

16.0 PUBLIC SERVICES AND UTILITIES

16.1 ENVIRONMENTAL SETTING

16.1.1 Public Water Supply

Information on the existing water supply in the Project area and vicinity is derived largely from the revised *Homewood Mountain Resort Water Supply Assessment* (Nichols Consulting Engineers ~~2010~~2011). This section discusses two types of water used in the Project area: domestic and raw water. Domestic water has been treated to meet California Department of Health Services (DHS) standards, whereas raw water is untreated and supplied directly from its source. Domestic water includes water for residential, commercial, retail, maintenance, and landscape irrigation. Domestic water and raw water can be supplied from groundwater wells or surface water. Surface water sources include diversions from Lake Tahoe and streams.

The Madden Creek Water Company (MCWC), a private water utility in Tahoma, California, provides approximately 43.7 million gallons (134 acre-feet) of domestic water per year from groundwater sources to 160 service connections in the North Base area, Mid-Mountain Base area, and Project vicinity. The water source for the MCWC is the Silver Street Well, located in Homewood. A DHS evaluation found that the Silver Street Well is vulnerable to contamination from sewer collection systems (DHS 2003).

The Tahoe City Public Utilities District (TCPUD) McKinney-Quail Water Service Area provides domestic water to the South Base area. The McKinney-Quail Water Service Area is functionally isolated from other portions of the TCPUD service area, and provides 125.5 million gallons (385 acre-feet) per year to 453 service connections, with 95.5 – 60.3 million gallons (293-185 acre-feet) from groundwater from the Crystal Way Well, and 65.2 millions gallons (200 acre-feet) from Lake Tahoe (Nichols Consulting Engineers ~~2010~~2011).

Groundwater produced from the Crystal Way Well is normally sufficient to meet winter demand, but supply is augmented by pumping water from Lake Tahoe to meet summer peak demand (Nichols Consulting Engineers ~~2010~~2011). The Crystal Way Well produces 500 gallons per minute from groundwater, and the lake intake pumps from Lake Tahoe provide up to 300 gallons per minute. Total capacity of the water supply system is 1.15 million gallons (3.5 acre-feet) per day and there is a peak day demand of 0.75 million gallons (2.3 acre-feet) per day. The system has a ~~28-0.34~~ million gallon (~~85-91.04~~ acre-feet) storage tank (TCPUD 2009).

Infrastructure for the McKinney-Quail Water Service Area water system is near the end of its service life and many elements are undersized to meet current requirements. Regulatory mandates for surface water treatment, water quality source redundancy and fire protection have changed since the system was designed. To meet critical water deficiencies, TCPUD prepared a 5-year, \$26.2 million Capital Improvement Plan (CIP) to replace and upgrade its facilities through 2013. In the Project area, the CIP includes the McKinney-Quail Secondary Source Projects to meet local, State, and federal requirements with a permanent surface water treatment facility for diversions from Lake Tahoe. ~~Planning and designs are scheduled to be completed in 2010 with construction beginning in 2011.~~ The TCPUD plans to construct a new water treatment plant (WTP) ~~in 2012~~ to replace the existing temporary WTP in this area (Homolka, 2010). Designs and permitting of the WTP have not yet begun.

Snowmaking constitutes the largest existing demand for water at HMR. Snowmaking operations at HMR currently cover approximately 23.8 acres and use 14.2 million gallons (43.6 acre-feet) per year (assuming

three feet of total artificial snow cover per season). The current water pumping capacity is 1,300 gallons per minute. Water supplies available for snowmaking are (Hoopingarner 2010, Nichols Consulting Engineers ~~2010~~2011):

- The TCPUD McKinney Well No. 1, currently producing raw water at 300 gallons per minute, and tested by ~~TCPUD-Kleinfelder as having a potential discharge rate as capable of producing~~ 1,000 gallons per minute (Kleinfelder 1994);
- TCPUD domestic water from the Crystal Way Well and Lake Tahoe, supplied to the South Base area at 300 gallons per minute, available from 6:00 PM to 6:00 AM (requires the use of a cooling tower);
- HMR well in the North Base area gravel parking lot, not currently operating but capable of producing raw water at 800 gallons per minute. When operational, flows are restricted to 500 gallons per minute due to the size of the pipe on the discharge side of the well pump and the tank in the pump house.
- MCWC domestic water supplied at 300 gallons per minute, available from 6:00 PM to 6:00 AM.

16.1.2 Wastewater

TCPUD provides wastewater removal to about 7,540 customers, including the Project area. Homewood is within the boundaries of Sewer Assessment District A53 and the West Shore Export II conveyance. TCPUD has a 5-year CIP for its sewerage system to replace and improve facilities. The CIP period runs from 2009 to 2013 and includes improvements budgeted at \$6.04 million (TCPUD 2009).

The TCPUD delivers wastewater to the Tahoe-Truckee Sanitation Agency (TTSA), which operates a 9.6 million gallon per day advanced Water Reclamation Plant in Martis Valley north of the Lake Tahoe Basin. The TTSA manages the Truckee River Interceptor (TRI), a 17-mile long pipeline that carries wastewater out of the Lake Tahoe Basin from Tahoe City to the Water Reclamation Plant. The TTSA plant provides primary and secondary treatment, phosphorus removal, biological nitrogen removal, disinfection, and effluent filtration. Final effluent polishing is achieved by routing through a Soil Aquifer Treatment system, having the soil remove additional constituents as the effluent percolates through.

16.1.3 Reclaimed Water

The Porter-Cologne Water Quality Control Act of 1970 prohibits the use of reclaimed wastewater within the Lake Tahoe Basin. Wastewater is transported out of the Basin to the TTSA plant in Martis Valley, and no reclaimed water is imported back into the Basin.

16.1.4 Solid Waste

Eastern Placer County is primarily rural, located in the Tahoe National Forest. The household and commercial waste stream consists largely of glass, cardboard, paper, plastic, metal, organics, and construction debris. According to CalRecycle, the average household consists of 2.6 persons and the average resident generates seven pounds of waste per day. The Placer County Facility Services Department, Environmental Engineering Division administers and manages the countywide solid waste programs. Programs include garbage collection contracts, education and outreach, the Eastern Regional Materials Recovery Facility (MRF), the Household Hazardous Waste Facility, recycling centers, and satellite recycling bins (Placer County 2010).

Construction and demolition debris is waste material generated in the process of construction or demolition of structures, typically includes concrete, asphalt, wood, metals, gypsum wallboard, roofing,

and land clearing debris such as stumps, woody material rocks, and dirt. Construction and demolition waste varies greatly by structure type. Nationally, residential construction generates 2.4 – 11.3 (4.4 average) pounds per square foot of new residential construction, and non-residential construction generates 1.6 – 4.2 (3.9 average) pounds per square foot. Demolition of non-residential structures generates an average of 155 pounds per square foot (Franklin Associates 1998). In California, construction and demolition debris accounts for up to 22% of the waste stream by volume, and 11% by weight. The California Integrated Waste Management Board (CIWMB, now CalRecycle) identified construction and demolition materials as a top priority for waste reduction under its 2005 Action Plans (California Integrated Waste Management Board 2002, 2005, CalRecycle2009).

Solid waste collection services are provided by the Tahoe-Truckee Sierra Disposal Company, Inc. (TTSD) for the west shore of Lake Tahoe from Emerald Bay to Crystal Bay. TTSD transports materials to the MRF, where they are sorted to meet California's mandatory solid waste diversion requirements. The MRF is located on property owned by Placer County and the County between Truckee and Squaw Valley west of the Truckee River, contracts with Eastern Regional Sanitary Landfill, Inc. (ERSL) to conduct the day-to-day operations and maintenance of the Facility. The MRF receives, separates, processes and markets recyclable materials removed from the waste stream. Non-recyclable materials are sent to the Lockwood Regional Landfill in Nevada. The MRF handles household recyclables, including plastics, aluminum, tin, glass, cardboard, newspaper, carpet, computers, "white goods," (i.e. refrigerators and freezers), wood waste, and lot clearing debris. Wood waste is chipped for mulch or biomass fuel, pine needles are chipped and used for slope stabilization, and inert materials are crushed for reuse as aggregate or in on-site land remediation. MRF staff evacuates any chlorofluorocarbon (CFC) or other refrigerants from white goods before marketing the materials as scrap metal (Placer County 2008, 2010). The MRF has a permitted capacity of 800 tons of material per day and 832 vehicles per day. In 2009, the facility received and processed nearly 63,000 tons of solid waste (approximately 29,000 tons of which were from unincorporated Placer County).

Non-hazardous solid waste is consolidated and transported to the Lockwood Regional Landfill, a 1,535-acre municipal solid waste facility located in Storey County, Nevada. TTSD has a 30-year contract (1995-2025) with a 30-year option to dispose of non-hazardous solid waste at the Lockwood Regional Landfill. The landfill does not accept hazardous waste. Lockwood Regional Landfill has a capacity of up to 250 years (Placer County 2008).

The Eastern Regional Landfill, is a closed landfill and does not accept waste. The ERL occupies 65.6 acres adjacent to the MRF. A separate 32 acres area is currently being reclaimed using inert materials (crushed rock and concrete) diverted from the MRF (Placer County 2010).

Hazardous waste from households and Conditionally Exempt Small Quantity Generators is collected at a permanent Household Hazardous Waste Facility, located next to the MRF. The facility is open, by appointment, during ten, two-day collection days each year. Materials accepted include paint, paint products, household batteries, car batteries and fluids, pesticides, household cleaners, used oil and filters, sharps, and pharmaceuticals. The facility is operated subject to the Permit-by-Rule requirements under the jurisdiction of Placer County Environmental Health Services and as an Approved Home-Generated Sharps Consolidation Point under the jurisdiction of the California Department of Public Health, Medical Waste Management Program. Hazardous wastes are collected, transported, and disposed of by a licensed contractor at other facilities outside of the region (Placer County 2010).

16.1.5 Electricity, Gas and Energy

Liberty NV Energy (formerly known as Sierra Pacific Power Company) provides electric service in the Project area. As a regulated utility based in Nevada, NV Energy is required to serve projects within its

designated service area, which includes 54,500 square miles, 2.4 million people, and 1.194 million customers in Nevada and northeastern California, including 46,000 customers in the Lake Tahoe area (NV Energy 2010).

NV Energy had a peak generating capacity of 5,581 megawatts (MW) in 2009, and the 2009 peak load was 7,140 MW; thus the utility is able to generate about 78% of the power it supplies. The remaining supplies are purchased on an as-needed basis (NV Energy 2010). Provided that electricity is available for purchase, no shortfall in electrical energy supply is anticipated in the future.

The NV Energy substation serving the Project area is located in Tahoe City, with aboveground power lines running to Homewood roughly parallel to West Lake Boulevard. The Tahoe City substation is nearing its maximum load capacity, and any large additional loads will require an upgrade of the facility (Hutton 2009).

