (i.e., edge of where construction activities could occur for these improvements) and would not be exposed to a vibration impact that could result in structural building damage. Because construction activities would occur during daytime hours, when people are less sensitive, existing residences would not be exposed to vibration levels that would disturb people and this impact would be less than significant.

- ▶ Geology, Soils, Land Capability, and Coverage and Hydrology and Water Quality: Construction of the water supply system improvements would result in similar erosion impacts and surface water and groundwater quality impacts as those described for Alternative A as described under Impacts 3.9-3, 3.10-1, and 3.10-3. Because the water supply system improvements would occur in previously disturbed areas and would implement temporary and permanent best management practices, as required by TRPA, Lahontan Regional Water Quality Control Board, and Placer County, erosion impacts would be less than significant. Because these improvements would be located in previously disturbed and developed areas, they would not adversely affect the topography or result in compaction or land coverage beyond TRPA limits. These impacts would be less than significant.
- ▶ Utilities: Construction of water supply system improvements, if determined to be needed, would be implemented to meet fire flow demand for Alternative A. There would be no long-term demand for wastewater services or electricity and natural gas supplies associated with the fire flow upgrades. Installation of the water supply improvements would involve excavation and construction and demolition (C&D) waste associated with asphalt removed during construction. As discussed under Impact 3.11-4 for Alternative A, the water supply system improvements would comply with Section 5.408 of the CALGreen Code which requires that a minimum of

65 percent of C&D debris generated during construction be recycled and/or salvaged. For these reasons and because of the temporary nature of construction activities, the impact from implementation of this mitigation measure on solid waste collection and disposal would be less than significant.

- ▶ Energy: Construction of the water supply system improvements would result in the same types of fuel consumption, which would be a one-time energy expenditure, described for Alternative A under Impact 3.12-1. Construction equipment use and associated energy consumption would be typical of that associated with the construction of utility improvements. Implementation of Mitigation Measure 3.7-1, as summarized above, would result in the reduction of GHG emissions through implementation of measures that would also reduce construction-related consumption of fuels. Because the demand for energy for construction activities would be temporary and would not require additional capacity or increased peak or base period demands for electricity or other forms of energy and because construction of the water supply system would implement measures to reduce fuel consumption, the water supply system improvements would not result in wasteful, inefficient, or unnecessary consumption of energy. This impact would be less than significant.

For the reasons described above, implementation of this mitigation measure would not result in additional or secondary environmental impacts to those of Alternative A. With implementation of Mitigation Measures 3.11-1, this impact would be reduced to a **less-than-significant** level.

Impact 3.11-2: Increased Demand for Wastewater Collection, Conveyance, and Treatment

The proposed Project would generate wastewater flows associated with operation of the Schilling Lodge and continued use of the Highlands Community Center, which would result in estimated total annual average wastewater flows of up to 129,315 gallons, an increase of up to 99,940 gallons over existing conditions. Operation of the proposed Project would increase average daily wastewater demand by 273 gpd and peak day wastewater demand by 1,625 gpd over existing conditions. Alternative A would result in the removal of the Highlands Community Center and construction and operation of the Schilling Lodge in its place, resulting in generation of annual average wastewater flows of up to 111,694 gallons, an increase of up to 82,319 gallons over existing conditions. The average day wastewater flows for Alternative A would result in an increase of 225 gpd over existing conditions and an increase of 1,189 gpd over existing peak day wastewater flows. TCPUD has indicated there would be sufficient capacity in their wastewater collection system to convey wastewater flows from the proposed Project and Alternative A to the T-TSA TRI. Additionally, T-TSA has indicated there is sufficient capacity in the T-TSA TRI and WRP to serve the proposed Project. For these reasons, the proposed Project and Alternative A would have a **less-than-significant** impact on wastewater collection, conveyance, and treatment.

Proposed Project

This analysis assumes that wastewater flows typically mirror domestic water usage without irrigation. The increase in wastewater flows from the Schilling Lodge with implementation of the proposed Project would be associated with restrooms, the café (includes service counter and kitchen), and showers. The estimated annual average wastewater flows at the Schilling Lodge with implementation of the proposed Project would be 111,694 gallons with the average daily flows estimated to be 305 gpd and peak day wastewater flows estimated at 1,625 gpd.

For the purposes of this analysis, wastewater demand at the Highlands Community Center under the proposed Project is conservatively assumed to be similar to or less than existing wastewater demands, like that described for the water demand discussed under Impact 3.11-1. The annual average wastewater flows for the Highlands Community Center would be up to 17,621 gallons, average day wastewater flows would be 48 gpd, and the peak day wastewater flows would be 436 gpd. The total future annual average wastewater flows associated with implementation of the proposed Project, including operation of the Schilling Lodge and the Highlands Community Center would be 129,315 gallons. This would be an increase in wastewater flows at Tahoe XC of 99,940 gallons per year.

