

CHAPTER 14 PUBLIC SERVICES AND UTILITIES

14.1 ENVIRONMENTAL SETTING

This chapter addresses the public services and utilities required to serve the Alpine Sierra Subdivision project (proposed project). These services and utilities consist of fire protection, law enforcement, schools, public facilities, other governmental services, water supply, wastewater treatment and conveyance, solid waste collection and management, energy, snow removal, and parks and recreation.

14.1.1 Fire Protection

The North Tahoe Fire Protection District (NTFPD) serves a permanent population of 22,000 people (150,000 visitors) within a 31-square-mile area on the north and west shores of Lake Tahoe, as well as 6 square miles in the Alpine Meadows area (NTFPD 2014). Six fire stations are within the NTFPD, which are located in Alpine Meadows, Tahoe City, Homewood, Dollar Hill, Carnelian Bay, and Kings Beach. The closest station to the project site is Alpine Meadows Fire Station 56, located approximately 2.5 miles from the project site at 270 Alpine Meadows Road.

The NTFPD is a member of the Eastern Placer County Joint Powers Authority, along with the Squaw Valley Fire Department, Alpine Springs Community Service District, Tahoe City Public Utility District, Placer County Service Area 16, Placer County Service Area 21, Meeks Bay Fire Protection District, and Donner Summit Public Utility District. The Joint Powers Authority provides mutual aid and a shared radio repeater and equipment purchases between other member districts. In addition, Squaw Valley and surrounding forested areas are classified as a State Responsibility Area and receive fire protection assistance from the California Department of Forestry and Fire Protection (CAL FIRE).

The NTFPD prepared an Emergency Preparedness and Evacuation Plan to provide the community with information regarding what to do before, during, and after an emergency. The plan includes a map of evacuation routes that identifies the four major routes to the nearby highways, fire and Sheriff's station locations, and emergency shelter locations. The project site is located nearest to evacuation route "B," which runs along State Route 89 to Interstate 80 (NTFPD n.d.).

14.1.2 Law Enforcement

Law enforcement within unincorporated Placer County is provided by the Placer County Sheriff's Department (general law enforcement) and the California Highway Patrol (traffic-related incidents). The closest Placer County Sheriff's substation is the Tahoe Substation, which

is located approximately 8 miles from the project site at 2501 North Lake Boulevard in Tahoe City. Current staffing at this station consists of one field operations lieutenant, 18 patrol deputy positions, six patrol sergeants, four detectives, one detective sergeant, one problem-oriented deputy (neighborhood disputes and Placer County code violations), one administrative sergeant, two jail deputies, one evidence technician, two community services officers, and five professional staff. The Tahoe Substation covers the largest portion of Lake Tahoe, from the California/Nevada state line on Highway 28 west to the Nevada County line in Truckee and south on State Route 89 to the El Dorado County line in Tahoma. The station also covers Highway 267 from Kings Beach to the Nevada County line in Truckee, as well as a small portion of Donner Lake (Placer County Sheriff's Department 2015).

14.1.3 Schools

The Alpine Meadows community is served by the Tahoe-Truckee Unified School District. The nearest schools to the project site are Tahoe Lake Elementary School (375 Grove Street, Tahoe City), North Tahoe High School (2945 Polaris Road, Tahoe City), and Coldstream Alternative School (740 Timberland Lane, Tahoe City) (TTUSD 2015).

14.1.4 Water Supply

Domestic water service to the community of Alpine Meadows is provided by the Alpine Springs County Water District (ASCWD). The ASCWD encompasses approximately 5 square miles and serves a permanent population of approximately 500 residents. Primary water users include four commercial centers, a 30-unit apartment complex, 462 single-family homes, and 130 condominiums. ASCWD's system is described below; Table 14-1 provides a brief overview of the major water facilities (Placer LAFCO 2004).

The ASCWD water system has seven water supply wells. The primary supply sources, used on a daily basis, include three horizontal gravity flow wells that flow directly into the highest pressure zone (Zone 1). Water is distributed down through the system through a series of pressure regulation stations. Well 3 (small horizontal gravity flow well) and the AME Well (vertical well) are the supply sources within Pressure Zone 3. At the bottom of the water system within Zone 4 are two vertical production wells (Wells R1 and R2) that are normally used for supplying snowmaking water to the Alpine Meadows ski area. Well R1, with a capacity of 350 gallons per minute (gpm), can be used to supply potable water to the distribution system directly into Zone 4. Well R2 exceeds the secondary standard for manganese set by U.S. Environmental Protection Agency (EPA), and any future usage as a potable water source would require blending or treatment to lower manganese levels. Furthermore, R2 is not equipped with a chlorine feed system. The total supply and demand by pressure zone and the resulting cumulative surplus or deficit is shown in Table 14-1, Existing System Pressure Zone Surplus/Deficit Summary. The

distribution system, as designed, allows for surplus water in the zone above to be used to meet demands in the next lowest zone (Appendix K).

Table 14-1
Existing System Pressure Zone Surplus/Deficit Summary

Zone	Source	Available Source Supply (gpm)	Available from Upper Zones (gpm)	ADD Demand (gpm)	MDD Demand (gpm)	MDD Surplus/Deficit (gpm)
Zone 1	Wells 1, 2, and 4	178	—	17	77	101
Zone 2	None	—	70	24	108	-7
Zone 3	Well 3, AME Well	39	-7	49	221	-189
Zone 4	Well R1	350	-189	12	54	107
Total		567		102	460	

Source: Appendix K.

Notes: gpm = gallons per minute; ADD = average daily demand; MDD = maximum daily demand.

ASCWD maintains six water storage tanks with a capacity of 1 million gallons. Storage available at the top of the system is available for all pressure zones via pressure valves.

According to the 1998 Water Audit, ASCWD serves 463 single-family homes, 154 condominiums, and various commercial uses that total 1,595 equivalent dwelling units of water demand. Domestic water demand totals 204 acre-feet annually, and peak day demand is 304 gpm (Table 14-2, ASCWD Domestic Water Demands). Nondomestic demand (snowmaking) requires 130 acre-feet annually and a peak day demand exceeding 500 gpm (Placer LAFCO 2004).

Table 14-2
ASCWD Domestic Water Demands

Demand Source	Equivalent Dwelling Units ^a	Average Annual Demand ^b (gpd)	Maximum Monthly Demand (gpd)	Peak Day Demand ^c (gpm)	Annual Acre-Feet
Residential	1,498	142,300	275,400	239	159
Commercial	97	9,200	17,800	15	10
Unaccounted (20%)	—	30,300	58,640	51	34
Total	1,595	181,800	351,840	304	204

Source: ASCWD Water Audit, 1998, as cited in Placer LAFCO Municipal Service Review, Area 3 Services.

^a Equivalent dwelling units (EDU) defined as follows: 1 single-family residence = 2.9 EDU; 1 condominium = 1 EDU.

^b Assumes 40% occupancy and 20% water loss.

^c Defined as 1.25 times maximum monthly demand and assumes occupancy of 100%.

14.1.5 Wastewater

The ASCWD also provides wastewater collection service to the Alpine Meadows community and Alpine Meadows Ski Resort. ASCWD's sewer infrastructure was built incrementally along with specific development patterns in the community; however, no information is available on the length of mains, appurtenances, or other important infrastructure components. According to the Placer LAFCO Municipal Service Review for ASCWD, the maximum 7-day flow is estimated at 0.066 million gallons per day (mgd), with peak-hour flows of 0.28 mgd during the summer and 0.29 mgd during winter. The sewer infrastructure has adequate capacity to handle present flows (Placer LAFCO 2014).

The Tahoe-Truckee Sanitation Agency (TTSA) provides regional wastewater treatment service to several Tahoe-area communities through its five-member sewage collection districts, including the ASCWD. The TTSA advanced water reclamation plant is located in Martis Valley, east of Truckee. The 9.6 mgd plant provides primary and secondary treatment, phosphorous removal, biological nitrogen removal, disinfection, and effluent filtration. Final effluent polishing is achieved through a soil aquifer treatment system. The TTSA treatment plant is required to meet some of the most stringent discharge requirements due to its location in the Lake Tahoe-Truckee region (TTSA 2015).

The Statewide General Waste Discharge Requirement applies to all public collection system agencies in California that own or operate collection systems that are composed of more than 1 mile of pipe or sewer lines and that convey untreated wastewater to a publicly owned treatment facility. It requires each agency to prepare a sewer system management plan. The TTSA Sewer System Management Plan was adopted in July 2009 and was last revised in June 2014 (TTSA 2015).

14.1.6 Solid Waste

Weekly solid waste collection and removal service is provided by Tahoe Truckee Sierra Disposal (TTSD), which serves the Tahoe Basin and Truckee areas, including the project area. Solid waste is delivered to and processed at the Eastern Regional Landfill Material Recovery Facility (MRF) and Transfer Station on Cabin Creek Road just south of Truckee.