Natural gas service in the Lake Tahoe Basin is provided by Southwest Gas Corporation, which also serves customers in portions of Arizona, Nevada, and portions of northeastern and southeastern California (Southwest Gas Corporation 2009, CNN Money 2009). Southwest Gas Corporation acquires its gas supplies from a variety of sources – the company used 46 suppliers in 2008 and has an active program to seek a diversity of supply. The company is the largest distributor of natural gas in the States of Arizona and Nevada, and no shortfalls in natural gas supply are anticipated in the future.

16.1.6 Parks and Recreation

Recreational facilities are described in detail in Chapter 18.

16.1.7 Schools

The Tahoe-Truckee Unified School District (TTUSD) provides public school services for elementary through high school (grades K–12). TTUSD encompasses more than 720 square miles and serves approximately 4,114 students (2008-2009 school year) in Nevada, Placer, and El Dorado Counties, making it one of the geographically largest districts in California (Education Data Partnership 2010, TTUSD 2009). TTUSD has two comprehensive high schools, one continuation high school, two middle schools, five elementary schools, and one K–12 alternative school. Their respective attendance areas are divided between the Truckee area and the Lake Tahoe Basin.

Table 16-1 summarizes current enrollment and residual school capacity for the 2009-2010 school year at the school facilities that would serve students from the Project area (TTUSD Facilities Master Plan, August 22, 2007; Education Data Partnership 2010; TTUSD 2009). In August 2007, TTUSD adopted a Facilities Master Plan, which identifies major facility issues and detailed information on future school needs, options, and costs (TTUSD 2007). Using historic and current enrollment data, student resident location, birthrates, and the anticipated impact of future residential development and demographic trends, enrollment projections were provided through the 2010–2011 school year. The K–12 enrollment projection for the Tahoe area shows that enrollment is expected to decline by 4.67% from 2006 to 2011.

Table 16-1**Tahoe Area K-12 Current School Enrollment and Capacity**

School	Grades	Enrollment 2009-2010	Capacity	Residual Capacity 2009-2010
Tahoe Lake Elementary School, 375 Grove Street, Tahoe City	K-3	291	304	13
North Tahoe Elementary School, 2945 Polaris Road, Tahoe City	4-5	198	535	40
North Tahoe Middle School, 2945 Polaris Road, Tahoe City	6-8	277		
North Tahoe High School, 2945 Polaris Road, Tahoe City	9-12	336	637	301
Total	K-12	1,102	1,476	354

Source: TTUSD 2007, Education Data Partnership 2010

16.1.8 Fire Protection and Emergency Medical Services

The Project area is within the North Tahoe Fire Protection District (NTFPD) service territory. Calfire is responsible for wildfire suppression in the upper mountain portion of the Project area. The lower portion of the Project area is within the service boundary of the North Tahoe Fire Protection District (NTFPD), which has primary responsibility for structure fire protection and related emergency services (NTFPD 2009). The NTFPD provides service through six stations and 50 uniformed and support personnel to nearly 20,000 people in a 31-square-mile area that includes Placer County portions of the Lake Tahoe Basin. NTFPD provides fire protection, fire prevention, fire safety education, emergency medical service, and other emergency response services in its service area and has mutual, automatic aid agreements with other fire agencies throughout the area (NTFPD 2009). In terms of wildland fires, the Project area is classified as a State Responsible Area (SRA), and Calfire is responsible for wildland fire suppression. Through a Cooperative Fire Management Agreement (CFMA) with Calfire, however, the USFS conducts wildland fire suppression (See Chapter 17 – Hazardous Materials and Public Safety).

CALFIRE/Grass Valley ECC provides dispatch services to NTFPD. Calls for fire or emergency service are typically received by the Placer County Sheriff Department (PCSD) Office and directed to one of the NTFPD fire stations. The station nearest to the Project area is Station #53, located at 5425 West Lake Boulevard (SR 89), adjacent to the South Base area. Station #53 is equipped with a water tender, engine company truck, and ambulance. Two firefighters normally staff Station #53, at least one of who has received emergency medical technician training (Martin 2009.) If needed, Typically, Station #53 is assisted from the NTFPD fire stations at Tahoe City and Meeks Bay due to low staffing at the Homewood station.

The Insurance Service Organization (ISO) Public Protection Classification (PPC) program assigns ratings to locations that reflect the level of fire protection services expected in a given area. The ISO is an independent organization that serves insurance companies, fire departments, insurance regulators, and others by providing information about risk. The PPC program provides information and analysis for fire departments and public officials to plan for improvements. ISO staff analyze relevant data and assign a PPC value from 1 – 10. Class 1 represents exemplary fire protection, and Class 10 indicates that the area's fire-suppression program does not meet ISO's minimum criteria.

PPC ratings consider factors such as the proximity to a fire station and the ability of the fire station to provide services to the area, fire alarm and communications systems, dispatching systems, fire department equipment and staffing, training, geographic distribution of fire companies, water supply systems, condition and maintenance of hydrants, and the amount of available water compared with the amount needed to suppress fires. In general, the price of fire insurance in a community with a lower PPC rating is substantially lower than in a community with a higher PPC rating. The ISO PPC classification for Homewood is either PPC Class 4 or PPC Class 9, with the lower PPC based on closer proximity to hydrants. Protection from wildland fire hazards is discussed in Chapter 17 - Hazardous Materials and Public Safety.

16.1.9 Sheriff and Police

Police protection services in the Project area is provided by the Placer County Sheriff's Department (PCSD). The PCSD has a service area of approximately 125 square miles, stretching from Tahoma on the southern boundary, around the northern and western shores of Lake Tahoe to the California/Nevada State line, north to Truckee, and west to the crest of the Sierra Nevada.

Approximately 35 full-time sworn PCSD officers serve the Lake Tahoe area from the Tahoe Vista substation located at 2501 North Lake Boulevard in Tahoe City. *Placer County General Plan Policy 4.H.1* states a goal to provide one officer per 1,000 persons in the County. Due to the transient nature and widely fluctuating seasonal populations, there is no specific service ratio goal for the Lake Tahoe area (Granum, pers. comm., 2009). Normally three officers are on patrol at one time. Response times to the Project area vary depending upon weather conditions and other calls for service.

16.1.10 Library Services

Library services are provided in the Homewood, California area by the Placer County Library Department. Placer County operates a branch library in Tahoe City at 740 North Lake Boulevard. The library is open Tuesday through Saturday (Placer County 2009).

16.1.11 Telecommunications Service

The Project area is in the AT&T service area. AT&T provides telecommunications services, including local, long distance, DSL, wireless, data networks, satellite television, and directory, to the Lake Tahoe area (AT&T 2009). AT&T communication infrastructure has sufficient capacity to meet expected future demands for service.

16.1.12 Other County/Community Services

The Homewood Post Office is located at 5375 West Lake Boulevard. Street delivery service is not available in Homewood and mail is delivered to post office boxes for pickup at the station. The post office is open Monday-Friday and has excess capacity to meet increased service demands (Brown 2009). Approximately 500 postal customers currently have boxes at the Homewood Post Office. Of the 1,217 post office boxes in the Homewood Post Office, approximately 500 are currently in use by customers.

16.2 REGULATORY SETTING

TRPA *Code of Ordinances* Chapter 27 and the 1994 *Placer County General Plan* provide regulations for utilities and public services. The Public Facilities and Services Elements articulate policies that guide the provision of adequate public facilities and services. Policy 4.A.1 requires new developments to fund its

fair share of the construction of new public facilities. Policy 4.A.2 states that the County shall ensure that adequate public facilities and services are available to serve new development (Placer County 1994).

16.2.1 Public Water Supply

Public Law 101-618 (Settlement Act) and the Truckee River Operating Agreement (TROA), when it is implemented, govern diversions of surface water from the Lake Tahoe Basin and the Truckee River Basin. Settlement Act §204 limits California water diversions in the Lake Tahoe Basin to 23,000 acre-feet per year. TCPUD is granted surface water diversions from Lake Tahoe and operates in accordance with the Settlement Act, but the specific water rights of TCPUD and other suppliers has not been finalized (Nichols Consulting Engineers ~~2010~~2011).

The TROA was executed by the State of Nevada and State of California in September 2008, but has not yet been implemented. The TROA provides for a quantified allocation of water for California and Nevada. The State Water Resources Control Board (SWRCB) has held water right applications in abeyance pending TROA implementation. It is expected that the SWRCB will resume processing water right applications when allocations are finalized (Nichols Consulting Engineers 2010). Consequently, for planning and disclosure purposes, the effect of Project water use in relation to the TROA is considered in this document.

Tahoe Regional Planning Agency

TRPA Code of Ordinances §27.3A requires basic water services (adequate water rights and supply systems) for projects designed or intended for human occupancy, including reconstruction or expansion projects. Specifically, Ordinance §27.3A states that development requiring water shall not be approved unless:

1. There is an adequate water supply within an existing water right recognized under the laws of the State in which the use is to occur; or
2. Adequate water rights recognized under the laws of the State in which the use is to occur are furnished with the development (TRPA 2009).

TRPA Code of Ordinances §27.3.B(1) states that the applicable local, state, federal, or utility district standards shall determine adequate fire flow standards. If no such standards exist, Ordinance §27.3.B(1) requires 3,500 to 6,000 gallons per minute over a three to six hour period at 20 pounds per square inch (psi) residual pressure for the Project area (TRPA 2009).

The *TRPA Goals and Policies*, Chapter VI – Public Services and Facilities Element, includes several goals and policies related to public water supply:

Goal #1: Public services and facilities should be allowed to upgrade and expand to support existing and new development consistent with the *Regional Plan*.

Policy 1: Public services and facilities should be allowed to upgrade and expand to support consistent with the Land Use Element of the *Regional Plan* and federal, State, and local standards.

Policy 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.

Goal #2: Consider the existence of adequate and reliable public services and facilities in approving new development under the Plan.

Policy 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 3: No additional development requiring water should 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.

California

Under California State Laws SB 610 (Water Supply Assessments) and SB 221 (Written Verifications of Water Supply), new development projects are required to prepare a Water Supply Assessment (WSA) to identify the source and quantity of water available prior to the publication of a draft EIR. SB 221 and SB 610 apply to residential development projects with 500 or more dwelling units or projects that increase a public water system's existing service connections or demand by 10%. Under Water Code §10912(a)(7), SB 610 applies to projects that demand an amount of water equivalent to, or greater than, the amount of water required by a 500-unit project (California Department of Water Resources 2003).