Implementation of the proposed Project would result in an increase in the number of events at the Schilling Lodge, but would not result in an increase in size of the events compared to existing conditions and, thus, would not increase wastewater flows on peak visitation days compared to existing conditions. Implementation of the proposed

Project would include construction of a new connection to the existing wastewater line in Polaris Road. The wastewater flows at the Highlands Community Center under the proposed Project would be associated with use of restroom facilities when the building is in use for community meetings, recreation classes, and special events.

Table 3.11-5 Existing Wastewater Demand Compared to that Estimated for the Proposed Project

	Building Size (sq. ft.)	Average Day Wastewater Flows (gpd)	Peak Day Wastewater Flows (gpd)	Annual Average Wastewater Flows (gallons)
Existing Conditions				
Existing Lodge ¹	2,723	80	436	29,375
Proposed Project				
Schilling Lodge ²	10,154	305	1,625	111,694
Highlands Community Center ³	2,723	48	436	17,621
Total Wastewater Flows for the Proposed Project	—	353	2,061	129,315
Increase in Wastewater Flows from Existing Conditions	—	273	1,625	99,940

¹ The average day wastewater flows for the Existing Lodge are calculated by dividing the annual average wastewater flows derived from the annual average water flows (see Table 3.11-3) by 365 days. The peak day wastewater flow for the Existing Lodge was developed from the month with the highest demand, which was January 2016 shown in Table 3.11-3. See the discussion under the header "Wastewater Treatment and Disposal" under the header "Methods and Assumptions."

² The average day wastewater flows for the Schilling Lodge was determined by multiplying the average day flow rate (0.03 gpd/sq. ft.) described under the header "Methods and Assumptions," by the size of the lodge. The peak day wastewater flow was determined by multiplying the peak day wastewater flow rate (0.16 gpd/sq. ft.) by the size of the lodge.

³ The average day wastewater flows for the Highlands Community Center was calculated by dividing the annual average wastewater flow (17,621 gallons) by 365 days. The peak day wastewater flows for the Highlands Community Center are conservatively estimated to be equal to wastewater flows for a peak day at the Existing Lodge, although the peak day flows at the Existing Lodge are based on highest use at the lodge during a winter month when Tahoe XC would be operating.

Source: Compiled by Ascent Environmental in 2019

The average daily wastewater flows associated with implementation of the proposed Project would be a 0.03-percent increase over existing wastewater flows collected by TCPUD's conveyance system and would represent 0.004 percent of the design daily flow (the allocated maximum flow to the T-TSA TRI and WRP). On a peak day, the increase in wastewater flows associated with the proposed Project would be a 0.2 percent increase over existing wastewater flows and would represent 0.02 percent of the design daily flow for TCPUD flows to T-TSA's collection system and WRP. The increase in average daily wastewater flows from the proposed Project would be 0.001 percent of the existing average treatment influent at the WRP and 0.005 percent of the remaining capacity at the WRP. On a peak day, the wastewater flows from the proposed Project would represent a 0.03-percent increase over existing maximum instantaneous flows to the WRP and the remaining capacity at the WRP. There is currently sufficient remaining capacity in the TCPUD wastewater collection system and T-TSA collection system and WRP to handle the projected increase in average day and peak day wastewater flows associated with the proposed Project.

TCPUD has indicated their wastewater collection system has capacity to convey wastewater flows from the proposed Project to the T-TSA WRP (Homolka, pers. comm., 2017). The proposed Project would be required to obtain authorization from TCPUD for the sewer connection, which would be subject to engineering analysis.

T-TSA has indicated there is sufficient capacity in the T-TSA TRI and WRP to serve the proposed Project (Pindar, pers. comm., 2019). However, T-TSA does not issue will-serve letters. All capacity allocations are made on a first-come, first-served basis for all projects within T-TSA's service area.

Because TCPUD and T-TSA have sufficient wastewater conveyance and treatment capacity to accommodate the wastewater flows from the proposed Project, this impact would be **less than significant**.