The MRF recovers, processes, and markets recyclable materials from the waste stream. The facility also processes source-separated wood waste and green waste, and accepts separated recyclables, including electronics and other universal wastes, at the recycling drop-off and buy-back center. The MRF typically diverts approximately 30% of solid waste from entering landfills. This does not include the additional recyclables received and diverted through the facility's buy-back center, drop-off center, compost facility, and landfill diversion. Facility-wide, the overall diversion achieved is nearly 50% (TTSD 2015). The MRF is permitted to receive 800 tons of material and 832 vehicles daily. In 2013, the MRF processed approximately 73,540 tons

of solid waste, or an average of 201 tons per day (Wallace, pers. comm. 2015). Hazardous wastes, including electronics, household and automotive batteries, paints, pesticides, cleaners, and other fluids, are illegal to dispose of with household garbage. These items are accepted at the MRF's Permanent Household Hazardous Waste Collection Facility.

After the solid waste has been sorted at the MRF, materials that cannot be recycled are taken to the Lockwood Regional Landfill, which is a municipal solid waste facility located in Storey County, approximately 10 miles east of Reno, Nevada. On average, the Lockwood Regional Landfill receives 5,000 tons of waste each day. The permitted combined disposal capacity of the landfill is 302.5 million cubic yards (NDEP 2015). This facility has a 60-year capacity to accommodate the build out of TTSD's service area. At the time this Draft Environmental Impact Report (EIR) was prepared, TTSD was in its 18th year of an 80-year contract for disposal service with the landfill (Town of Truckee 2006).

14.1.7 Snow Removal

Placer County provides snow removal services on public roads managed by the county, including on Alpine Meadows Road (Placer County 2015). Snow removal on private roads in the project area is the responsibility of homeowners' associations (HOAs) or individual homeowners.

14.1.8 Parks and Recreation

The project site is located adjacent to the Tahoe National Forest, which offers a wide range of recreational opportunities, including the nearby Five Lakes Trailhead and Bear Creek Campground. In addition, the project site is located near the base of Alpine Meadows Ski Resort, which offers both summer and winter recreational activities in coordination with Squaw Valley Ski Resort.

14.2 REGULATORY SETTING

14.2.1 Fire Protection

14.2.1.1 Federal Regulations

No federal regulations pertaining to fire protection services are applicable to the proposed project.

14.2.1.2 State Regulations

Mitigation Fee Act (California Government Code 66000–66008)

Enacted as Assembly Bill (AB) 1600, the Mitigation Fee Act requires a local agency establishing, increasing, or imposing an impact fee as a condition of development to identify the

purpose of the fee and the use to which the fee is to be put. The agency must also demonstrate a reasonable relationship between the fee and the purpose for which it is charged, and between the fee and the type of development plan on which it is to be levied. The Mitigation Fee Act came into force on January 1, 1989.

California Building Code

California provides a minimum standard for building design through the California Building Code (CBC), which is Part 2 of Title 24 of the California Code of Regulations (CCR). The CBC is based on the 1997 Uniform Building Code, but was modified for California conditions. It is generally adopted on a jurisdiction-by-jurisdiction basis, subject to further modification based on local conditions. Commercial and residential buildings are plan-checked by local city and county building officials for compliance with the CBC. Typical fire safety requirements of the CBC include installation of sprinklers in all high-rise buildings; establishment of fire-resistance standards for fire doors, building materials, and particular types of construction; and clearance of debris and vegetation within a prescribed distance from occupied structures in wildfire hazard areas.

California Fire Code

The California Fire Code incorporates, by adoption, the International Fire Code of the International Code Council, with California amendments. This is the official fire code for the state and all political subdivisions. It is located in CCR Part 9 of Title 24. The California Fire Code is revised and published every 3 years by the California Building Standards Commission. Similar to the CBC, the California Fire Code is generally adopted on a jurisdiction-by-jurisdiction basis, subject to further modification based on local conditions.

California Occupational Safety and Health Administration

In accordance with CCR Title 8 Sections 1270, “Fire Prevention,” and 6773 “Fire Protection and Fire Equipment,” the California Occupational Safety and Health Administration established minimum standards for fire suppression and emergency medical services. The standards include guidelines for handling highly combustible materials; requirements for fire hose sizing, restrictions on the use of compressed air; guidelines for access roads; and guidelines for 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 and smoke alarms, high-rise buildings, childcare facilities, and fire suppression training.

14.2.1.3 Local Regulations

Placer County General Plan

The Placer County General Plan (2013) contains a Public Facilities and Services Element that includes the following policies related to fire protection services that are applicable to the proposed project:

Policy 4.I.1: The County shall encourage local fire protection agencies in Placer County to maintain the following minimum fire protection standards (expressed as Insurance Service Organization [ISO] ratings):

- a. ISO 4 in urban areas
- b. ISO 6 in suburban areas
- c. ISO 8 in rural areas

Policy 4.I.2: The County shall encourage local fire protection agencies in the County to maintain the following standards (expressed as average response times to emergency calls):

- a. 4 minutes in urban areas
- b. 6 minutes in suburban areas
- c. 10 minutes in rural areas

Policy 4.I.3: The County shall require new development to develop or fund fire protection facilities, personnel, and operations and maintenance that, at a minimum, maintains the above service level standards.

Policy 4.I.9: The County shall ensure that all proposed developments are reviewed for compliance with fire safety standards by responsible local fire agencies per the Uniform Fire Code and other County and local ordinances.

14.2.2 Law Enforcement

14.2.2.1 Federal Regulations

No federal regulations pertaining to law enforcement services are applicable to the proposed project.

14.2.2.2 State Regulations

Mitigation Fee Act (California Government Code 66000–66008)

Enacted as AB 1600, the Mitigation Fee Act requires a local agency establishing, increasing, or imposing an impact fee as a condition of development to identify the purpose of the fee and the use to which the fee is to be put. The agency must also demonstrate a reasonable relationship between the fee and the purpose for which it is charged, and between the fee and the type of development plan on which it is to be levied. The Mitigation Fee Act came into force on January 1, 1989.

14.2.2.3 Local Regulations

Placer County General Plan

The Placer County General Plan (2013) contains a Public Facilities and Services Element that includes the following policies related to law enforcement services that are applicable to the proposed project:

Policy 4.H.1: Within the County’s overall budgetary constraints, the County shall strive to maintain the following staffing ratios (expressed as the ratio of officers to population):

- a. 1:1,000 for unincorporated areas
- b. 1:7 for jail population
- c. 1:16,000 total county population for court and civil officers

Policy 4.H.2: The County Sheriff shall strive to maintain the following average response times for emergency calls for service:

- a. 6 minutes in urban areas
- b. 8 minutes in suburban areas
- c. 15 minutes in rural areas
- d. 20 minutes in remote rural areas

Policy 4.H.4: The County shall require new development to develop or fund sheriff facilities that, at a minimum, maintain the above standards.

14.2.3 Schools

14.2.3.1 Federal Regulations

No federal regulations pertaining to fire protection services are applicable to the proposed project.

14.2.3.2 State Regulations

Mitigation Fee Act (California Government Code 66000–66008)

Enacted as AB 1600, the Mitigation Fee Act requires a local agency establishing, increasing, or imposing an impact fee as a condition of development to identify the purpose of the fee and the use to which the fee is to be put. The agency must also demonstrate a reasonable relationship between the fee and the purpose for which it is charged, and between the fee and the type of development plan on which it is to be levied. The Mitigation Fee Act came into force on January 1, 1989.

Leroy F. Greene School Facilities Act of 1998

This bill, commonly known as “SB 50,” was passed in 1998 and placed limitations on cities and counties with respect to mitigation requirements for school facilities. Senate Bill (SB) 50 permits school districts to levy fees, based on justification studies, for funding construction of school facilities, subject to established limits. The limits were set in 2000, can be adjusted annually for inflation, and can be leveled 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). SB 50 further states that payment of these fees by a development project is considered adequate to reduce impacts of that project on schools to a less-than-significant level.

14.2.3.3 Local Regulations

Placer County General Plan

The Placer County General Plan (2013) contains a Public Facilities and Services Element that includes the following policies related to schools that are applicable to the proposed project:

Policy 4.J.6: The County should include schools among those public facilities and services that are considered an essential part of the infrastructure that should be in place as development occurs.

14.2.4 Water Supply

14.2.4.1 Federal Regulations

Safe Drinking Water Act

The Safe Drinking Water Act (SDWA) is the main federal law that regulates the quality of potable water for the public. The SDWA authorizes EPA to establish national health-based standards for drinking water. These standards apply to both naturally occurring and human-caused constituents in drinking water. The national standards are established using scientific methods to evaluate health risks and consider available technology and costs to achieve the standards. The National Primary Drinking Water Regulations establish maximum contaminant levels or mandated methods for water treatment to remove contaminants, and requirements for regular water quality testing to make sure standards are achieved. In addition to setting these standards, EPA provides guidance, assistance, and public information about drinking water; collects drinking water data; and oversees state drinking water programs.