Local

The MCWC provides water to the North Base area and 160 service connections. The TCPUD provides municipal water to the McKinney-Quail Water Service Area, which serves the South Base area. The TCPUD Water Ordinance promulgates the rules, regulations, conditions of service, and rates for water service. The Project would be subject to TCPUD rules and regulations in effect at the time a water service application is made. Water Ordinance §~~3-4~~ (Customer Responsibilities) stipulates the following conditions that must be met for new developments to receive water service connection:

- The property to be served is in the service area of TCPUD;
- A District water main of adequate capacity and pressure, as only determined by the District, exists in a publicly traveled right-of-way, or District easement abutting a principal boundary of the land to be served; or adequate mains, pumps and storage facilities, as only determined by the District, are constructed; and
- The customer shall make application for said service and pay the charges as provided in the Ordinance.

TCPUD Water Ordinance §~~9-6~~ establishes requirements for the size, alignment, materials of construction, and construction methods of water supply infrastructure.

TCPUD Water Conservation Ordinance No. ~~406-264~~ (Conservation and Drought Response Standards) requires plumbing fixtures for new construction to meet the following low flow requirements:

- Showerheads must be 2.5 gpm or less;
- Toilets must be ultra low flow (ULFT) or high-efficiency (HET);

- Dual flush toilets qualify as HET;
- Faucets must be 2.2 gpm or less; and
- Water pressure shall not exceed 60 psi within residential or non-residential structures.
- ~~Toilets: 1.6 gallons/flush;~~
- ~~Showers: 3.5 gallons/minute;~~
- ~~Faucets: 4 gallons/minute; and~~
- ~~Water pressure shall not exceed 60 psi at ground floor level.~~

The 1994 Placer County General Plan includes the following Goal and Policies relating to water supply:

Goal 4.C. of the Public Facilities and Services Element of the Placer County General Plan is 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.

- 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 before occupancy.
- 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.
- 4.C.3. The County shall encourage water purveyors to require that all new water services be metered.
- 4.C.4. The County shall require that water supplies serving new development meet State water quality standards.
- 4.C.5. The County shall require that new development adjacent to bodies of water used as domestic water sources adequately mitigate potential water quality impacts on these water bodies.
- 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.

16.2.2 Wastewater

TRPA Code of Ordinances §27.4 requires new, reconstruction, or expansion projects designed for human occupancy and that generate wastewater, to be served by treatment and export facilities where wastewater is transported directly from the parcel to a treatment plant (TRPA 2009).

Wastewater services for the Project area will be provided by the TCPUD and the TTSA. The TCPUD Sewer Ordinance No. 255 (adopted April 17, 2006) (~~TCPUD 2000~~) establishes rules and regulations pertaining to the use, maintenance, and charges for the sewage works in the boundaries of the TCPUD, and requires connections to public sewers. TTSA's Ordinance 3-90, as amended, contains rules, regulations, and procedural requirements for the use of TTSA's sewerage system.

The 1994 Placer County General Plan contains the following Goal and Policies applicable to wastewater:

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

- 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 before occupancy (Placer County 2004).
- 4.D.3. The County shall discourage extension of sewer service outside of city spheres of influence and community plan areas, except in limited circumstances to resolve a public health hazard resulting from existing development, or where there is a substantial overriding public benefit.
- 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.

16.2.3 Solid Waste

Volume 40 of the Code of Federal Regulations, Part 258 contains regulations for municipal solid waste landfills and requires states to implement their own permitting programs incorporating the federal landfill criteria. The federal regulations address the locations, operation, design, groundwater monitoring, and closure of landfills.

The California Integrated Waste Management Act (AB 939, 1989) contains regulations affecting solid waste disposal in California. AB 939 requires that Counties prepare Integrated Waste Management Plans to implement landfill diversion goals and prepare and adopt Source Reduction and Recycling Elements (SRRE). The SRRE must establish a program for managing and reducing waste generated in the County.

SB 1016 (2007) amended portions of the California Integrated Waste Management Act. The Act allows the Department of Resources, Recovery and Recycling (CalRecycle) to use per capita disposal as an indicator in evaluating compliance with the requirements of AB 939. Jurisdictions track and report their per capita disposal rates to the CIWMB.

Solid waste facilities are required to obtain a Solid Waste Facilities Permit from the Placer County Local Enforcement Agency and obtain Waste Discharge Requirements from the California Regional Water Quality Control Board.

The Solid Waste Reuse and Recycling Access Act (AB 1327, 1991) requires jurisdictions to adopt ordinances requiring development projects to provide adequate storage area for collection and removal of recyclable materials. Placer County adopted such an ordinance (Municipal Code Section 8.16.080).

The TRPA does not regulate solid waste. Placer County Ordinance 8.16.266 requires waste receptacles to be bear-resistant. The *1994 Placer County General Plan* contains the following Goal and Policies that apply to solid waste:

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

- 4.G.1. The County shall require waste collection in all new urban and suburban development.
- 4.G.2. The County shall promote maximum use of solid waste source reduction, recycling, composting, and environmentally-safe transformation of wastes.

16.2.4 Electricity, Gas and Energy

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

HMR facilities will be required to comply with Title 24 of the California Code of Regulations (CCR). TRPA does not directly regulate the provision of electric or natural gas services in the Lake Tahoe Basin. *TRPA Code of Ordinances* §27.5 requires new, reconstruction, and expansion projects to be served by adequate electrical supply facilities (TRPA 2009). The *1994 Placer County General Plan* contains the following Goal and Policies that apply to energy:

Goal 2.G: To increase the efficiency of energy use in new and existing homes, with a concurrent reduction in housing costs to Placer County residents.

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

16.2.5 Fire Protection and Emergency Medical Services

TRPA does not regulate fire protection and emergency medical services. Under *1994 Placer County General Plan* Policy 4.I.2, the County strives to meet the following response time standards for calls for emergency and fire protection services:

- 4 minutes in urban areas,
- 6 minutes in suburban areas,
- 10 minutes in rural areas.

1994 Placer County General Plan Policy 4.I.1 states that the County strives to maintain the following minimum fire protection standards based on ISO PPC program ratings:

- ISO PPC Class 4 in urban areas,
- ISO PPC Class 6 in suburban areas,
- ISO PPC Class 8 in rural areas.

The 1998 *West Shore Area General Plan* states the following goal and policies related to fire protection:

VI. Safety Element. Goal 1. To protect the lives and property of the citizens of the West Shore Area General Plan from unacceptable risks associated with seismic, flooding, or wildfire hazards.

6. Ensure that all proposed developments are reviewed for fire safety standards by all local fire agencies responsible for its protection, including providing adequate water supplies and ingress and egress.

8. Inform residents and visitors of the wildfire hazard associated with occupancy in the basin. Encourage use of fire resistant materials and fire preventative techniques when constructing structures, especially in the highest fire hazard areas. Manage forest fuels to be consistent with State laws and other goals and policies of this Plan.

16.2.6 Police Protection

TRPA does not regulate police protection services. *Placer County General Plan* Policy 4.H.1 states a goal to provide one officer per 1,000 persons in the County. Due to the transient nature and widely fluctuating size of the population in the Lake Tahoe area, there is no specific service ratio goal for the Lake Tahoe area (Granum, pers. comm., 2009).

Under Policy 4.H.2, the PCSD strives to meet the following response time standards:

- 6 minutes in urban areas,
- 8 minutes in suburban areas,
- 15 minutes in rural areas,
- 20 minutes in remote rural areas.

16.3 EVALUATION CRITERIA WITH POINTS OF SIGNIFICANCE

For the purposes of this document, an impact to public services and utilities is defined as a physical change to the existing conditions. An impact is determined to be significant if environmental constraints do not allow for the provision of adequate public services or utilities.

Table 16-2 presents the evaluation criteria for Public Services and Utilities. These criteria are drawn primarily from local plans, adapted where necessary to reflect CEQA and TRPA requirements. The stated applicable points of significance determine whether implementing the Project will result in a significant impact. These points of significance are based upon Appendix G of the State CEQA Guidelines and the TRPA Initial Environmental Checklist. A Public Services and Utilities impact is significant if implementation of the Project exceeds the point of significance shown in Table 16-2.

The EIR/EIS does not address certain CEQA and TRPA evaluation criteria for on-site sewage systems because the Project Team determined during Project planning and development that the criteria are not applicable to the Project.

CEQA Appendix G Checklist item XVI-c (Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects) is addressed in Chapter 11 – Hydrology and Water Quality, Impact HYDRO-2.

Table 16-2**Evaluation Criteria with Point of Significance - Public Services & Utilities**

Evaluation Criteria	Significance Threshold	Justification
PSU-1. Will the Project increase demand or exacerbate peak period service demand of fire, law enforcement, schools, government services, water, sewage treatment and disposal, communication systems, solid waste, gas, or electric to such a degree that service standards and objectives cannot be maintained or new facilities are needed that could cause significant environmental effects?	a) Increased demand for personnel, equipment, or infrastructure that cannot be met by existing staffing or facilities b) Demonstrated need for expanded or new infrastructure c) Inconsistency with TROA	CEQA Appendix G Checklist XIV (a) and XVI (b-g); TRPA Initial Environmental Checklist II (14a-d, 15 a-b, and 16a-d, f); <i>TRPA Code of Ordinances</i> and <i>Regional Plan</i> Goals and Policies, Chapter 27; <i>Placer County General Plan</i> Public Facilities and Services Element, Goal 4.D, Policies 4.D.2, 4.D.3, 4.D.4.; TROA
PSU-2. Does the Project have the potential to damage existing utility infrastructure?	Damage to utility infrastructure that is not repaired during Project construction	TRPA Initial Environmental Checklist II (16 a)
PSU-3. Will Project construction interfere with law enforcement and fire protection services?	Loss of emergency services access such that access and response time standards are not met	TRPA Initial Environmental Checklist II (14a, b); <i>Placer County General Plan</i> Policies 4.H1, 4.H2, 4.I.1, and 4.I.2.

Source: Hauge Brueck Associates 2009.

Note: CEQA Appendix G Checklist item XVI-c (Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects) is addressed in impact HYDRO-2.

16.4 ENVIRONMENTAL IMPACTS AND RECOMMENDED MITIGATION

IMPACT: PSU-1. Will the Project increase demand or exacerbate peak period service demand of fire, law enforcement, schools, government services, water, sewage treatment and disposal, communication systems, solid waste, gas, or electric to such a degree that service standards and objectives cannot be maintained or new facilities are needed that could cause significant environmental effects?

Analysis: *No Impact; No Project (Alternative 2)*

Alternative 2 (No Project) involves no new land uses, facilities, or construction activities, and will create no demand for fire or police protection services, schools, water, sewage treatment and disposal, communication systems, solid waste disposal, energy (gas, or electric) or other public services and utilities. Consequently, Alternative 2 would have no impact on public services and utilities.

Mitigation: No mitigation is required.

Analysis: *Significant Impact; Proposed Project (~~Alternative 1~~ Alternative 1/1A) and Alternatives 3, 4, 5, and 6*

Water Supply. The Proposed Project (~~Alternative 1~~ Alternative 1/1A) and Alternatives 3, 5, and 6 are expected to increase demand for domestic and raw water. Alternative 4 would result in a net decrease in total water demand due to the cessation of snowmaking operations, but would have a small increase in demand for domestic water.