Alternative A

Impacts on wastewater conveyance and treatment from implementation of Alternative A would be the same as that described for the Schilling Lodge under the proposed Project, above, because the size of the Schilling Lodge and operations for this alternative would be the same as those for the proposed Project. However, the overall wastewater flows would be incrementally less than the proposed Project, limited to wastewater from the Schilling Lodge, since the Existing Lodge would be demolished and operations at the Highlands Community Center would cease under Alternative A. Thus, the estimated average annual wastewater flows for Alternative A would be up to 111,694 gallons, an increase of up to 82,319 gallons over existing conditions (see Table 3.11-5). The average day wastewater flows at the Schilling Lodge would be 305 gpd, an increase of 225 gpd over existing conditions, and the peak day wastewater flows would be 1,625 gpd, an increase of 1,189 gpd over existing peak day wastewater flows. For these reasons and those described above for the proposed Project, the impact from implementation of Alternative A on demand for wastewater conveyance and treatment would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

Impact 3.11-3: Increased Demand for Electricity and Natural Gas

Implementation of the Project, under either the proposed Project or Alternative A would increase electricity and natural gas consumption at each site relative to existing conditions. Liberty Utilities and Southwest Gas have indicated there would be adequate supplies and facilities to serve the electricity and natural gas needs of the proposed Project and Alternative A. For these reasons, the impact related to construction of new or expanded electricity or natural gas facilities would be **less than significant**.

Proposed Project

Liberty Utilities would provide electricity for the proposed Project and natural gas services would be provided by Southwest Gas Corporation.

Implementation of the proposed Project would result in an increase in electricity and natural gas use because the size of the Schilling Lodge would be larger and require additional resources to operate (e.g., heat) the additional space than the Existing Lodge (estimated to be 2,723 sq. ft.). With implementation of the proposed Project, operation of the Highlands Community Center would continue to have demands for electricity and natural gas, but those demands would be anticipated to be less than under existing conditions since the use of the facility throughout the year would be for a limited number of community events each month (e.g., recreation/special classes, community meetings; see Table 2-5 in Chapter 2, "Description of the Proposed Project and Alternative Evaluated in Detail"), which would be less activity than currently occurs at the Existing Lodge. The Project would increase electricity and natural gas consumption relative to existing conditions, and would require the construction of new utility connections to existing electrical and natural gas facilities provided by Liberty Utilities and Southwest Gas, respectively.

As discussed in Impacts 3.13-1 and 3.12-2 in Section 3.12, "Energy," the proposed Project would be constructed in compliance with energy efficiency standards of Part 6 of the 2019 California Energy Code, which is 30 percent more energy efficient than the previous iteration of the California Energy Code. Thus, compliance with these regulations would minimize the Project's increase in energy demands.

Liberty Utilities and Southwest Gas have indicated there would be adequate supplies and facilities to serve the Project (Custer, pers. comm., 2019; Nelson, pers. comm., 2019). Additionally, before receiving permit approval from TRPA or Placer County, future development would be required to comply with Section 32.6 of the TRPA Code, which requires that a project applicant demonstrate that the project would be served by facilities that have adequate electrical supply. Aside from a new service connection to the new building, no other new electricity or natural gas systems or substantial alterations to energy systems would be required. The new service connections would be constructed within the footprint of the proposed Project site and, thus, the potential environmental effects associated with construction of these service connections are considered as part the analysis of this proposed Project throughout this EIR.

For the reasons described herein, the increase in demand for electricity and natural gas would not be substantial for the Schilling Lodge and Highlands Community Center such that existing sources would not be sufficient to serve the proposed Project. This impact would be **less than significant**.

Alternative A

Operations at the Schilling Lodge associated with Alternative A would have similar levels of energy demand as the proposed Project; however, overall operational energy demand of electricity and natural gas use and consumption of gasoline and diesel fuels would be incrementally less than the proposed Project because of the discontinued use of the Existing Lodge. The Existing Lodge would be removed and replaced with the Schilling Lodge under this alternative; thus, the only natural gas and electricity demand for this alternative would be associated with the Schilling Lodge.

For similar reasons described above under the discussion of the proposed Project's electricity and natural gas impacts, the impact from Alternative A related to construction of new or expanded electricity or natural gas facilities would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

Impact 3.11-4: Increased Demand for Solid Waste Collection and Disposal

Solid waste collection services are currently provided by TTSD. After recyclable materials are sorted by TTSD at the Eastern Regional Landfill and MRF, residual solid waste is disposed of at Lockwood Regional Landfill in Nevada. Implementation of the proposed Project and Alternative A would result in an increase in solid waste generation proportionate to the anticipated increase in visitation at the Schilling Lodge and would generate some construction and demolition debris associated with new facilities. The Eastern Regional Landfill and MRF and Lockwood Regional Landfill both have sufficient capacity to meet the additional construction and operation solid waste collection and disposal demand of the proposed Project and Alternative A. This impact would be **less than significant**.