The SDWA was passed by Congress in 1974 and amended in 1986 and 1996. The original focus of the law was on treatment of water supplies as a means of providing safe drinking water. However, the 1996 amendments expanded the focus to recognize protection of water quality at the source. Under this expanded focus, the SDWA requires actions to protect rivers, lakes, reservoirs, springs, and groundwater wells that provide sources of drinking water. The 1996 amendments also recognized operator training, funding for water system improvements, and public information as important components of safe drinking water.

States can apply to EPA for authority to implement the SDWA within their jurisdictions by showing that they will adopt standards at least as stringent as the national standards and adequately enforce these standards. California has been granted this authority, and the California Department of Public Health establishes and enforces statewide drinking water standards.

Truckee-Carson Water Rights Settlement and Truckee River Operating Agreement

Congress passed the Truckee-Carson-Pyramid Lake Water Rights Settlement Act (Pub. L. No.101-618, Title II [Nov. 16, 1990]) (the Settlement Act) in 1990 to resolve litigation involving claims to the Truckee River. The Settlement Act mandated a negotiation agreement between California and Nevada for Truckee River operations, and that the resulting operation be promulgated as a federal regulation (Settlement Act Section 205). Negotiations between the states and Truckee River stakeholders resulted in the Truckee River Operating Agreement (TROA) which was executed in September 2008, published in December 2008 (73 Fed. Reg. 74031 [December 5, 2008]) and promulgated as a federal regulation in January 2009. Implementation of the TROA began in January 2016. “TROA is intended to increase the

operational flexibility and efficiency of reservoirs in the Lake Tahoe and Truckee River basins, thus providing multiple environmental benefits while protecting the exercise of existing water rights” (U.S. Bureau of Reclamation 2016).

California is allocated 32,000 acre-feet of total water diversions from all sources, surface and groundwater, for use in the Truckee River Basin (Settlement Act Section 204[c][1]). The TROA Environmental Impact Statement (EIS)/EIR analysis used projections from DWR to predict that California’s Truckee River basin total water usage, for both surface and groundwater, would not exceed 22,700 acre-feet annually by 2033 and concluded that total water use was anticipated to be the same under both the “no action” and TROA alternatives (U.S. Bureau of Reclamation et al. 2008, 2-31). DWR is responsible for implementing compliance with California’s allocation under the Settlement Act (Settlement Act Section 204[d][1]).

14.2.4.2 State Regulations

California Safe Drinking Water Act

The California Department of Public Health administers the state’s SDWA through the Drinking Water Program. This program implements the regulatory authority of the Department of Public Health over public water systems in the state. Public water system operators are required to regularly monitor their drinking water sources and supplies for microbiological, chemical, and radiological contaminants to demonstrate that the water meets the regulatory requirements regarding primary maximum contaminant levels listed in CCR Title 22. Maximum contaminant levels have been established for ±80 specific inorganic and organic contaminants and six radiological contaminants. Monitoring is also required for a number of other contaminants and characteristics that deal with the aesthetic properties of drinking water such as taste, odor, and appearance. These are known as secondary maximum contaminant levels. The Department of Public Health performs field inspections, issues operating permits, reviews plans and specifications for new facilities, takes enforcement actions for non-compliance with laws and regulations, reviews water quality monitoring results, and supports and promotes water system security.

The Drinking Water Program also provides funding for infrastructure improvements, conducting source water assessments, and evaluating projects that use recycled treated wastewater. The Drinking Water Program is implemented by the Department of Public Health in cooperation with EPA; the State Water Resources Control Board; Regional Water Quality Control Boards (RWQCBs); and other state and local agencies, including county health departments, planning departments, and boards of supervisors.

Urban Water Management Planning Act

California Water Code Section 10610 et seq. requires that all public water systems providing water to more than 3,000 customers or supplying more than 3,000 acre-feet per year must prepare an Urban Water Management Plan. The California Department of Water Resources provides guidance to urban water suppliers on the preparation and implementation of Urban Water Management Plans. These plans must be updated at least every 5 years. The current Placer County Water Agency Urban Water Management Plan was adopted in December 2005.

Senate Bill 610 – Water Supply Assessments

SB 610, adopted in 2001, requires analysis of water supplies for projects that meet certain size requirements. For residential projects, the requirements of SB 610 apply to projects consisting of 500 or more new residences. These requirements do not apply to the proposed project.

California Water Code, Water Supply

According to California Water Code Section 10910 (referenced in California Environmental Quality Act [CEQA] Guidelines Section 15155), lead agencies (in this case, Placer County), are required to identify the public water system(s) that would serve a project and assess whether the water supply is sufficient to provide for projected water demand associated with a project when existing and future uses are also considered (California Water Code Section 10910[c][3]). The lead agency (Placer County) must condition approval of a subdivision of certain sizes (including the project) upon “a requirement that a sufficient water supply shall be available” (Government Code Section 66473.7[b][1]).

California Water Code, Water Supply Wells, and Groundwater Management

The California Water Code is enforced by the California Department of Water Resources. The mission of the Department of Water Resources is “to manage the water resources of California in cooperation with other agencies to benefit the state’s people, and to protect, restore, and enhance the natural and human environments.” The Department of Water Resources is responsible for promoting California’s general welfare by ensuring beneficial water use and development statewide. The laws regarding groundwater wells are described in California Water Code Division 1, Article 2 and Articles 4.300 to 4.311, and Division 7, Articles 1–4. Further guidance is provided by bulletins published by the Department of Water Resources, such as Bulletins 74-81 and 74-90 related to groundwater well construction and abandonment standards.

Groundwater management is outlined in the California Water Code, Division 6, Part 2.75, Chapters 1–5, Sections 10750–10755.4. The Groundwater Management Act was first introduced in 1992 as AB 3030, and has since been modified by SB 1938 in 2002, AB 359 in 2011, and AB

1739 in 2014. The intent of the Groundwater Management Act is to encourage local agencies to work cooperatively to manage groundwater resources within their jurisdictions and to provide a methodology for developing a Groundwater Management Plan.

14.2.4.3 Local Regulations

Placer County General Plan

The Placer County General Plan (2013) sets forth the following goal and policies for water supply and delivery:

Goal 4.C: To ensure the availability of an adequate and safe water supply and the maintenance of high quality water in water bodies and aquifers used as sources of domestic supply.

Policy 4.C.1: The County shall require proponents of new development to demonstrate the availability of a long-term, reliable water supply. The County shall require written certification from the service provider that either existing services are available or needed improvements will be made prior to occupancy. Where the County will approve groundwater as the domestic water source, test wells, appropriate testing, and/or report(s) from qualified professionals will be required substantiating the long-term availability of suitable groundwater.

Policy 4.C.2: The County shall approve new development based on the following guidelines for water supply:

- a. Urban and suburban development should rely on public water systems using surface supply.
- b. Rural communities should rely on public water systems. In cases where parcels are larger than those defined as suburban and no public water system exists or can be extended to the property, individual wells may be permitted.
- c. Agricultural areas should rely on public water systems where available, otherwise individual water wells are acceptable.

Policy 4.C.4: The County shall require that water supplies serving new development meet state water quality standards.

Policy 4.C.6: The County shall promote efficient water use and reduced water demand by:

- a. Requiring water-conserving design and equipment in new construction;

- b. Encouraging water-conserving landscaping and other conservation measures;
- c. Encouraging retrofitting existing development with water-conserving devices; and
- d. Encouraging water-conserving agricultural irrigation practices.

Policy 4.D.4: The County shall promote efficient water use and reduced wastewater system demand by:

- a. Requiring water-conserving design and equipment in new construction;
- b. Encouraging retrofitting with water-conserving devices; and
- c. Designing wastewater systems to minimize inflow and infiltration to the extent economically feasible.

Alpine Springs County Water District Policies

ASCWD’s policies, improvement standards, technical provisions, standard drawings, and the current ASCWD Rules, Regulations, Rates, and Charges Governing the Distribution and Use of Water (ASCWD 2010) apply to supply and delivery of treated domestic water to the proposed project.

In particular, ASCWD’s Design Criteria (citation) set forth specific requirements for engineering design of water system improvements that are intended to “provide a water system that will dependably and safely convey the required amount of high-quality water throughout the distribution system at the least cost.”

Additionally, ASCWD’s improvement standards require that the design of all Placer County Water Agency facilities comply with the following:

1. Laws and standards of the State of California Department of Public Health pertaining to domestic water supply.
2. Title 17, Chapter V, Sections 7583–7622 of the California Administrative Code (pertaining to cross-connections).
3. Applicable ordinances, rules, and regulations of all other local agencies.