This impact analysis for water supply focuses on the volume and rate of new water demand of the Project. Volume refers to the total quantity of water required by the Project, and is expressed as acre-feet per year. Volume is related to legal water rights and delivery capacity available to supply the Project. Rate refers to the flow of water to be supplied at one time to meet the various needs of end users, and is expressed as gallons per minute. Rate of flow is related to the production and conveyance capacity of wells, pumps, pipelines, and other infrastructure. Rate of flow estimates are important for planning and designing for the necessary capacity of the water delivery infrastructure. Both analyses rely on relatively conservative assumptions.

Nichols Consulting Engineers has prepared a WSA for the Project: *Draft Final Homewood Mountain Resort Water Supply Assessment* (Nichols Consulting Engineers ~~2010~~2011). The Project Applicant retained Beaudin Ganze Consulting Engineers, Inc. and Snow Machines, Inc. to assess Project demand and rate of flow for snowmaking (Beaudin Ganze Consulting Engineers, Inc. 2007; Snow Machines, Inc. 2010). Estimated peak day and annual total water demand for commercial, retail, and single- and multi-family residential uses (including on-site residences and affordable housing developed by the Project Applicant and Project-related workforce/affordable housing located off-site) is derived from Beaudin Ganze Consulting Engineers, Inc. (2007) and Nichols Consulting Engineers (~~2010~~2011) data.

Water volume demand calculations are based on occupancy at buildout, applying empirically derived demand factors from similar projects in the vicinity. The analysis assumes new plumbing fixtures would meet or exceed TCPUD Water Conservation Ordinance No. ~~406-264~~ requirements for new construction. Recent similar projects in the region consume an average of 0.14 acre-feet per year per residential and transient dwelling unit, and commercial/retail areas use 0.07 acre-feet per year per 1,000 square feet (Nichols Consulting Engineers ~~2010~~2011). For this impact analysis, commercial, skier support services, gondola terminal, and maintenance uses were included in the estimate of domestic water demand at the same rate as commercial/retail uses to provide a more conservative estimate. Rate of flow calculations are based on peak demand periods, such as the full operation of snowmaking equipment and full occupancy of Project facilities.

An estimate of domestic water consumption for Alternative 4 is based on average values for single-family homes obtained from the (United States Department of Agriculture [USDA] 2009, United States Geological Survey [USGS] 2009). California households use 0.5 – 1.0 acre-foot of water per year on average (USDA 2009). It was therefore assumed that each single family home would use 1.0 acre-foot of water for a total demand of 16 acre-feet. Individuals use between 80-100 gallons of water per day (USGS 2009). Assuming employees spend one-third of their day at work, 33 gallons of water

per individual would be consumed at the commercial facility. Based on the daily trip rate for the commercial lot, it is estimated that 30 individuals will be employed at the facility. If employees work 250 days per year, domestic water consumption would be 0.25 million gallons, or 0.77 acre-foot, per year.

Table 16-3 presents estimated domestic and snowmaking demand rounded to the nearest acre-foot. Estimated annual domestic water consumption for residential, commercial, and irrigation uses for the Proposed Project (~~Alternative 1~~ Alternative 1/1A) and Alternative 3 is 64 acre-feet, 17 acre-feet for Alternative 4, 80 acre-feet for Alternative 5, and 68 acre-feet for Alternative 6 (Table 16-3). Proposed Snowmaking operations, including existing and proposed terrain, is estimated to require 187 acre-feet per year (Snow Machines, Inc. 2010).

The TCPUD McKinney-Quail Water Service Area and MCWC currently provide approximately 14 acre-feet of domestic water per year to HMR (Tirman pers. comm. [B]). Snowmaking at HMR currently uses approximately 14.2 million gallons per year or 43.6 acre-feet per year (Snow Machines, Inc. 2010). The impact analysis assumes that new domestic water supply required to meet Project demands would come from a combination of MCWC and the TCPUD McKinney-Quail Water Service Area, and water for snowmaking would continue to be provided by a combination of TCPUD, MCWC, and HMR onsite sources.

As a result, during Project operation, the estimated annual total demand for domestic water use in the TCPUD McKinney-Quail Water Service Area is 449 acre-feet with the Proposed Project (~~Alternative 1~~ Alternative 1/1A) and Alternative 3, 402 acre-feet with Alternative 4, 465 acre-feet with Alternative 5, and 453 acre-feet with Alternative 6. A total of 187 acre-feet per year of raw water (60.8 million gallons) would be required for snowmaking operations under the Proposed Project (~~Alternative 1~~ Alternative 1/1A) and Alternatives 3, 5, and 6.

The TCPUD McKinney-Quail Water Service Area, including the Crystal Way Well and surface diversions from Lake Tahoe, has sufficient available water rights to meet the expected increased demand for water due to the Project (Nichols Consulting Engineers ~~2010~~ 2011). TCPUD has been granted Lake Tahoe surface water diversions and operates in accordance with the Settlement Act, but allocations under the TROA have not been finalized (Nichols Consulting Engineers ~~2010~~ 2011). TCPUD expects to be allocated a sufficient amount of diversions to meet the demands of the Project and other users in the McKinney-Quail Water Service Area (Nichols Consulting Engineers ~~2010~~ 2011). However, because the TROA has not been implemented, the TCPUD and HMR would be required to demonstrate that water used for domestic consumption and snowmaking comply with a final allocation agreement. Consequently, the Proposed Project (~~Alternative 1~~ Alternative 1/1A) and Alternatives 3, 4, 5, and 6 may have a significant impact on water supply and mitigation is required.

Table 16-3**Annual Water Demand by Alternative**

Category	Alternative				
	1/1A	3	4	5	6
HMR Master Plan Project Area					
Residential and Tourist Accommodation Units	329/325	329	16	441	361
Commercial/Retail and Ski Area Facilities (square feet)	105,000	105,000	15,000	105,000	95,000
Residential Water Use (acre-feet per year) ¹	46/46	46	16	62	51
Commercial/Retail and Ski Area Water Use (acre-feet per year) ²	7	7	1	7	7
Landscape Irrigation (acre-feet per year) ³	11	11	0	11	11
Subtotal New Domestic Water Demand (acre-feet per year)	64	64	17	80	68
Snowmaking Raw Water Demand (acre-feet per year) ⁴	187	187	0	187	187
Total New Water Demand (acre-feet per year)	251	251	17	267	255
TCPUD McKinney-Quail Water Service Area					
Current Domestic Water Demand (acre-feet per year)	385	385	385	385	385
With Project Domestic Water Demand (acre-feet per year)	449	449	402	465	453
With Project Domestic + Snowmaking Water Demand (acre-feet per year)	636	636	402	652	640

Notes:

- 1 – 0.14 acre-foot (45,620 gallons) per year per residential and tourist accommodation unit (NCE ~~Nichols Consulting Engineers 2010~~2011).
- 2 – 0.07 acre-foot (22,810 gallons) per year per 1,000 square feet of commercial/retail and ski area facilities (NCE ~~Nichols Consulting Engineers 2010~~2011).
- 3 – Landscape irrigation demand of 10.5 acre-feet (3.4 million gallons) per year based on the State of California department of Water Resources Water Budget Workbook, Beta Version 1.0, December 17, 2009 (NCE ~~Nichols Consulting Engineers 2010~~2011).
- 4 – Expected supply includes raw and domestic sources (NCE ~~Nichols Consulting Engineers 2010~~2011).

The TCPUD water supply system infrastructure operates at capacity for its existing customers and does not have additional capacity available to serve the proposed South Base Area of the Proposed Project (~~Alternative 1~~Alternative 1/1A) and Alternatives 3, 4, 5, and 6. ~~In 2012, TCPUD plans to construct a new WTP to replace the existing temporary WTP in this area. Design and permitting have not begun on the WTP project and construction start dates are uncertain. The WTP project, or an alternative supply project, must be completed before TCPUD will be able to meet the water supply needs of the South Base area. The TCPUD did not identify the need for any additional offsite infrastructure improvements relative to water supply to accommodate the proposed HMR MP implementation. According to the TCPUD, the new WTP would be sized for the District's domestic water needs, the proposed HMR South Base Area's domestic water needs, and likely would include some capacity for regional expansion to serve adjacent private water companies.~~

Two alternatives for the new WTP are currently being studied. One would utilize the existing Chamber's Landing lake intake, with a new WTP, to be built at one of two potential locations, and includes approximately 1,200 feet of raw water pipe from the intake to the WTP and connections to the distribution system. The other alternative would be to retrofit and use the existing lake intake at McKinney Shores Homeowners Beach, with a new WTP facility located at the HMR South Base Area. This alternative may include approximately 2,400 feet of raw water pipe in addition to connections to the existing distribution system (Homolka, 2010). Development of the new WTP and associated pipelines would be designed, evaluated and permitted by TCPUD under their existing Capital Improvement Program ~~and according to their schedule, would occur prior to development of HMR's South Base area development (HMR MP Phase 2).~~ TCPUD did not identify the need for any additional offsite infrastructure improvements to accommodate the proposed HMR MP implementation.

Calculations conducted for the MCWC indicate that MCWC facilities have water supply to serve the proposed HMR North Base area domestic water needs, but that some offsite improvements may be required to meet higher fire flows associated with the new development. The improvements proposed by MCWC include a new 500,000-gallon water tank and associated distribution pipelines and a new groundwater well in the vicinity of Sacramento Avenue to improve system reliability (Twomey, 2010).

TCPUD's fire flow capabilities are also deficient in the area adjacent to the South Base Area and require improvements to meet current residential fire flow requirements of 1,000 gallons per minute. The Project is expected to require 1,500 gpm and at least 429,000 gallons of storage (Nichols Consulting Engineers 2011). While capital improvement projects are already planned by TCPUD for existing service, the South Base area will require a level of fire protection beyond TCPUD's typical requirements that would be addressed through additional improvements. According to TCPUD, these improvements can occur through one of three options. One option would be to construct approximately 7,500 feet of 12-inch pipe from the Quail #1 Tank to the existing distribution system in the South Base area. This option is less desirable due to the length of pipeline and because flow duration requirements may exceed the capabilities of the Quail #1 Tank. A second option would be to construct a new water storage tank at the northern end of the District's water system to serve the South Base area, and approximately 1,000 feet of 12-inch pipe from the tank to the South Base area. The third option would be to interconnect TCPUD's water system with the proposed HMR water tanks at the Mid-Mountain area. The necessary improvements would be constructed by the TCPUD but funded by the Project Applicant.