Proposed Project

Solid waste collection for the Existing Lodge is provided by TTSD. Recyclable materials are collected as part of the solid waste collection service and sorted at the Eastern Regional Landfill and MRF in Truckee. Operations at the Schilling Lodge could generate up to an estimated 9.2 tons/year of solid waste (modeled by Ascent Environmental in 2019). Solid waste generated by special events, community events, and private events would increase with the anticipated increase in number of events that could occur with implementation of the proposed Project, but the sizes of the events would not exceed that of the existing special events at the Existing Lodge. Operation of the Highlands Community Center under the proposed Project would generate a limited amount of solid waste associated with up to 24 recreation/special classes throughout the year and up to four community gatherings throughout the year. Solid waste collection for the proposed Project would continue to be provided by TTSD.

After recyclable materials are separated from solid waste at the MRF in Truckee, the residual solid waste is hauled to Lockwood Regional Landfill for disposal. The MRF is permitted to receive 800 tons of material daily (CalRecycle 2018). The MRF receives an average of 205 tons per day and has available capacity to receive an additional 595 tons per day. The facility is achieving a near 50 percent diversion rate for commercial wastes and greater than 50 percent diversion for residential wastes (TTSD 2019a, 2019b). The Lockwood Regional Landfill has a disposal capacity of 302.5 million cubic yards with a remaining capacity of more than 267 million cubic yards (NDEP 2017). There is sufficient capacity at the MRF and Lockwood Regional Landfill to accept the anticipated incremental increase in solid waste generated by the proposed Project.

Construction and demolition (C&D) waste would be generated by construction of the Schilling Lodge. In accordance with Section 5.408 of the CALGreen Code, the Project would implement a Construction Waste Management Plan for recycling and/or salvaging for reuse of a minimum of 65 percent of C&D debris generated during Project construction. It should be noted that the Schilling Lodge would be a reconstruction of an existing building, thus, less

solid waste would be generated during construction of the Project compared to other projects involving construction of an entirely new building.

In compliance with TRPA Policy PS-3.3 requiring garbage pick-up service in the Basin, the proposed Project would continue to have solid waste collection provided by TTSD. Unincorporated Placer County is in compliance with state targets for waste diversion from landfills. Because the Project would be served by TTSD, which separates recyclable materials from solid waste at the MRF, the Project would comply with state requirements for solid waste diversion.

The increase in solid waste generation that would occur with implementation of the proposed Project would not result in an increase in solid waste that would cause the MRF or Lockwood Regional Landfill to exceed permitted capacities. The Project would also comply with all relevant regulations related to solid waste reduction and recycling. This impact would be **less than significant**.

Alternative A

The demand for solid waste collection and disposal associated with Alternative A would be similar to that of the proposed Project on a long-term basis because the size of the Schilling Lodge and operations for this alternative would be similar to the proposed Project. However, Alternative A would remove the Existing Lodge; thus, there would be no solid waste generated from recreation/special classes and community gatherings at the Highlands Community Center like that described above for the proposed Project.

Alternative A would generate a greater amount of C&D waste than the proposed Project, because Alternative A would include demolition of the Existing Lodge. Construction-generated C&D waste would need to be managed in accordance with Section 5.408 of the CALGreen Code, which requires that a minimum of 65 percent of C&D debris generated during construction be recycled and/or salvaged for reuse. For these reasons and those described above for the proposed Project, the impact from implementation of Alternative A on solid waste collection and disposal would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

CUMULATIVE IMPACTS

As described in Impacts 3.11-1 through 3.11-4, all utility providers are currently able to meet the needs of their customers. Therefore, no existing significant impacts on utilities currently exist.

Water

Cumulative projects that could combine with the Project to result in a cumulatively considerable impact on water supply and water supply infrastructure include buildout of the Placer County Tahoe Basin Area Plan and Regional Plan within the service area for TCPUD and implementation of the Dollar Creek Crossing project. As identified in Impact 3.11-1, above, the proposed Project would result in a less-than-significant impact related to water supply and water supply conveyance infrastructure and, after implementation of Mitigation Measure 3.11-1, Alternative A would also result in a less-than-significant impact. As identified in the TCPUD Urban Water Management Plan, there would be sufficient water supplies to meet future demand of these projects (TCPUD 2016; see Table 3.11-2). Additionally, individual projects are required to obtain approval of a water connection by TCPUD, which could include a capacity analysis to be performed by a project applicant to ensure the areas of the system being tapped for service are adequate to serve the project. If deficiencies are found, any infrastructure improvements required to serve the Project would be a condition of the Project through which the Project constructs system improvements and TCPUD takes ownership of the new facilities. For these reasons, there would be **no significant cumulative impact** on water supply and water supply infrastructure and, therefore, the proposed Project and Alternative A would not considerably contribute to any such impact.