14.2.5 Wastewater

14.2.5.1 Federal Regulations

The federal Clean Water Act regulates the discharge of treated effluent from wastewater treatment plants. This authority is administered through discharge permits issued to facilities by

the RWCQB. Discharge water quality must meet standards specified by the National Pollutant Discharge Elimination System (NPDES) discharge permit and Waste Discharge Requirements. The TTSA wastewater treatment plant serving the project site is presently in compliance with the terms of the NPDES discharge permit and Waste Discharge Requirements.

14.2.5.2 State Regulations

The State RWCQB has authority for administering the federal Clean Water Act through issuance of NPDES discharge permits and for issuing Waste Discharge Requirements required by the State Water Code for point-source discharges from treatment plant facilities to surface waters.

Lahontan Regional Water Quality Control Board

Lahontan is one of the nine RWQCBs in California. The Lahontan RWQCB maintains the California Regional Water Quality Control Board's Basin Plan for the Lahontan Region (Basin Plan). The Basin Plan recognizes natural water quality, existing and potential beneficial uses, and water quality problems associated with human activities in Placer County. The Lahontan RWQCB regulates waste discharges under the California Water Code, Article 4 (Waste Discharge Requirements) and Chapter 5.5 (Compliance with the Provisions of the Federal Water Pollution Control Act as Amended in 1972). The Basin Plan includes waste discharge prohibitions: "Discharge or threatened discharge, attributable to human activities, of solid or liquid waste materials including soil, silt, clay, sand and other organic and earthen materials to lands within the 100-year floodplain of the Truckee River or any tributary to the Truckee River is prohibited."

14.2.5.3 Local Regulations

Placer County General Plan

The Placer County General Plan sets forth the following goal and policies for wastewater collection and treatment.

Goal 4.D: To ensure adequate wastewater collection and treatment and the safe disposal of liquid and solid waste.

Policy 4.D.2: The County shall require proponents of new development within a sewer service area 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.4: The County shall promote efficient water use and reduced wastewater system demand by:

- a. Requiring water-conserving design and equipment in new construction;
- b. Encouraging retrofitting with water-conserving devices; and
- c. Designing wastewater systems to minimize inflow and infiltration to the extent economically feasible.

14.2.6 Solid Waste

14.2.6.1 Federal Regulations

No federal regulations are applicable to the analysis of potential environmental impacts associated with the collection and disposal of solid waste generated by the proposed project.

14.2.6.2 State Regulations

California Integrated Solid Waste Management Act

AB 939, passed in 1989, created the California Integrated Solid Waste Management Act, which mandates a focus on the conservation of natural resources. Cities and counties are required to create comprehensive source reduction, recycling, and composting programs. The goal of these programs is to reduce the amount of waste sent to landfills by 50%. AB 939 also requires counties to prepare an Integrated Solid Waste Management Plan.

This bill shifted the emphasis from landfill disposal toward waste reduction, recycling, and composting whenever possible. This approach conserves natural resources, saves energy, decreases pollution, and provides new jobs in the waste industry.

AB 939 established the following priorities for waste management:

- Waste reduction
- Recycling and composting
- Controlled combustion of waste to generate electricity
- Landfilling

14.2.6.3 Local Regulations

Placer County General Plan

The Placer County General Plan’s overarching goal for solid waste management is as follows:

Goal 4.G: To ensure the safe and efficient disposal or recycling of solid waste generated in Placer County.

14.2.7 Energy

14.2.7.1 Federal Regulations

No federal regulations are applicable to the analysis of potential environmental impacts associated with energy for the proposed project.

14.2.7.2 State Regulations

California Environmental Quality Act

Under Appendix F of the CEQA Guidelines, 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 Section 21100[b][3]).

California Code of Regulations, Energy Efficiency Standards

Energy consumption of new buildings in California is regulated by State Building Energy Efficiency Standards contained in CCR Title 24, Part 2, Chapter 2-53. Title 24 applies to all new construction of residential and nonresidential buildings, and regulates energy consumed for heating, cooling, ventilating, 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 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 (24 CCR, Part 11). 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 CALGreen. Placer County has adopted several modifications to the residential and non-residential CALGreen mandatory sections.

14.2.7.3 Local Regulations

Placer County General Plan

Within the Housing Element, Goal 2.G of the Placer County General Plan is to increase the efficiency of energy use in new and existing homes, with a concurrent reduction in housing costs to Placer County residents. The following policies were developed to meet this goal:

Policy 2.G.1: All new dwelling units shall be required to meet current state requirements for energy efficiency. The retrofitting of existing units shall be encouraged.

Policy 2.G.2: New land use patterns should encourage energy efficiency, to the extent feasible.

14.2.8 Parks and Recreation

14.2.8.1 Federal Regulations

No federal regulations are applicable to the analysis of potential environmental impacts associated with parks and recreation.

14.2.8.2 State Regulations

Quimby Act

The Quimby Act (California Government Code Section 66477) preserves open space and parkland in urbanizing areas of the state by authorizing local governments to establish ordinances requiring developers of new subdivisions to dedicate land for parks, pay an in-lieu fee, or perform a combination of the two. The Quimby Act provides two standards for the dedication of land for use as parkland. If the existing area of parkland in a community is 3 acres or more per 1,000 persons, then the community may require dedication based on a standard of 5 acres per 1,000 persons residing in the subdivision. If the existing amount of parkland in a community is less than 3 acres per 1,000 persons, then the community may require dedication based on a standard of 3 acres per 1,000 persons residing in the subdivision. The Quimby Act requires a city or county to adopt standards for recreational facilities in its general plan recreation element if it is to adopt a parkland dedication/fee ordinance.

Placer County has developed a park dedication fee program based on the Quimby Act. The fee is imposed on new development projects in the county, and is used for acquisition of land and/or improvements to active and passive parks and open space. The Placer County fee program is based on the estimated cost to provide recreational facilities to maintain a ratio of 5 acres of active and 5 acres of passive parkland per 1,000 residents. (Placer County 2013; also see General Plan Policy 5.A.3). The current Placer County parks fee is collected at the final map recording

and an AB 1600 fee that is collected at the building permit stage. The current Park Dedication fee for a single-family-zoned parcel in a Planned Development project is \$1,355 at the time of final map recordation and the remainder of the fee (\$7,200) is collected when a Building Permit is approved. Project applicants can provide new and expanded public recreational facilities and/or dedication of land to meet county standards, and, in such cases, fees would be reduced or not be required based on the nature and extent of facilities/lands provided.

14.2.8.3 Local Regulations

Placer County General Plan

The Recreational and Cultural Resources Element of the Placer County General Plan includes standards designed to develop and maintain a system of conveniently located, properly designed parks and recreational facilities to serve the needs of present and future residents, employees, and visitors:

Policy 5.A.3: The County shall require new development to provide a minimum of 5 acres of improved parkland and 5 acres of passive recreation area or open space for every 1,000 new residents of the area covered by the development.

Policy 5.A.4: The County shall consider the use of the following open space areas as passive parks to be applied to the requirement for 5 acres of passive park area for every 1,000 residents.

- a. Floodways.
- b. Protected riparian corridors and stream environment zones.
- c. Protected wildlife corridors.
- d. Greenways with the potential for trail development.
- e. Open water (e.g., ponds, lakes, and reservoirs).
- f. Protected woodland areas.
- g. Protected sensitive habitat areas providing that interpretive displays are provided (e.g., wetlands and habitat for rare, threatened or endangered species.)

Policy 5.A.5: The County shall require the dedication of land and/or payment of fees, in accordance with state law (Quimby Act) to ensure funding for the acquisition and development of public recreation facilities. The fees are to be set and adjusted as necessary to provide for a level of funding that meets the actual cost to provide for all of the public parkland and park development needs generated by new development.

Policy 5.A.10: The County shall ensure that park design is appropriate to the recreational needs and, where feasible, access capabilities of all residents, employees, and visitors of Placer County.

Policy 5.A.11: Regional and local recreation facilities should reflect the character of the area and the existing and anticipated demand for such facilities.

Policy 5.A.12: The County shall encourage recreational development that complements the natural features of the area, including the topography, waterways, vegetation, and soil characteristics.

Policy 5.A.22: The County shall encourage compatible recreational use of riparian areas along streams and creeks where public access can be balanced with environmental values and private property rights.

Policy 5.A.23: The County shall require that park and recreation facilities required in conjunction with new development be developed in a timely manner so that such facilities are available concurrently with new development.

Policy 5.B.1: The County shall encourage development of private recreation facilities to reduce demands on public agencies.

14.3 IMPACTS

14.3.1 Significance Criteria

The analysis below evaluates potentially significant project impacts related to public services and utilities based on the following significance criteria:

- Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental services and/or 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 of the public services:
 - Fire protection?
 - Sheriff protection?
 - Schools?
 - Maintenance of public facilities, including roads?
 - Other governmental services?

- Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?
- Would the project require or result in the construction of new water or wastewater delivery, collection or treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?
- Would the project require or result in the construction of new on-site sewage systems?
- Would the project require new or expanded water entitlements due to insufficient water supplies available to serve the project from existing entitlements and resources?
- Would the project require sewer service that may not be available by the area's wastewater treatment provider?
- Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs in compliance with all applicable laws?
- Would the project 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?
- Would the project result in insufficient snow removal and storage such that vehicular or pedestrian public safety is not maintained or require new or expanded snow storage facilities that could cause significant environmental effects?
- Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?
- Would the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

The analysis in the Initial Study (Appendix A) found that Alternative A would have a potentially significant impact related to the following criterion. Impacts associated with this criterion are evaluated in Chapter 12, Hydrology and Water Quality:

- Would the project require or result in the construction of new stormwater drainage facilities or expansion of existing facilities?

14.3.2 Project Impacts

Impact 14.1

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection services and/or facilities, the construction of which could cause significant environmental impacts? Specifically, would the project adversely impact the ability of the North Tahoe Fire Protection District to respond to emergencies?

Significance and Mitigation	Alternative A	Alternative B
Significance before mitigation:	Significant	Significant
Mitigation measures:	Mitigation Measures 14.1a through 14.1c	Mitigation Measures 14.1a through 14.1c
Significance after mitigation:	Less than significant	Less than significant

Alternative A Impacts

Alternative A would result in the development of 47 residential lots, 1 caretaker unit and up to 5 secondary dwelling units, which would increase the demand for fire protection and emergency services. This would represent a **significant** impact. All of the proposed buildings would be equipped with sprinkler systems, and fire hydrants would be installed at various locations within the project site for fire protection. Specific hydrant locations and fire flow would be determined during the design phase through consultation with the NTFPD. Landscaping and tree removal within the project site would be regulated, in part, by the need to provide defensible space to minimize fuel for wildfires. The project proposes to implement defensible space provisions as described in the Forest Health and Fire Assessment report provided in Appendix J. The risk of wildfire is further discussed in Chapter 13, Hazards and Hazardous Materials. Additionally, as required under Mitigation Measure 14.1a, the project applicant would purchase a new fire truck and make improvements to the water supply system to increase water pressure throughout the system to ensure adequate water supplies are available for fire suppression. This would improve firefighting capacity for NTFPD and would ensure that the project's increased demand for fire protection would be met without resulting in adverse effects on existing residents and businesses. In addition, to ensure that there is sufficient water supply for fire suppression needs, Mitigation Measure 14.1b requires the project to obtain a will-serve letter from the Alpine Springs County Water District and to provide a fair-share contribution to the cost of upgrading the ASCWD booster pumps. With implementation of Mitigation Measures 14.1a and 14.1b, the project's impacts associated with increased demand for fire protection would be reduced to **less than significant**.

Alpine Meadows Road is the only emergency access route for the Alpine Meadows community, including the project site. The project could contribute to congestion on this roadway during

construction due to temporary lane/road closures, increased truck traffic, and other roadway effects that could slow or stop emergency vehicles. If traffic congestion sufficiently impedes movement along this route, the NTFPD may not be able to meet response time goals (10 minutes in rural areas) in the case of an emergency. This would cause this impact to be **potentially significant**. However, with implementation of Mitigation Measure 14.1c, which requires preparation of a construction traffic management plan, this impact would be reduced to **less than significant**. Emergency access to and from the project site is discussed in greater detail in Chapter 7, Transportation and Circulation.

Alternative B Impacts

Alternative B would result in the development of 38 residential lots, 1 caretaker unit and up to 5 secondary dwelling units, which would increase the demand for fire protection and emergency services, similar to Alternative A, resulting in a **significant** impact associated with project operation and a **potentially significant** impact related to interference with emergency response during construction. However, with implementation of Mitigation Measures 14.1a through 14.1c, this impact would be reduced to **less than significant**.

Mitigation Measures

- MM 14.1a:** Prior to Improvement Plan approval and recordation of the Final Map, the project applicant shall submit to Placer County a will-serve letter from the North Tahoe Fire Protection District (NTFPD). Further, the project applicant shall purchase and donate to the NTFPD a standard four-wheel-drive Type 1 pumper truck with a 1,500-gallon-per-minute pump and a 750-gallon water tank, unless otherwise required by the NTFPD.
- MM 14.1b:** Prior to Improvement Plan approval and recordation of each Final Map, the applicant shall provide a will-serve letter from the Alpine Springs County Water District (ASCWD) to describe terms under which the District will provide water service to the project. The project applicant shall also make a fair-share contribution toward the cost of upgrading three system-wide pump stations (Booster Pumps B, C, and D) to ensure adequate water supply and pressure to serve the proposed project and to increase water supply reliability and pressure throughout the ASCWD service area, unless otherwise approved by the ASCWD. This contribution shall be made to ASCWD prior to recordation of each Final Map.
- MM 14.1c:** The project applicant shall implement Mitigation Measure 7.4c, which requires the applicant to prepare a Construction Management Plan and obtain approval be the Placer County Department of Public Works and Facilities Transportation Division.

Impact 14.2

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered sheriff protection services and/or facilities, the construction of which could cause significant environmental impacts? Would the project adversely impact the Placer County Sheriff’s ability to respond to emergencies?

Significance and Mitigation	Alternative A	Alternative B
Significance before mitigation:	Less than significant	Less than significant
Mitigation measures:	None	None
Significance after mitigation:	Less than significant	Less than significant

Alternative A Impacts

The project would result in the development of 47 residential lots, 1 caretaker unit and up to 5 secondary dwelling units, which would increase the demand for Sheriff protection services. The Placer County General Plan (Policy 4.H.1) requires that the county strive to maintain a staffing ratio of one officer per 1,000 residents in unincorporated Placer County, within the county’s overall budgetary constraints (Placer County 2013). This ratio method is not well suited for application to the Truckee–Tahoe region with its large seasonal variation in the numbers of transient visitors and residents. The Placer County Sherriff’s Department has confirmed that there would be no additional need for new facilities due to additional demands on police services as a result of Alternative A (Weaver, pers. comm. 2015). The impact would be **less than significant** and no mitigation would be required.

Alternative B Impacts

Alternative B would result in the development of 38 residential lots, 1 caretaker unit and up to 5 secondary dwelling units, which would increase the demand for Sheriff protection services, similar to Alternative A. The Placer County Sherriff’s Department has confirmed that there would be no additional need for new facilities due to additional demands on police services as a result of Alternative B (Weaver, pers. comm. 2015). The impact would be **less than significant** and no mitigation would be required.

Mitigation Measures

No mitigation measures are required.

Impact 14.3

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered school services and/or facilities, the construction of which could cause significant environmental impacts? Would the project cause staffing shortages or other facility impacts resulting from a substantial increase in the student population of the Tahoe-Truckee Unified School District?

Significance and Mitigation	Alternative A	Alternative B
Significance before mitigation:	Less than significant	Less than significant
Mitigation measures:	None	None
Significance after mitigation:	Less than significant	Less than significant

Alternative A Impacts

The project would result in the development of 47 residential lots; however, it is anticipated that the majority of these homes (75%) would be used as vacation homes and would not likely generate substantial increased demands on local schools to accommodate new students. As discussed in Section 14.2.3.2, SB 50 permits school districts to levy fees, subject to established limits, for funding construction of school facilities. SB 50 considers payment of these fees by a development project to be adequate to reduce impacts of the project on schools. School impact fees would be paid, as applicable, as part of the development of project. Therefore, this impact would be **less than significant** and no mitigation would be required.

Alternative B Impacts

Alternative B would result in the development of 38 residential lots, which, similar to Alternative A, are anticipated to be used primarily as vacation homes. The vacation homes would not likely generate a substantial increased demand on local schools to accommodate new students. In accordance with SB 50, school impact fees would be paid, as applicable, as part of the development of the project. Therefore, this impact would be **less than significant** and no mitigation would be required.

Mitigation Measures

No mitigation measures are required.

Impact 14.4

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered public facilities, the construction of which could cause significant environmental impacts?

Significance and Mitigation	Alternative A	Alternative B
Significance before mitigation:	Less than significant	Less than significant
Mitigation measures:	None	None
Significance after mitigation:	Less than significant	Less than significant

Alternative A Impacts

Alternative A is not anticipated to require new or physically altered public facilities beyond those evaluated in this EIR. Impacts to public roads are discussed in Chapter 6, Transportation and Circulation. This impact would be **less than significant** and no mitigation would be required.