According to HMR, the two 250,000 gallon water tanks proposed at the Mid Mountain area have been designed to provide adequate fire flows (volume and rate) necessary for the proposed HMR MP development at the Mid Mountain, South Base and North Base areas (Tirman, 12/30/10, Nichols Consulting Engineers 2011). If HMR's proposed onsite water facility design and engineering calculations are accepted by TCPUD and MCWC, then no offsite water system improvements would be required for implementation of the HMR MP. However, HMR's current water system designs do not adequately demonstrate how water stored at the Mid Mountain would be distributed to the South Base area to provide necessary fire flows requested by TCPUD. The water system plans show a connection of the Mid Mountain area water tanks to the North Base area and the MCWC existing connection, but intertie to the South Base area and the TCPUD service area. Since HMR has not demonstrated how the Mid Mountain water tanks may supply

fire flows to the South Base area (HMR MP Phase 2), this impact is considered to be potentially significant. The adequacy of fire flow and water storage tanks is not known, and would not be known, until the design review stage of the project. Therefore, impacts to fire flow is considered a significant impact.

In addition to domestic water demand, the HMR MP will increase demand for snowmaking water supplies. Existing water production and delivery infrastructure is not sufficient to meet the expected new peak demand for snowmaking with Proposed Project (~~Alternative 1~~Alternative 1/1A) and Alternatives 3, 5, and 6. The proposed snowmaking system requires installation of nearly 8 miles of onsite pipeline (4-inch to 10-inch diameter), 10 miles of electrical lines, 55 snowguns, 127 hydrants and pedestals, and electrical service connections to cover an additional 78.5 acres of existing ski runs (Snowmakers Inc. 2010). The snowmaking system has an operational capacity of 4,400 gallons per minute, with a minimum required operating pressure of 300 pounds per square inch (Snow Machines, Inc. 2010). The snowmaking plan indicates that water supplies are presently available at up to 2,400 gallons per minute (Hoopingarner 2010; Nichols Consulting Engineers ~~2010~~2011; Snow Machines, Inc. 2010). Sources include:

- The TCPUD McKinney Well No. 1, currently producing raw non-potable water at 300 gallons per minute, and tested by ~~TCPUD-Kleinfelder~~ as capable of producing up to 1,000 gallons per minute (Kleinfelder 1994);
- TCPUD domestic water from the Crystal Way Well and Lake Tahoe, supplied to the South Base area at 300 gallons per minute, available from 6:00 PM to 6:00 AM (requires the use of a cooling tower);
- HMR well in the North Base area gravel parking lot, not currently operating but capable of producing raw water at 800 gallons per minute. When operational, flows are currently restricted to 500 gallons per minute due to the size of the pipe on the discharge side of the well pump and the tank in the pump house; and
- MCWC domestic water supplied at 300 gallons per minute, available from 6:00 PM to 6:00 AM.

Current rate of flow is not sufficient to meet peak demand for snowmaking under the Proposed Project (~~Alternative 1~~Alternative 1/1A) and Alternatives 3, 5, and 6. HMR and the TCPUD McKinney-Quail Water Service Area would require upgraded extraction, pumping, treatment, conveyance, and storage capacity to serve the total new snowmaking demand for the Project area. This is considered a significant impact on water supply and mitigation is required.

Wastewater Treatment. Implementation of the Proposed Project (~~Alternative 1~~Alternative 1/1A) or Alternatives 3, 4, 5, or 6 includes the construction of new residences and affordable/employee housing units, and improved winter sports, recreational and commercial facilities. Wastewater quantities generated by the Proposed Project (~~Alternative 1~~Alternative 1/1A) and Alternatives 3, 4, 5, and 6 are expected to be similar to the demand for domestic water (Beaudin Ganze Consulting Engineers, Inc. 2007). The Proposed Project (~~Alternative 1~~Alternative 1/1A) and Alternatives 3, 4, 5, and 6 require up to 70,431 gallons per day of domestic water, and are expected to generate up to that volume during peak use periods (Beaudin Ganze Consulting Engineers, Inc. 2007).

TCPUD's and TTSA's existing wastewater conveyance and treatment facilities are considered adequate to accept wastewater from the Proposed Project (~~Alternative 1~~Alternative 1/1A) and Alternatives 3, 4, 5, or 6 (Lalotis 2009, Parker 2010). TTSA facilities are currently operating with about 20% available excess capacity. The TRI has a design capacity of 6.0 million gallons per day, and current excess capacity in the pipeline is 1.2 million gallons per day. The TTSA Water Reclamation Plant has a treatment capacity of 9.6 million gallons per day, and currently has an excess capacity of 1.92 million gallons per day. On peak demand days, Project wastewater may occupy up to 6% of available excess capacity in the TTSA conveyance and treatment systems. Excess capacities in the TRI and at the water reclamation plant are available on a first come/first serve basis.

TCPUD requires a detailed domestic sewer study engineering report prepared by a registered civil engineer prior to Project approval. However, according to TCPUD, it is anticipated that the proposed development will connect directly to the District's West Shore Export (WSE) sewer facility. The WSE has greater than sufficient capacity to accommodate the proposed project since the sewer collection and export systems were originally designed to serve a much larger population than presently exists. At this time, the District does not have any future projects planned for the WSE for which HMR would be responsible (Homolka, 12/15/10). TCPUD adopted water and sewer connection fees (Ordinance 259a) and user and service fees (Ordinance 295b) fees will apply to the Project. In addition to paying these fees, HMR will install the connections from the Project area to the TCPUD wastewater main in accordance with the District's standards, rules, and regulations.

TCPUD and the TTSA finance facility improvements and expansions through connection charges, service charges, and tax revenue. Developers are assessed connection charges, based on the number of new residential units and other uses, at the time development occurs. The TTSA Connection Fee Schedule (TTSA 2010) is based on the quantity of wastewater that would be generated by type of dwelling unit or commercial use.

Due to existing available capacity in the wastewater conveyance and treatment system, and the fee schedules in place designed to recover agency costs to upgrade and maintain systems, the impact of the Proposed Project (~~Alternative 1~~Alternative 1/1A) and Alternatives 3, 4, 5, and 6 on the wastewater system is considered less than significant.

Solid Waste Disposal. The analysis of solid waste disposal is based on TTSD permitted capacity to handle waste on a daily basis, and the total lifespan capacity of disposal areas. The MRF has a permitted capacity of 800 tons of material per day and 832 vehicles per day. TTSD handled approximately 63,000 tons of solid waste in 2009 (average of approximately 210 tons per day of operation). The Lockwood Regional Landfill handles non-hazardous solid waste material and has a capacity of up to 250 years (Placer County 2008, 2010). The analysis considers waste generated during construction and demolition, and waste expected to be generated during project operation.

Construction and Demolition Waste. According to a national survey, the national average construction waste generation is 4.38 pounds per square foot for residential buildings, 3.89 pounds per square foot for non-residential buildings, and 155 pounds per square foot for demolition of non-residential structures (Franklin Associates 1998). Statewide, construction and demolition account for 22% of the total waste stream by

volume, and 11.6% by weight (California Integrated Waste Management Board 2002, 2005, CalRecycle 2009).

An estimated 60% of green buildings certified by the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) program divert over 75% percent of construction and demolition waste through reuse, recycling, and other methods (California Integrated Waste Management Board 2005). Consequently, for this analysis, it is assumed that under LEED certification standards for the Proposed Project (~~Alternative 1~~ Alternative 1/1A) and Alternatives 3, 5, and 6, construction would generate approximately 25% of the average amount of waste. This reduced rate of waste generation is considered feasible because construction and demolition materials recycling centers readily divert 60% - 90% of materials from the waste stream (California Integrated Waste Management Board 2002, 2005). To provide a more conservative analysis, the analysis assumes that mixed-use structures with multi-family and tourist accommodation units would generate waste at the residential construction rate, and demolition of existing structures and hardscape surfaces would occur at the non-residential rate. Therefore, this analysis assumes that under Proposed Project (~~Alternative 1~~ Alternative 1/1A) and Alternatives 3, 5, and 6, demolition of existing structures and facilities would generate 38.75 pounds per square foot, construction of residential and mixed-use structures (including hotels, timeshares/fractional ownership units, townhouses, condominiums, and single family homes) would generate 1.095 pounds per square foot, and construction of non-residential structures (e.g., parking structures, maintenance buildings, skier service facilities) would generate 0.9725 pound per square foot. Alternative 4 would not be constructed to LEED standards, and this analysis assumes construction and demolition waste would be generated at the national average rates listed above. For analysis purposes, it is assumed that single-family residences in Alternatives 4, 5, and 6 would average 4,000 square feet in size.

The initial step of the Project development would be to remove existing structures and ski area facilities. Structures to be removed at the North Base area includes four existing ski lifts (including beginner lifts and the base of the Madden Ski Lift) and associated pads, footings and utilities; buildings and concrete foundations; storm drain structures; asphalt parking surfaces; overhead transmission lines; and a pumphouse. At the South Base area, structures to be removed includes one existing ski lift (the beginner surface lift) and associated pads, footings and utilities; buildings and concrete footings; asphalt parking surfaces; and overhead transmission lines. At the Mid-Mountain area, existing shacks, an abandoned foundation, the white tent structure, the top station of the existing Madden Ski Lift and associated pads, footings and utilities will be removed.

The precise square footage of structures and facilities to be removed under demolition is not known. The estimated surface area and structures to be demolished under the Proposed Project (~~Alternative 1~~ Alternative 1/1A) and Alternatives 3, 4, 5, and 6 are based on existing land coverage and structures described in Chapter 3, Section 3.1. Existing land coverage is approximately 271,000 square feet at the North Base area and 117,000 square feet at the South Base area. The existing North Base lodge is 13,943 square feet. The South Base lodge is 7,300 square feet and the vehicle shop/maintenance facility located adjacent to the South Base area is 3,884 square feet. Therefore, the total demolition area therefore is estimated to be 413,127 square feet for the Proposed Project (~~Alternative 1~~ Alternative 1/1A) and Alternatives 3, 4, 5, and 6. At the rate of 38.75 pounds per square foot, demolition would generate an estimated 16,008,671 pounds (8,004 tons) of waste and debris for the Proposed Project (~~Alternative 1~~ Alternative 1/1A).

and Alternatives 3, 5, and 6. Alternative 4, which would not meet LEED standards, may generate up to 64,034,684 pounds (32,017 tons) of demolition debris if the North Base area is totally redeveloped.

The Proposed Project (~~Alternative 1~~Alternative 1/1A) and Alternatives 3, 4, 5, and 6 would generate up to 1,107,919 pounds during construction. Table 16-4 below provides estimated construction waste generated by alternative.

LEED certification with the Proposed Project (~~Alternative 1~~Alternative 1/1A) and Alternatives 3, 5, and 6 emphasizes reuse of building materials and limiting of waste disposal for previously developed sites. Accordingly, new buildings will utilize materials from existing structures dismantled on-site. Components from old chair lifts can be used when building new chair lifts on-site or at other local ski resorts. HMR is creating a “Green Guide” or sustainability plan that addresses the concerns associated with the building process. Architectural design will consider the “life-cycle” costs of the infrastructure and buildings used at HMR. Green building principles that to be implemented during redevelopment includes the reuse and recycling of materials from de-constructed buildings.