Wastewater

Cumulative projects that could combine with the Project to result in a cumulatively considerable impact on wastewater conveyance and treatment infrastructure include buildout of the Placer County Tahoe Basin Area Plan and Regional Plan within the service area for TCPUD and implementation of the Dollar Creek Crossing project. 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). The same requirements for capacity analysis and needed system improvements described for water supply above related to TCPUD infrastructure would also apply to their wastewater collection services. The Project and cumulative projects identified above would contribute wastewater to the TRI and WRP. Any excess capacity in the TRI is allocated on a first-come, first-served basis and all future projects that would use this conveyance would be required to demonstrate that sufficient wastewater conveyance capacity is available. The T-TSA WRP has a capacity of 9.6 mgd and can accommodate between 400 to 800 new connections per year. However, the rate of new connections has not increased as originally anticipated (Nevada LAFCo 2018). The estimated remaining available capacity at the treatment plant is 5.6 mgd. Currently, there is ample available capacity to serve projected future development, including the buildout of the cumulative projects listed above. No project would be permitted without confirmation from the service provider that available capacity exists at the WRP. For these reasons, there would be **no significant cumulative impact** on TCPUD and T-TSA wastewater conveyance and wastewater treatment infrastructure or on the T-TSA WRP; therefore, the proposed Project and Alternative A would not considerably contribute to any such impact.

Electricity and Natural Gas

Liberty Utilities and Southwest Gas Corporation employ various programs and mechanisms to support provision of these services to new development; various utilities charge connection fees and re-coup costs of new infrastructure through standard billings for services. There is currently sufficient infrastructure and energy supply to support existing demand. Implementation of the proposed Project and Alternative A would result in an incremental increase in demand for energy.

Many of the cumulative projects identified in Table 3.1-2 in Section 3.1.2, "Cumulative Impact Analyses," that would be served by these energy providers involve redevelopment of existing developed sites or areas, including buildout of the Placer County Tahoe Basin Area Plan and Regional Plan and implementation of the North Tahoe High School and North Tahoe Middle School Facilities Program and the Dollar Creek Crossing project. Buildout of the Area Plan and Regional Plan include redevelopment of existing developed sites or areas, which could include residential and commercial uses. The school facilities program would expand the band room, construct a greenhouse, and implement other improvements to the outdoor quad areas. The Dollar Creek Crossing project is an affordable housing project that could construct up to 214 residential units, consisting primarily of multi-family units. These cumulative projects would result in an increase in demand for electricity and natural gas. Through their established process to provide connections, electricity, and natural gas supply to new development, Southwest Gas and Liberty Utilities use plans provided by developers to determine if or when upgrades in the system would be required to meet demand. These projects would also be required to implement energy efficiency measures in accordance with Title 24 standards to reduce energy demand, which would minimize increases in energy demand. For these reasons and because the utilities have procedures to plan for system improvements to keep pace with projected demand, there would be **no significant cumulative impact** on electricity and natural gas services and supplies and, therefore, the proposed Project and Alternative A would not considerably contribute to any such impact.

Solid Waste

Contributions of solid waste to the landfill associated with operation of the Project would be minimal, including contributions from an anticipated increase in visitation at the Schilling Lodge, for special events, community events, and private events. The Project operations would achieve the 50 percent waste diversion requirements of AB 939 through diversion of recyclable materials at the MRF. C&D activities associated with the Project would be required to recycle or salvage for reuse a minimum of 65 percent of C&D debris in accordance with Section 5.408 of the CALGreen Code. The cumulative projects listed in Table 3.1-2 in Section 3.1.2, "Cumulative Impact Analyses," would similarly contribute to the generation of solid waste during construction activities and operations that could be sorted and transferred through the

MRF and disposed at the Lockwood Regional Landfill. These projects would also achieve solid waste reductions during operations and construction as required by AB 939 and Section 5.408 of the CALGreen Code.

The available capacities of the Eastern Regional Landfill MRF and Lockwood Regional Landfill are characterized in Impact 3.11-4, above, and are determined to have remaining capacity of 595 tons per day and 267 million cubic yards, respectively. There would be sufficient and available capacity to meet solid waste disposal needs for the Project and cumulative projects for the foreseeable future. For these reasons, there would be **no significant cumulative impact** on solid waste disposal and, therefore, the proposed Project and Alternative A would not considerably contribute to any such impact.