Alternative B Impacts

Alternative B is not anticipated to require new or physically altered public facilities beyond those evaluated in this EIR. Impacts to public roads are discussed in Chapter 6. This impact would be **less than significant** and no mitigation would be required.

Mitigation Measures

No mitigation measures are required.

Impact 14.5

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental services, the construction of which could cause significant environmental impacts?

Significance and Mitigation	Alternative A	Alternative B
Significance before mitigation:	Less than significant	Less than significant
Mitigation measures:	None	None
Significance after mitigation:	Less than significant	Less than significant

Alternative A Impacts

While the project would alter the distribution of land use and zoning designations across the project site, the land uses proposed under Alternative A are consistent with the land use and

zoning designations for the project site and Alternative A is not anticipated to require new or physically altered governmental services beyond those evaluated in this EIR. This impact would be **less than significant** and no mitigation would be required.

Alternative B Impacts

Alternative B would also alter the distribution of land use and zoning designations across the project site, but would develop land uses that are consistent with the uses allowed at the site under the existing land use and zoning designations. Alternative B is not anticipated to require new or physically altered governmental services beyond those evaluated in this EIR. This impact would be **less than significant** and no mitigation would be required.

Mitigation Measures

No mitigation measures are required.

Impact 14.6

Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board, or require the construction of new wastewater facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Significance and Mitigation	Alternative A	Alternative B
Significance before mitigation:	Less than significant	Less than significant
Mitigation measures:	None	None
Significance after mitigation:	Less than significant	Less than significant

Alternative A Impacts

Wastewater generated from Alternative A would be collected by the ASCWD and treated at the TTSA wastewater treatment plant. The TTSA wastewater treatment plant is a permitted facility, and Alternative A would not cause the TTSA to exceed wastewater treatment requirements.

As discussed in the technical memo (Appendix K, the Alpine Sierra Water and Sewer Facility Evaluation prepared by Stantec Consulting), adequate wastewater capacity exists in the existing ASCWD sewer system to serve Alternative A. However, because the project site is not currently connected to the sewer system, a new sewer connection would be required. Most of the homes would have direct access to gravity sewer lines, but a few would require individual sewage pumps to access the gravity sewer. One sewer lift station would be constructed in the northeastern corner of the project site (Parcel H), as shown in the Utility Plan on Figure 14-1. Alternative A would require construction of new on-site wastewater facilities to serve the

project, which are evaluated as part of the project throughout this EIR. No other wastewater facilities would be required to accommodate Alternative A. This impact would be **less than significant** and no mitigation would be required.

Alternative B Impacts

As described above, wastewater would be collected by the ASCWD and treated at the TTSA wastewater treatment plant. Since the TTSA plant is a permitted facility and has sufficient capacity to treat wastewater generated by the project, Alternative B would not cause the TTSA to exceed wastewater treatment requirements.

Similar to Alternative A, wastewater generated by Alternative B would be accommodated in the existing ASCWD sewer system; however, a new sewer connection would be required and a sewer lift station would be constructed to feed into the existing ASCWD system. These on-site improvements are analyzed throughout this EIR, and no additional facilities would be required to accommodate Alternative B. Therefore, this impact would be **less than significant** and no mitigation would be required.

Mitigation Measures

No mitigation measures are required.

Impact 14.7

Would the project require the construction of new water facilities or expansion of existing facilities, the construction of which could cause significant environmental effects, or require new or expanded water entitlements due to insufficient water supplies available to serve the project from existing entitlements and resources?

Significance and Mitigation	Alternative A	Alternative B
Significance before mitigation:	Significant	Significant
Mitigation measures:	Mitigation Measure 14.7a	Mitigation Measure 14.7a
Significance after mitigation:	Less than significant	Less than significant

Alternative A Impacts

Water service for Alternative A would be provided by the ASCWD. Existing water supplies for the ASCWD are provided by seven wells, six of which are suitable for potable water, with a combined production capacity of 567 gpm. Water demand provided for Alternative A by ASCWD are 0.155 gpm for average daily demand for single-family homes and 0.1 gpm for townhouses (Appendix K). To calculate maximum daily demand, ASCWA uses a ratio of 4.5:1

in relation to average daily demand. Table 14-3, Water Demands of Alternative A, shows the estimated water demands of Alternative A.

Table 14-3
Water Demands of Alternative A

Unit Type	Number of Units	ADD (gpm)	MDD (gpm)
Single-Family Unit	33	5.12	23.00
Townhouse	14	1.40	6.30
Totals	47	6.5	29.30

Source: Appendix K.

Notes: ADD = average daily demand; gpm = gallons per minute; MDD = maximum daily demand.

ASCWD further calculates water demand on the system by pressure zone to ensure adequate supplies would be available to all customers. This would also provide for adequate flows in emergency situations when steady flows of 1,000 gpm for up to 2 hours may be required. Table 14-4, Water Demand in ASCWD Zones, shows the estimated demands at build out of Alternative A by pressure zones.

Table 14-4
Water Demand in ASCWD Zones

Zone	ADD (gpm)	ADD (gpd)	MDD (gpm)	MDD (gpd)
Zone 1 (without Alternative A)	17	24,480	77	110,880
Zone 1 (with Alternative A)	24	34,560	108	155,520
Zone 2	24	34,560	108	155,520
Zone 3	49	70,560	221	318,240
Zone 4	12	17,280	54	77,760
Totals (with Alternative A)	109	156,960	491	707,040

Source: ASCWD 2013.

Notes: ADD = average daily demand; gpm = gallons per minute; gpd = gallons per day; MDD = maximum daily demand.

Currently, available supplies to Zones 2 and 3 are deficient for maximum daily demand, an issue that Alternative A would exacerbate according to the technical memo provided by the ASCWD (Appendix K). Further, Title 22 forbids a development project from making any existing deficiency worse. Therefore, this impact would be **significant**. To mitigate for this impact, Alternative A would implement Mitigation Measure 14.7a, which requires water system improvements to be constructed to increase the maximum daily demand water supply to Pressure Zones 2 and 3 in an amount at least equal to Alternative A's maximum day demand. Mitigation Measure 14.7a would require that these zonal supply deficiencies be mitigated with the installation of three booster pump stations (Pump Stations B, C, and D) to convey excess supply from Zone 4 to Zone 3, Zone 2, and Zone 1. These pumps would be sized according to specifications found within Appendix K.

Additionally, the project could result in changes in the Truckee River streamflow as a result of meeting the project's water demand. The Truckee River receives water from releases at the Lake Tahoe Dam and from several tributaries between Tahoe City and Truckee, including Bear Creek. "The total watershed area of the Truckee River at Tahoe City is 507 square miles, and increases to 553 square miles just upstream of the Town of Truckee. With a watershed area of roughly 5.6 square miles, Bear Creek tributary accounts for roughly 6.8 percent of the watershed area contributing to the Truckee River near Truckee (USGS)" (Balance Hydrologics 2016) .

To evaluate the potential for adverse streamflow effects in the Truckee River, Balance Hydrologics compared average monthly streamflow on Bear Creek and the Truckee River. The streamflow on Bear Creek ranges from 0.4 cubic feet per second (cfs) in September to 67.5 cfs in May while streamflow in the Truckee River near the Town of Truckee ranges from around 101 cfs in October to 477 cfs in May. The contribution of Bear Creek to the Truckee River streamflows range from 0% in July and August, which is the typical timeframe for the maximum releases from Lake Tahoe, to 14% in May (Balance Hydrologics 2016).

A portion of the streamflow in Bear Creek comes from the overflow of water produced from the four ASCWD horizontal wells in the Bear Creek watershed. These wells produce and deliver water to storage tanks to meet water demand within the ASCWD system. When the storage tanks are full, excess water overflows into snowmaking water storage ponds located at the base of the Alpine Meadows Ski Resort. If the snowmaking ponds are full, they overflow to Bear Creek. The median monthly overflow rate corresponds to 79 gallons per minute (gpm; 0.17 cfs) while the minimum measured overflow rate is 2.8 gpm (0.01 cfs), as measured in September 2012 (Balance Hydrologics 2016). Balance Hydrologics also notes that "it is possible or likely that well development and storage overflow is currently serving to supplement natural flows in Bear Creek."

Estimated water demand associated with Alternative A is 6.9 gpm on an average monthly basis (ASCWD, undated, as cited in Balance Hydrologics 2016). Based on a comparison of this demand to the estimated average monthly flow in Bear Creek, "project demand has the potential to reduce monthly flows in Bear Creek by a maximum of 3.8% during the late summer and early fall, with negligible effects at all other times of the year. This is a conservative estimate in that it assumes that the average demand will come at the expense of overflow to the stream. In actuality, tank storage may be available to meet the demand, and snowmaking ponds may intercept storage overflow. This reduction would have no discernable effect on Truckee River flows, with project demand equal to less than 0.03 percent of Truckee River flows (near Truckee) at most" (Balance Hydrologics 2016). Therefore, the project would have a **less than significant** impact on stream flows in the Truckee River and no additional mitigation is required to ensure that the project would not adversely affect the Truckee River watershed.