Table 16-4**Solid Waste Generated During Construction by Alternative**

Alternative	North Base ¹			South Base ²			Mid-Mountain Base ³		Total Construction Waste (Pounds) ⁶
	Residential/ Mixed Use (square feet) ⁴	Non-Residential/ Parking (square feet) ⁵	Construction Waste (pounds) ⁶	Residential/ Mixed Use (square feet) ⁴	Non-Residential/ Parking (square feet) ⁵	Construction Waste (pounds) ⁶	Non-Residential (square feet)	Construction Waste (pounds)	
Proposed Project (Alternative 4 Alternative 1/1A) and Alternative 3⁷	452,824	181,911	672,751	295,403	65,583	387,246	49,278	47,923	1,107,919
Alternative 4⁸	32,000	15,000	198,510	32,000		140,160	49,278	47,923	338,670
Alternative 5	487,780	60,000	592,469	64,000		70,080	49,278	47,923	710,472
Alternative 6	465,216	145,351	650,765	147,535	35,140	195,724	49,278	47,923	894,413

Source: ~~HBA~~Hauge Brueck Associates, 2010

Notes:

1. North Base area residential and mixed-use buildings include buildings A, B, C, D, E, P, and single-family residential (Alternative 4) with the exception of square footage of parking structures in buildings B (85,351 square feet) and P (96,560 square feet).
2. South Base area residential and mixed-use buildings include buildings A, A1, B, townhomes, and single-family residential (Alternatives 4, 5, and 6) with the exception of square footage of parking structures in buildings A/A1 (40,523 square feet) and B (25,060 square feet).
3. Mid-Mountain Base area structures consist of non-residential uses.
4. Waste from the construction of residential and mixed-use buildings (i.e., structures with tourist accommodation units, fractional ownership, lockout units, and townhomes with commercial, skier service, and other non-residential uses) is calculated at the residential building rate. For estimation purposes, it is assumed that single-family homes under Alternatives 4, 5, and 6 would be 4,000 square feet.
5. Non-residential structures include parking structures, maintenance facilities, and other uses that do not include residential or tourist accommodation units within the structure.
6. Construction of the Proposed Project (~~Alternative 4~~ Alternative 1/1A) and Alternatives 3, 5, and 6 would meet LEED Certification Standards, and it is assumed that construction activities would result in a reduction of waste generation rates of 75% below average rates, or 1.095 pounds per square foot for residential structures and 0.9725 pound per square foot for non-residential structures.
7. Buildings and facilities under the Proposed Project (~~Alternative 4~~ Alternative 1/1A) and Alternative 3 have the same or similar square footage and uses, and therefore construction waste estimates are the same or similar.
8. Construction of Alternative 4 is assumed to not meet LEED standards, so the waste generation rates of 4.38 pounds per square foot for residential construction, 3.89 pounds per square foot for non-residential, are applied.

Up to 100,000 cubic yards of excavated materials could be generated during construction of Proposed Project (~~Alternative 1~~ Alternative 1/1A) and Alternatives 3, 5, and 6. There are opportunities for the on-site reuse of approximately 102,000 cubic yards of excavated materials that is generated during project construction to be used as fill, as identified in Chapter 3, Figure 3-12, and Table 3-6. If materials cannot be used on-site for construction, restoration, and revegetation, the materials would be used at nearby California Tahoe Conservancy (CTC) and Placer County project sites or exported to a TRPA designated disposal site out side of the Lake Tahoe Basin. HMR will coordinate with Placer County and the CTC on the storage and use of export material for restoration projects in the Project vicinity.

While the existing landfills are expected to have sufficient capacity to handled demolition and construction waste and debris, existing sorting and transfer facilities may not have sufficient capacity to handle a large quantity of waste on given day. Demolition of existing structures and the construction of the project are expected to occur in phases over a 10-year period. Appendix N provides a detailed estimate of the 10-year construction schedule. Due to the expected highly variable rates of generation of demolition and construction waste that would be dependent on the type and schedule of activities, demolition and construction may periodically overwhelm TTSD capacity to transport, sort, and handle solid waste. Consequently, the generation of demolition and construction waste is considered a significant impact, and mitigation is required.

Operational Solid Waste. Due to the seasonal nature of activities at HMR, solid waste generation during operation is presented for both peak days and an annual total. For planning and environmental analysis, Placer County assumes new dwelling units would be occupied by 2.6 persons, and each person generates seven pounds of trash per day. For peak daily demand, the calculations assume 2.6 persons occupy each tourist accommodation unit and dwelling unit (Placer County 2010). For annual waste generation, the calculations assume that 2.0 persons occupy each tourist accommodation unit and 2.6 persons occupy half of the residential dwelling unit. Table 16-5 presents estimates of solid waste generated by the Proposed Project and Alternatives.

The Proposed Project (~~Alternative 1~~ Alternative 1/1A) and Alternatives 3, 4, 5, and 6 will generate between 5,988 to 291 pounds per day if fully occupied. This represents a maximum of 0.37% of the TTSD's daily capacity to manage solid waste stream, and up to 1.4% of the current waste handled by the TTSD. On an annual basis, up to 788 tons of solid waste would be generated, representing a 1.25% increase over the current quantity. The annual quantity is considered a conservative estimate by assuming tourist accommodation units are fully-occupied. Existing waste handling systems and landfills have sufficient capacity to handle and dispose of new waste generated by the Proposed Project (~~Alternative 1~~ Alternative 1/1A) and Alternatives 3, 4, 5 and 6. The quantity of waste is not expected to shorten the lifespan of existing landfills or induce the need to construct new or expand existing waste disposal facilities. Consequently, this is considered a less than significant impact on solid waste services.

Table 16-5**Peak Daily and Annual Total Solid Waste Generation by Alternative**

Alternative	Daily Peak				Annual Total		
	Persons¹	Solid Waste (pounds/day)²	Percent (%) of Daily Capacity³	Percent (%) of Average Daily Handling⁴	Persons⁵	Solid Waste (tons/year)²⁶	Percent (%) Increase⁷
Proposed Project (Alternative 1 + Alternative 1/1A) ⁷ and Alternative 3	855	5,988	0.37%	1.4%	617	788	1.25%
4	42	291	0.02%	0.1%	39	50	0.08%
5	627	4,386	0.27%	1.0%	553	706	1.12%
6	413	2,894	0.18%	0.7%	435	556	0.88%

Notes:

1. Based on 2.6 persons per tourist accommodation unit and dwelling unit (Placer County 2010).
2. Based on seven pounds per person per day (Placer County 2010).
3. Based on percentage of existing capacity 1.6 million pounds (800 tons) per day (Placer County 2010).
4. Based on a daily average handling of approximately 210 tons per day.
5. Based on 2.0 persons per tourist accommodation unit and 2.6 persons per dwelling unit at 50% occupancy (see Chapter 7 – Population, Employment, and Housing).
6. Based on percentage of existing 63,000 tons per year currently handled (Placer County 2010).
7. For the purposes of analyzing impacts associated with the generation of household waste, it is assumed that Alternative 1/1A would have similar levels of peak and annual use levels and generate the same or similar quantity of solid waste.

On-site solid waste receptacles will be bear-resistant per Placer County Ordinance 8.16.266. TTSD fees for service are based on the number of waste bins used at the Project area.

Construction waste would include materials that are not recycled during demolition of existing structures. Excavated materials are proposed for offsite disposal at facilities that will accept clean fill material. It is also possible that excavated material would be used onsite as part of on mountain restoration activities or within the west shore area by restoration agencies (e.g., California Tahoe Conservancy). Construction wastes would be generated in the initial phases of construction and would not occur over long-term operation of the Project or Alternatives.

Energy (Gas and Electricity). HMR facilities will be required to comply with Title 24 of the CCR. Under Appendix F of the CEQA Guidelines, the State of California sets forth goals for energy conservation, including decreasing per capita energy consumption and reliance on fossil fuels, and increasing reliance on renewable energy sources. The Proposed Project (~~Alternative 1~~
+~~Alternative 1/1A~~) and Alternatives 3, 5, and 6 include

additional energy conservation measures as part of the LEED certification process at the North Base area, which requires a decrease in energy use by more than 50% per guest compared to standard construction and operation of similar facilities. The design will include solar energy us to augment electrical demand and water heating. The buildings will include high efficiency insulation, windows, appliances, and building materials.

Residential, commercial, and recreational electricity consumption was estimated using a variety of resources and methodologies. In 2007, Beaudin Ganze Inc. completed a natural gas and electric energy use estimates for the Proposed Project (~~Alternative 4~~ Alternative 1/1A) (Beaudin Ganze Inc. 2007). According to JMA Ventures, LLC, these estimates accurately represent consumption patterns for Alternatives 3, 5, and 6 given the similar land uses (Tirman pers. comm. [E]). Electricity and natural gas consumption for Alternative 4 was not provided. This data was therefore estimated from 2007 average consumptive data for residential and commercial customers in California (Dillard pers. comm; Energy Information Association 2009a, 2009b, and 2009c).

The Project would receive electricity generated by NV Energy. Electricity consumption for the Proposed Project (~~Alternative 4~~ Alternative 1/1A) and Alternatives 3, 5, and 6 would be approximately 44,593,658 kilowatt-hours per year (Beaudin Ganze Inc. 2007), which is minor in relation to the total amount of energy supplied by NV Energy in its service area. NV Energy has a peak load of 7,152 MW. HMR currently consumes approximately 1,372,000 kilowatt-hours per year (Tirman pers. comm. [B]). The Proposed Project (~~Alternative 4~~ Alternative 1/1A) and Alternatives 3, 4, 5, and 6 will increase electrical demand in the Project area by up to 16 MW and annual usage by 43,374,000 kilowatt-hours (Beaudin Ganze Consulting Engineers, Inc. 2007).

Due to ski area closure, Alternative 4 is expected to result in a net decrease in energy demand. Electricity consumption for Alternative 4 is based on average demand in California in 2007. According to NV Energy, the average annual monthly electricity usage per single family home is 755 kilowatt-hours. Average monthly electricity usage per commercial customer in California is 5,772 kilowatt-hours (Energy Information Association 2009a). With 16 single family homes and one 15,000 square foot commercial/retail building, total electricity consumption for Alternative 4 is estimated to be 214,224 kilowatt-hours per year.

The Tahoe City Substation on West Lake Boulevard supplies electricity to the Project area. The Tahoe City substation is nearing its maximum load capacity, and large additional loads will require an upgrade of the facility (Hutton 2009). The Proposed Project (~~Alternative 4~~ Alternative 1/1A) and Alternatives 3, 5, and 6, may hasten the need to upgrade the Tahoe City Substation. NV Energy establishes service connection and usage fees such that users pay their proportional fair share of anticipated capital improvements and expected maintenance.

Aboveground electrical transmission lines serve the Project area. The Proposed Project (~~Alternative 4~~ Alternative 1/1A) and Alternatives 3, 4, 5, and 6 include a new underground distribution system with aboveground pad-mounted transformers, and eight miles of belowground lines to serve the snowmaking system. Off-site, new cables will be needed to provide electrical service to the site from existing transmission lines. The ultimate configuration would be approved by NV Energy in accordance with California Public Utilities Commission (CPUC) Decision 95-08-038 for the installation or upgrading of electric facilities. Belowground transmission lines will not result in additional physical disturbances beyond that currently anticipated for the Project.

The Proposed Project (~~Alternative 1~~ Alternative 1/1A) and Alternatives 3, 5, and 6 are expected to demand up to 154,000 Btus (British thermal units) per hour, with an annual demand of 1,064,000 therms (one therm equals 100,000 British thermal units) (Beaudin Ganze Consulting Engineers, Inc. 2007). Annual natural gas usage for existing conditions (No Project [Alternative 2]) was provided by JMA Ventures, LLC and estimated at 11,000 therms (Tirman pers. comm. [B]). Natural gas usage for Alternative 4 was calculated using average consumption rates for residential and commercial customers in California (Energy Information Association 2009b and 2009c). Average annual natural usage per residential household and commercial customer is 485 therms and 5,777 therms, respectively (Energy Information Association 2009c). With 16 single family homes and one 15,000 square foot commercial/retail building, total natural gas consumption for Alternative 4 would be 13,535 therms per year.

Underground gas service will be extended to serve new structures. HMR will coordinate with Southwest Gas Corporation for the extension of on-site and off-site infrastructure with the ultimate configuration to be approved by Southwest Gas Corporation. New infrastructure will be installed in utility rights-of-way on-site. Extension of these facilities will not require upgrades to the Southwest Gas Corporation transmission system that are not currently planned for, nor will additional physical disturbances result beyond that currently anticipated. As part of the Project approval process, HMR will coordinate with and meet the requirements of Southwest Gas Corporation regarding the extension and locations of on-site infrastructure. HMR is required to pay for necessary natural gas infrastructure improvements.

Electrical and gas utility improvements and new easements on site will be identified in the final Project design and are required to comply with Placer County, NV Energy, of Southwest Gas Corporation, CPUC, and California Building Code requirements, and are expected to be sufficient to serve the Project area. New line extensions and facility construction to serve the site will occur concurrently with development phases. Off-site distribution systems and supply sources are considered adequate to serve the expected increased demand of the Project. Therefore, this impact is considered less than significant.

Public Schools. The Proposed Project (~~Alternative 1~~ Alternative 1/1A) and Alternatives 3, 4, 5, and 6 are anticipated to add new students to Tahoe Lake Elementary School, Tahoe Middle School, and North Lake Tahoe High School. TTUSD calculates potential students by utilizing the Student Yield Rates from its 2006 Developer Fee Justification Study (TTUSD 2006). To estimate the maximum potential number of students associated with the Project, it is assumed that residential and worker units are 100% occupied during the school year. In actuality, at least 50% of new residential units are expected to be second homes, yielding fewer students than estimated in this impact analysis. The potential maximum number of K-12 students, and potential impacts on existing school capacity is as shown in Table 16-6.

Table 16-6**Potential New School Enrollment and Residual Capacity**

Alternative	Residential Units¹	Factor²	Total New Students	Current Residual Capacity³	Residual Capacity by Alternative
1/1A	181/177	0.290	5452/51	354	300302/303
2	1840		0		354
3	246181		524		3020
4	16		5		349
5	363241		704		280284
6	2097		61		293

Source: Hauge Brueck Associates 2009.

Notes

1. Total single-family, multi-family, and affordable housing/worker residential units.
2. Total K-12 Student Yield Rate per residential unit (TTUSD 2006). Anticipated number of new students calculated by multiplying number of residential units by student yield rate.
3. Residual capacity based on current enrollment for the 2009-2010 school year.

There is currently sufficient excess capacity in the TTUSD system to accommodate new students generated by the Proposed Project (~~Alternative 1~~Alternative 1/1A) and Alternatives 3, 4, 5, and 6. Long-term enrollment patterns are difficult to predict, but the TTUSD does not anticipate demographic shifts in the district that would bring substantial new students to area schools. No new facilities will be needed and the Project is not expected to adversely affect school resources.

Projects are required to pay the State-mandated school impact fees to TTUSD for new residential and commercial construction in the district boundaries. The fees mitigate impacts of new development and can only be used for capital outlay expenses related to development (e.g., new construction, reconstruction, portable classrooms, etc.). Under SB 50, payment of the school impact fee is considered full and adequate mitigation under CEQA (Government Code §65996). Section 65996 does not provide for remediation of existing deficiencies in school services.

The Proposed Project (~~Alternative 1~~Alternative 1/1A) and Alternatives 3, 4, 5, and 6 would be required to pay the school impact fee at the time of construction. The current rates for the 2009-2010 school year are \$2.63 per square foot of new residential construction, and \$0.42 per square foot for new commercial or industrial uses. With payment of the State-mandated school impact fees to mitigate potential adverse impacts on schools, this impact is considered less than significant.

Fire Protection Services. The Proposed Project (~~Alternative 1~~Alternative 1/1A) and Alternatives 3, 4, 5, and 6 would build new single- and multi-family residential units, hotel rooms, commercial floor space, skier service facilities, parking in surface, underground and parking structure facilities, and ancillary structures. New buildings will be equipped with sprinkler systems and fire hydrants will be installed at various locations in the Project area for fire protection. Specific hydrant locations and fire flow will be

determined during the design phase through consultation with the NTFPD. SR 89 provides primary the emergency access route to the Project area.

The NTFPD has provided a list of design conditions for the Project, some of which are encompassed in the requirements of local and State codes or ordinances, and some that are specific to NTFPD (NTFPD January 14, 2009). These conditions include emergency water supplies, adequate roadways and fire access roads, automatic fire sprinkler systems, automatic fire alarm systems, and main power disconnect systems. Approved non-freezing automatic sprinklers that meet or exceed NFPA (13, 13R, and 13D), CFC, and NTFPD standards will be required in many project structures. Approved automatic fire alarm systems that meet or exceed NFPA (72), CFC, and NTFPD standards will be required in many project structures. The systems must be connected to sprinkler system water flow, tamper, and other devices. Any building with an automatic sprinkler system shall have a Knox Box and 110-volt outside fire alarm properly installed. A remote main power disconnect switch may be required if the main switch is located inside or is inaccessible due to snow. The NTFPD will review the tentative Project site maps before construction begins or annexation of the Project area is completed to ensure these conditions are met. At the time of final NTFPD review and annexation, the NTFPD may place additional requirements on the Project, if needed, to meet public safety service standards.

The potential for an increase in fires and accidents is inherent with an increase in resident population. The NTFPD expects that the Proposed Project (~~Alternative 1~~Alternative 1/1A) and Alternatives 3, 4, 5, and 6 will cause a marked increase in fire/EMS calls for service from NTFPD. NTFPD will require measures to maintain existing service levels and response times with the increased calls for service, such as increased staffing, specialized apparatus because of new building heights, and station accommodations for additional staff.

Placer County and the NTFPD require projects to pay developer impact fees based on developed living space (including garages). It is expected that this fee will fund service capacity improvements that will offset the expected increase in calls for service to maintain existing service levels and response times in the service territory.

NTFPD review and approval of Project design plans and development impact fees will ensure that the Proposed Project (~~Alternative 1~~Alternative 1/1A) and Alternatives 3, 4 and 5 will include adequate fire protection facilities, including sprinkler systems in new buildings and fire hydrants on the Project area, to meet NTFPD service standards and local and State codes. This impact is considered less than significant.

Sheriff and Police Services. The Proposed Project (~~Alternative 1~~Alternative 1/1A) and Alternatives 3, 4, 5, and 6 may add up to 855 new TAU and affordable/employee housing occupants to the Project area during periods of peak use. This would be in addition to the up to 326/321 permanent new residents generated by the Project (Alternative 1/1A), 326 with Alternative 3, 402 with Alternative 5, and 355 with Alternative 6. Alternative 4 would be limited to up to 38 new residents and up to 314 occupants on average, along with additional visitor serving commercial facilities. Police emergency response times to the Project and service area of the PCSD could increase due to increased calls for service. There is currently no developer impact fee designed to offset the costs of expanding PCSD service.

PCSD typically provides “will serve” letters to proponents of new residential projects, indicating that PCSD will serve the Project to the best of their ability. Placer County and the PCSD have a standard of providing one officer per 1,000 residents, but this ratio method is not well suited for application to the Lake Tahoe area with its large seasonal variation in the numbers of transient visitors and residents. Based on population growth analysis of new housing units in Chapter 7 – Population, Employment and Housing, if new single-family, multi-family, and workforce housing units are fully occupied under the Project (Alternative 1/1A) would require up to 0.33/0.32 new FTE, the Project would require up to 0.314 FTE of a PCSD sheriff deputy to offset the expected increased calls for service and to maintain existing service and response times. Alternative 3 would require 0.33 FTE, Alternative 4 would require 0.04 FTE, Alternative 5 would require 0.40 FTE, and Alternative 6 would require 0.36 FTE. This impact is considered a significant impact on police services.

Telecommunications Service. The Project will expand telecommunication facilities to serve new buildings and residents. HMR will place these lines underground and will coordinate with AT&T on the location and capacity of new lines. Commercial buildings to be directly served by AT&T require a 4-inch duct from the point of feed, and single-family residences require a 2-inch duct. Existing service lines to Homewood are considered adequate to accommodate the increased demand for service within the Project area, so no off-site construction or infrastructure improvements are expected. Payment of appropriate new service connection fees is expected to cover costs to upgrade and maintain communication systems as needed. Therefore, this impact is less than significant.

Other Government Services. The Homewood Post Office is located near the Project area at 5375 West Lake Boulevard. Street delivery service is not available in Homewood or the Project area. Indirectly, the increase in residents may result in increased vehicle trips to the Post Office and potential safety concerns (especially in snow conditions). The increase in individual vehicle trips is considered in Chapter 11 – Transportation and Circulation. However, mail pickup from the post office will not affect postal operations. Therefore, this impact is less than significant.

Library services are provided in the Homewood area by the Placer County Library Department at a branch library in Tahoe City at 740 North Lake Boulevard. Placer County does not have a developer impact fee specific to library services. The Placer County Library Department will continue to provide library services from its Tahoe City branch and no specific library service issues have been identified. The existing library facility is expected to accommodate the estimated increased demand for services, and this impact is considered less than significant.