With implementation of Mitigation Measure 14.7a, the Alternative A's impact on water supplies and distribution would be **less than significant**.

Alternative B Impacts

Water service for Alternative B would be provided by the ASCWD. Water demands for Alternative B would be similar to but slightly less than Alternative A, as shown below in Table 14-5. As described above, additional water demands would exacerbate the current maximum daily demand supply deficiency in Zones 2 and 3. Therefore, this impact would be **significant**. To mitigate for this impact, Alternative B would implement Mitigation Measure 14.7a, which requires water system improvements to be constructed to increase the maximum daily demand water supply to Pressure Zones 2 and 3 in an amount at least equal to Alternative B’s maximum day demand. Mitigation Measure 14.7a would require that these zonal supply deficiencies be mitigated with the installation of three booster pump stations (Pump Stations B, C, and D) to convey excess supply from Zone 4 to Zone 3, Zone 2, and Zone 1. These pumps would be sized according to the specifications found within Appendix K.

With respect to potential impacts to streamflow within the watershed, the water demand associated with Alternative B demand is estimated to be 6.4 gpm on an average monthly basis (ASCWD, undated, as cited in Balance Hydrologics 2016). As the demand is slightly less than the demand associated with Alternative A, Alternative B would also result in a maximum reduction in monthly flows in Bear Creek of 3.8% during the late summer and early fall, with negligible effects at all other times of the year. “This reduction would have no discernable effect on Truckee River flows, with project demand equal to less than 0.03 percent of Truckee River flows (near Truckee) at most” (Balance Hydrologics 2016). Therefore, Alternative B would have a **less than significant** impact on streamflows in the Truckee River and no additional mitigation is required to ensure that Alternative B would not adversely affect the Truckee River watershed.

With implementation of Mitigation Measure 14.7a, Alternative B’s impact on water supplies and distribution would be **less than significant**.

**Table 14-5
Water Demands of Alternative B**

Unit Type	Number of Units	ADD (gpm)	MDD (gpm)
Single-Family Unit	38	5.89	26.51

Source: Appendix K.

Notes: ADD = average daily demand; gpm = gallons per minute; MDD = maximum daily demand.

Mitigation Measures

MM 14.7a: The project applicant shall implement Mitigation Measure 14.1b which requires the applicant to provide a will-serve letter from the ASCWD and make a fair-

share contribution toward the cost of upgrading three system-wide pump stations (Booster Pumps B, C, and D).

Impact 14.8

Would the project require or result in the construction of new on-site sewage systems, or require sewer service that may not be available by the area’s wastewater treatment provider?

Significance and Mitigation		Alternative B
Significance before mitigation:	Less than significant	Less than significant
Mitigation measures:	None	None
Significance after mitigation:	Less than significant	Less than significant

Alternative A Impacts

As discussed in the technical memo (Appendix K), the Alpine Sierra Water and Sewer Facility Evaluation prepared by Stantec Consulting concludes that adequate wastewater capacity exists in the existing ASCWD sewer system to serve Alternative A. However, because the project site is not currently connected to the sewer system, a new sewer connection would be required. Most of the homes would have direct access to gravity sewer lines, but a few would require individual sewage pumps to access the gravity sewer. One sewer lift station would be constructed in the northeastern corner of the project site (Parcel H). Alternative A would need to construct new on-site wastewater facilities to serve the project, which are evaluated as part of Alternative A throughout this EIR. No other wastewater facilities would be required to accommodate Alternative A. This impact would be **less than significant** and no mitigation would be required.

Alternative B Impacts

Similar to Alternative A, wastewater generated by Alternative B would be accommodated in the existing ASCWD sewer system; however, a new sewer connection would be required and a sewer lift station would be constructed to feed into the existing ASCWD system. These on-site improvements are analyzed throughout this EIR, and no additional facilities would be required to accommodate Alternative B. Therefore, this impact would be **less than significant** and no mitigation would be required.

Mitigation Measures

No mitigation measures are required.

Impact 14.9

Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs in compliance with all applicable laws?

Significance and Mitigation	Alternative A	Alternative B
Significance before mitigation:	Less than significant	Less than significant
Mitigation measures:	None	None
Significance after mitigation:	Less than significant	Less than significant

Alternative A Impacts

The project would result in development of 47 residential lots, 1 caretaker unit and 5 secondary dwelling units. Solid waste service would continue to be provided by TTSD. Project construction activities, although temporary, would generate solid waste, including construction materials and material removed during site clearing. Residential construction is estimated to generate approximately 4.4 pounds of waste per square foot of construction. Based on the maximum building coverage permitted within Alternative A, full buildout could result in approximately 218,492 square feet of residential construction, which would result in approximately 961,365 pounds of waste (2,209 cubic yards) (CalRecycle 2015a). If none of the construction debris is recycled, this would account for approximately 0.0007% of the 302.5 million cubic yard capacity at the Lockwood Regional Landfill.

Following construction, Alternative A is estimated to generate approximately 530 pounds (0.27 tons) of solid waste per day based on a waste generation rate of 10 pounds of solid waste per single-family home (CalRecycle 2015b). Solid waste would first go to the MRF for sorting to recover recyclable materials. The 0.27 tons of solid waste generated per day would be accommodated within the facility's permitted capacity of 800 tons per day. Any waste not recycled at the MRF would be transferred to the Lockwood Regional Landfill, which receives approximately 5,000 tons of waste per day (NDEP 2015). The 0.27 tons of solid waste generated by the project would account for 0.003% of the solid waste currently received at the landfill. At current rates, the Lockwood Regional Landfill would have capacity to accept solid waste for more than 40 years. Alternative A would not generate enough solid waste to cause the landfill to exceed its permitted capacity. The project would also comply with all federal, state, and local statutes and regulations related to solid waste reduction and recycling. Therefore, this impact would be **less than significant** and no mitigation would be required.

Alternative B Impacts

Alternative B would result in development of 38 residential lots, 1 caretaker unit and 5 secondary dwelling units. Similar to Alternative A, solid waste service would continue to be provided by TTSD. Project construction activities, although temporary, would generate solid waste, including construction materials and material removed during site clearing. Since Alternative B would result in slightly less residential construction, there would be less solid waste generated than Alternative A. Therefore, the construction waste generated by Alternative B would be accommodated within the 302.5-million-cubic-yard capacity at the Lockwood Regional Landfill.

Following construction, Alternative B is estimated to generate approximately 440 pounds (0.22 tons) of solid waste per day based on a waste generation rate of 10 pounds of solid waste per single-family home (CalRecycle 2015b). Solid waste would first go to the MRF for sorting to recover recyclable materials. The 0.22 tons of solid waste generated per day would be accommodated within the facility's permitted capacity of 800 tons per day. Any waste not recycled at the MRF would be transferred to the Lockwood Regional Landfill, which receives approximately 5,000 tons of waste per day. The 0.22 tons of solid waste generated by Alternative B would account for 0.003% of the solid waste currently received at the landfill. At current rates, the Lockwood Regional Landfill would have capacity to accept solid waste for more than 40 years. Alternative B would not generate enough solid waste to cause the landfill to exceed its permitted capacity. Alternative B would also comply with all federal, state, and local statutes and regulations related to solid waste reduction and recycling. Therefore, this impact would be **less than significant** and no mitigation would be required.

Mitigation Measures

No mitigation measures are required.

Impact 14.10

Would the project result in insufficient snow removal and storage such that vehicular or pedestrian public safety is not maintained or require new or expanded snow storage facilities that could cause significant environmental effects?

Significance and Mitigation	Alternative A	Alternative B
Significance before mitigation:	Less than significant	Less than significant
Mitigation measures:	None	None
Significance after mitigation:	Less than significant	Less than significant

Alternative A Impacts

Snow removal for Alpine Meadows Road would continue to be provided by Placer County; however, snow removal within the project site would be the responsibility of the Alpine Sierra HOA. Snow storage areas would be located away from public views and visually sensitive areas. Areas for snow removal and storage would be incorporated into the project design with the inclusion of a 20-foot snow storage easement along each individual lot's frontage on the project site roadways. This area would be reserved for snow removed from the roads and other common areas. Snow from plowing or blowing operations would not be deposited in drainage channels or swales. On-site infiltration systems for snow storage areas would be consistent with the permanent best management practices, as required under Mitigation Measure 12.2d in Chapter 12, Hydrology and Water Quality. Since the Alpine Sierra HOA would provide snow removal service within the project site and there would be adequate snow storage areas to serve Alternative A, this impact would be **less than significant** and no mitigation would be required.

Alternative B Impacts

As described above, snow removal for Alpine Meadows Road would continue to be provided by Placer County while snow removal within the project site for Alternative B would be the responsibility of the Alpine Sierra HOA. Snow storage areas would be provided within the 30-foot easement along each lot's road frontage. Snow from plowing or blowing operations would not be deposited in drainage channels or swales. On-site infiltration systems for snow storage areas would be consistent with the permanent best management practices, as required under Mitigation Measure 12.2d. Since the Alpine Sierra HOA would provide snow removal service and there would be adequate snow storage areas to serve Alternative B, the impact would be **less than significant** and no mitigation would be required.

Mitigation Measures

No mitigation measures are required.

Impact 14.11

Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; or include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

Significance and Mitigation	Alternative A	Alternative B
Significance before mitigation:	Less than significant	Less than significant
Mitigation measures:	None	None
Significance after mitigation:	Less than significant	Less than significant

Alternative A Impacts

This analysis does not consider the potential for recreational impacts to facilities at the Alpine Meadows Ski Resort, a privately owned and operated for fee recreational amenity, that may result from any additional skiers added by Alternative A. Recreation impacts examine, among other things, whether a project would degrade public recreational facilities.

Policy 5.A.3 of the Placer County General Plan requires new development to provide a minimum of 5 acres of improved parkland and 5 acres of passive recreation area or open space for every 1,000 new residents. With an average per household population of 2.59 people, Alternative A could support a residential population of 122 people, which would require 0.61 acres each of improved parkland and passive recreation area or open space. Further, as a Planned Unit Development, the project may provide for a portion of its recreation demand by construction of on-site recreation facilities. Where no onsite recreation facilities are constructed, a Planned Unit Development project is required to pay double park fees which are used to construct regional serving parks and trails. Furthermore, Placer County Code Section 17.54.100 requires that every single-family PD include a minimum of 20% of the site dedicated for use as open space. For this 47.3-acre project site, a minimum of 9.46 acres of open space is required.

Alternative A must comply with Placer County's parks and recreation policies and ordinances through dedication of parkland, construction of park and recreational facilities, and/or payment of in-lieu fees. Alternative A includes one recreation lot consisting of 9,596 square feet (0.22 acre) that would include amenities such as a pool or spa, and picnic tables. The project would also relocate and reconstruct the existing U.S. Department of Agriculture Forest Service trail on site, and would extend the trail throughout the site. Alternative A would also include 14.21 acres of open space, inclusive of the 2.37 acres in the three parcels that are disconnected from the majority of the project site. The construction of these amenities would help meet Alternative A's obligations under Placer County policy. With provision of a 0.22-acre recreation lot and 14.21 acres of open space, Alternative A would meet the County's requirements for 20% of the site to be designated as open space but would be required to fund construction of additional active and passive recreation facilities/parkland. Under Placer County Code Section 15.34, the project applicant would be required at the time of recordation of the final map to pay Park Dedication fees. By constructing and/or dedicating recreational facilities and paying Park Dedication fees, Alternative A would meet its obligation to address the increased demand for parks and recreational facilities. Because Placer County would not approve the subdivision map without the project applicant showing adequate dedication of open space and parkland, or provision of other recreational facilities and/or in lieu fees, the project would not provide inadequate recreational facilities or result in the increased use of

existing facilities such that they would experience deterioration. This impact would be **less than significant** and no mitigation would be required.

Alternative B Impacts

Under Alternative B, the project would involve development of 38 residential lots. With an average per household population of 2.59 people, Alternative B could support a residential population of 98 people, which would require 0.49 acres each of improved parkland and passive recreation area or open space. The 20% open space requirement would also apply to this alternative, requiring a minimum of 9.46 acres of open space. Alternative B would dedicate 18.93 acres of open space within the project site (inclusive of the 2.37 acres in the three parcels that are disconnected from the majority of the project site). The open space within Alternative B would include two private recreation amenity lots and on-site trails as described for Alternative A above. One of the recreation amenity lots would consist of 8,010 square feet (0.18 acres) while the other, which would also be used to support HOA facilities, is proposed to include 37,041 square feet (0.85 acres). At the time of recordation of the final map, the project applicant would pay the County's parkland dedication fee for any portion of the required passive and active recreation area that is not met onsite, as provided under Placer County Code Section 15.34. Thus, Alternative B would meet the County's requirements for recreational amenities and this impact would be **less than significant**. No mitigation would be required.

Mitigation Measures

No mitigation measures are required.

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ALPINE SIERRA SUBDIVISION

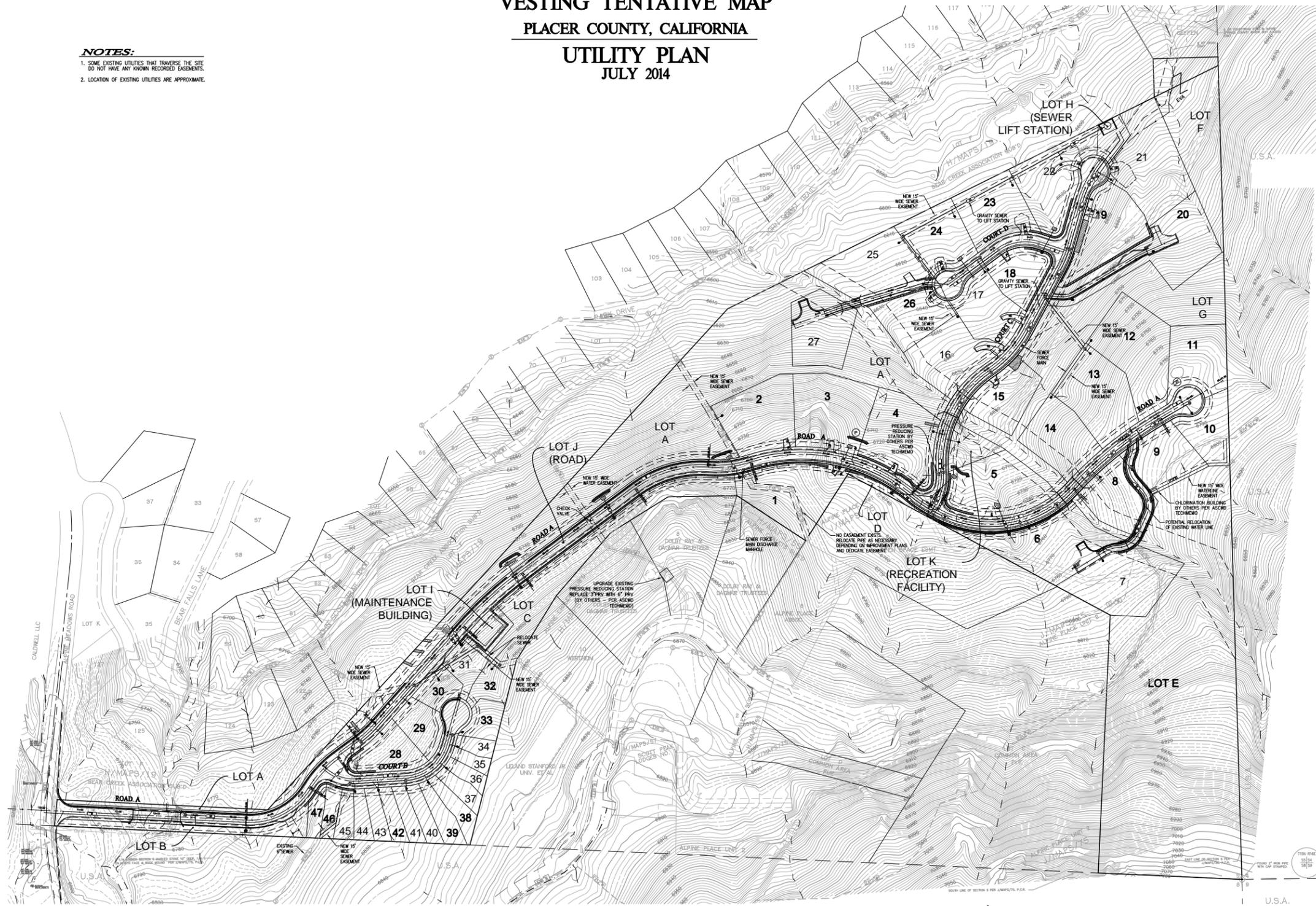
VESTING TENTATIVE MAP

PLACER COUNTY, CALIFORNIA

UTILITY PLAN

JULY 2014

- NOTES:**
1. SOME EXISTING UTILITIES THAT TRAVERSE THE SITE DO NOT HAVE ANY KNOWN RECORDED EASEMENTS.
 2. LOCATION OF EXISTING UTILITIES ARE APPROXIMATE.



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DUDEK

SOURCE: TLA ENGINEERING & PLANNING 2014

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Alpine Sierra Subdivision - Environmental Impact Report

FIGURE 14-1
Proposed Utility Plan

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