Mitigation: **PSU-1a: Water Supply Assessment and Infrastructure**

The Project Applicant shall prepare a final WSA as required under SB 610 to identify the quantity and source of domestic and raw water to serve the Project. The WSA shall demonstrate that Project infrastructure for water delivery volume, rate, pressure, and schedule meets the snowmaking demand of HMR. The Project Applicant shall obtain approval from the Placer County LAFCO for any service area adjustments required to provide water for the Project prior to the approval of Improvement Plans and the first Final Map recordation for any portion of the Project requiring water supply from the TCPUD, whichever occurs first. Because a water supplier has not been selected, details

regarding water supply engineering will be determined at the time the supplier is identified. The Project Applicant shall provide a detailed Water System Engineering Report approved by the serving water supplier (TCPUD and/or MCWC) for any portion of the Project requiring water supply from the TCPUD and/or MCWC prior to approval of Improvement Plans for any portion of the HMR MP Phase 1 development. The Report shall be prepared by a California Registered Civil Engineer and describe the necessary infrastructure required by the serving water provider to meet the Proposed Project's domestic, fire protection, and snow making water demands. The report shall include specific on-site distribution system design calculations and demonstrate that peak, maximum, and average demands as well as flow rate, pressure, and duration requirements will meet Placer County, TPRA and other relevant standards. The Project Applicant shall obtain a "will-serve" letter from the serving water provider(s) prior to the approval of Improvement Plans and the first Final Map recordation for any portion of the Project.

The Project Applicant shall incorporate into their project designs fire flow requirements based on the California Fire Code and other applicable requirements based on TRPA and Placer County fire prevention standards.

The off-site water system infrastructure improvements identified by the above Report shall be designed, permitted, and constructed prior to occupancy of any portion of the Project necessitating the improvement. The Project Applicant shall be responsible to reimburse the serving water district(s) for all costs associated with the improvement.

The identified WTP, or alternative water source solution shall be completed prior to occupancy of any portion of the Project requiring water supply from TCPUD. The Project Applicant shall be responsible to reimburse the TCPUD for their fair-share contribution to the water supply project as determined by the TCPUD.

The Project may obtain water from a combination of TCPUD, MCWC, and on-site groundwater wells and surface water. ~~HMR owns an existing right to divert 673 gallons per minute (1.5 cubic feet per second) from streams on site.~~ With the water supply source identified, the Project Applicant shall determine the location and designs of infrastructure necessary to meet peak demand and overall quantity in the Project area for domestic use, fire flows, and snowmaking. If additional onsite or offsite facilities are required for snowmaking operations (e.g., facilities not included in the proposed HMR MP), then snowmaking operations will be managed to utilize available water resources until additional studies, if necessary, are completed and approved.

The Project Applicant will be responsible for construction of infrastructure to connect to the established water system. ~~TCPUD has established connection fees consisting of two components: 1) a Water and Sewer Connection Fee (Ordinance 259a), and 2) and User Fees and Service Fees (Ordinance 295b). These fees to provide for the increased water demand of the Project. TCPUD assesses a single charge to buy into the system improvements necessary to and fees are charged monthly for water usage based on consumption. Connection fees, however, do not accommodate additional development in of the TCPUD service area a magnitude of the Proposed Project. The Project Applicant will be responsible to enter into a development agreement with TCPUD and pay costs related to onsite infrastructure and the fair share of off-site infrastructure. The Project Applicant will be required to pay both components of this new the connection fee and for the construction of additional infrastructure to supply the Project with user fees charged upon connection for water usage.~~

MCWC has similar requirements for connection and service fees, and the applicant will be required to construct the appropriate infrastructure to utilize MCWC water supply (Marr 2009).

During the design phase of new water supply infrastructure and prior to approval of Improvement Plans, the lead and responsible agencies will determine if additional environmental review will be required for the construction and operation of any ~~offsite~~ facilities potentially required for HMR MP Phase 2 development (e.g., South Base area fire flows) or whether they are covered by the environmental analysis included in this EIR/EIS.

Mitigation: **PSU-1b: Coordination of Construction Waste Disposal with ERS�**

To reduce impacts to the existing solid waste handling capacity, the Project Applicant shall coordinate with the Eastern Regional Sanitary Landfill, Inc. (ERSL) to ensure that sufficient capacity to handle demolition and construction waste is available. Coordinating waste volume with handling capacity during demolition and construction will reduce impacts to solid waste services to less than significant.

Mitigation: **PSU-1c: Payment of Development Impact Fee to Placer County Sheriff's Department.**

Based on the Alternative selected, the Project Applicant shall consult with the PCSD to develop an appropriate fair share development impact fee to offset the cost of 1.0 FTE PCSD sheriff deputy per 1,000 new residents. Payment of the impact fee is expected to go towards upgrading equipment or facilities, increasing staff, or otherwise improving response times in the Project vicinity.

After

Mitigation: *Less than Significant; Proposed Project (~~Alternative 1~~ Alternative 1/1A) and Alternatives 3, 4, 5, and 6*

Implementation of Mitigation Measures PSU-1a, PSU-1b, and PSU-1c will reduce impacts to water supply, solid waste disposal, and police services to less than significant. ~~The Project Applicant shall prepare a WSA as required under SB 610 to identify the quantity and source of potable and non-potable water to serve the Project.~~ The Project Applicant shall demonstrate that water source(s) are adequate and assure that it meets State and Federal requirements for quality and quantity.

The ~~SB 610 WSA~~ and payment of connection and service fees approved by TCPUD and MCWC are expected to provide sufficient water to meet peak demand in the Project area with less than significant impacts on water supply in the vicinity. Coordination of demolition and construction waste disposal with the ERS� to handle and sort material will ensure sufficient capacity is available to handle solid waste. Payment of a proportional fair development impact fee is expected to maintain existing police services levels and reduce the potential impact to less than significant.

IMPACT: PSU-2. Does the Project have the potential to damage existing utility infrastructure

Analysis: *No Impact; No Project (Alternative 2)*

Alternative 2 (No Project) involves no new land uses or construction and will not damage existing infrastructure.

Mitigation: No mitigation is required.

Analysis: *Less than Significant Impact; Proposed Project (~~Alternative 1~~ Alternative 1/1A) and Alternatives 3, 4, 5, and 6*

Project development under the Proposed Project (~~Alternative 1~~ Alternative 1/1A) and Alternatives 3, 4, 5, and 6 will replace existing on-site infrastructure as part of Project development. The existing utility infrastructure has potential to be damaged inadvertently during construction activity, or if the Project does not design for adequate capacity or connections. Designs for replacing, extending or upgrading existing utility infrastructure will be coordinated with and approved by the appropriate utility service provider. Each utility service provider will require that the Project meet equipment and installation standards for connection to existing service infrastructure to maintain existing service levels. Prior to performing excavation, HMR is required to call DigAlert at 811 to mark existing underground utilities and avoid inadvertent damage. Consequently, this impact is considered less than significant.

Mitigation: No mitigation is required.

IMPACT: PSU-3: Will Project construction interfere with law enforcement and fire protection services?

Analysis: *No Impact; No Project (Alternative 2)*

Alternative 2 (No Project) involves no new land uses, construction, or residents, and so is expected to have no impact on existing law enforcement and fire protection services.

Mitigation: No mitigation is required.

Analysis: *Less than Significant Impact; Proposed Project (~~Alternative 1~~ Alternative 1/1A) and Alternatives 3, 4, 5, and 6*

The Proposed Project (~~Alternative 1~~ Alternative 1/1A) and Alternatives 3, 4, 5, and 6 will maintain adequate access to on-site and adjacent land uses during construction such that law enforcement and fire protection services will remain unimpeded. Designs for emergency vehicle access to the construction site and temporary construction-related detours, if necessary, will be coordinated with and approved by the PCSD and NTFPD. Therefore, this impact is less than significant.

Mitigation: No mitigation is needed.

16.5 CUMULATIVE IMPACTS AND MITIGATION MEASURES

IMPACT: PSU-C1. Will the Project have significant cumulative impacts to public service and utility resources?

Analysis: *Less than Significant Impact; Project and Alternatives*

The Project and other proposed, planned, or permitted projects in the Homewood area and along the West Shore of Lake Tahoe may temporarily interrupt provision of services and utilities during construction, and may reduce supplies or capacities to provide public services during operation. The No Project (Alternative 2) involves no new land uses, construction, or demand for services, and so will not contribute to a cumulative impact on public services and utilities. Alternative 4, closure of HMR and the construction of 16 single-family homes and a commercial building, is expected to result in a net reduction in demand for public services and utilities, and therefore would result in a less than significant contribution to cumulative impacts.

Construction and operation of the Proposed Project (~~Alternative 1~~ Alternative 1/1A) and Alternatives 3, 5 and 6 will result in increased demands for utilities and public services, including: water supply, treatment, and distribution; wastewater treatment and disposal; solid waste collection and disposal; electricity; natural gas; fire protection and emergency medical services, law enforcement, library, telecommunications; and postal service. The Proposed Project (~~Alternative 1~~ Alternative 1/1A) and Alternatives 3, 5 and 6 are not expected to result in significant impacts to these public services and utilities. The assessment of potential cumulative impacts must consider, in addition to the Project, other past, present, and reasonably foreseeable future projects (e.g., other proposed, planned, or permitted projects). For the purpose of assessing potential cumulative impacts to public utilities and service systems, a list of other past, present, and future projects that are expected to increase demand for public utilities and services, and may contribute to cumulative impacts to these resources is included in Table 20.1-1 in Chapter 20: Mandated Environmental Analysis.

The Proposed Project (~~Alternative 1~~ Alternative 1/1A) and Alternatives 3, 5 and 6 are not expected to contribute to a cumulatively considerable impact on public services and utilities. Public services and utilities either have sufficient excess capacity to provide service to the Project and cumulative projects, such as with wastewater and schools, or mitigation measures are provided to provide fees to expand or maintain service levels. The Proposed Project (~~Alternative 1~~ Alternative 1/1A) and Alternatives 3, 5 and 6 would have a significant impact on water supply and infrastructure. Mitigation Measure PSU-1a, which requires a SB 610 WSA and Water System Engineering Report meeting the requirements of and approved by the TCPUD, would address cumulative impacts associated with increased water demand. Implementation of Mitigation Measure PSU-1a would ensure sufficient water supplies and service infrastructure is maintained for existing users, the Project, and would not constrain future planned uses listed in Table 20.1-1. Mitigation Measure PSU-1c ensures adequate funding is provided to maintain existing police service levels in the Project area and vicinity.

Mitigation: No mitigation is required.

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- Hoopingarner, Kent. Homewood Mountain Resort, Operations Manager. Personal contact with Melanie Greene, Hauge Brueck Associates. September 13, 2010.

- Hutton, Tim. System Engineer. NV Energy. Personal contact with Brian Farris, Hauge Brueck Associates. October 19, 2009.
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- Tirman, David (B). Executive Vice President. JMA Ventures, LLC, Truckee, CA. November 13, 2009—Email message to Laura Smith, ICF.
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- Twomey, Stephen, P.E. Letter to Madden Creek Water Company regarding Homewood Mountain Resort. July 12, 2010.