24.16 CHAPTER 16 - PUBLIC SERVICES AND UTILITIES

Section 16.1.1, DEIR/EIS page 16-1, FEIR/EIS page 16-1: Revisions made based on TCPUD comment letter

16.1.1 Public Water Supply

Information on the existing water supply in the Project area and vicinity is derived largely from the Draft Final Homewood Mountain Resort Water Supply Assessment (Nichols Consulting Engineers 2010). 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).

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). 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.
Section 16.1.1, DEIR/EIS page 16-2, FEIR/EIS page 16-2: Revisions made based on TCPUD comment letter

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):

- 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.

Section 16.1.8, DEIR/EIS page 16-5, FEIR/EIS page 16-5: Revisions made in response to NTFPD and Calfire comment letters

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). Typically, Station #53 is assisted from the NTFPD fire stations at Tahoe City and Meeks Bay due to low staffing at the Homewood station.
Section 16.2.1, DEIR/EIS page 16-8, FEIR/EIS page 16-8: Revisions made in response to TCPUD comment letter

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. 496–264 (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.
Section 16.2.2, DEIR/EIS page 16-9, FEIR/EIS page 16-10: Revisions made in response to TCPUD comment letter

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.
Impact PSU-1, DEIR/EIS page 16-14, FEIR/EIS page 16-14: Revisions made to reflect revised WSA

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

**Water Supply.** The Proposed Project (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). 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) 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). 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.
Impact PSU-1, DEIR/EIS page 16-16, FEIR/EIS page 16-16: Alternative 1A added to analysis and Table 16-3, revisions made to analysis in response to TCPUD comment letter

Table 16-3

Annual Water Demand by Alternative

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

Notes:
1 – 0.14 acre-foot (45,620 gallons) per year per residential and tourist accommodation unit (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 (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 1/1A) 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). Sources include:

- The TCPUD McKinney Well No. 1, currently producing raw 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,
Impact PSU-1, Table 16-6, DEIR/EIS page 16-26, FEIR/EIS page 16-27: Alternative 1A added to Table 16-6

### Table 16-6

Potential New School Enrollment and Residual Capacity

<table>
<thead>
<tr>
<th>Alternative</th>
<th>Residential Units¹</th>
<th>Factor²</th>
<th>Total New Students</th>
<th>Current Residual Capacity³</th>
<th>Residual Capacity by Alternative</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/1A</td>
<td>181/4177</td>
<td></td>
<td>6452/51</td>
<td>354</td>
<td>300/302/303</td>
</tr>
<tr>
<td>2</td>
<td>4440</td>
<td></td>
<td>0</td>
<td>354</td>
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<tr>
<td>3</td>
<td>246181</td>
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<td>524</td>
<td>3029</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>16</td>
<td>0.290</td>
<td>5</td>
<td>349</td>
<td></td>
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<td>5</td>
<td>363241</td>
<td></td>
<td>704</td>
<td>280284</td>
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</tr>
<tr>
<td>6</td>
<td>2092</td>
<td></td>
<td>61</td>
<td>293</td>
<td></td>
</tr>
</tbody>
</table>


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.
Impact PSU-1, DEIR/EIS page 16-27, FEIR/EIS page 16-28: Revisions made in response to NTFPD and Calfire comment letters and comments regarding police services

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 1/1A) 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 1/1A) 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 1/1A) 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.
Mitigation Measure PSU-1A, DEIR/EIS page 16-28, FEIR/EIS page 16-29: Revisions made in response to TDPUD comment letter

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 will provide for the increased water demand of the Project. TCPUD assesses a single charge to buy into the system improvements necessary to hand fees are charged monthly for water usage based on consumption. Connection fees, however, do not accommodate additional development in the TCPUD service area of 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 these new 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 off-site 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.

**Impact PSU-1A, DEIR/EIS page 16-31, FEIR/EIS page 16-31: Revision made in response to TCPUD comment letter and updated Mitigation Measure PSU-1A**

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 ERSL 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, DEIR/EIS page 16-30, FEIR/EIS page 16-32: Alternative 1A analysis added; Revision made in response to TCPUD comment letter

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

Project development under the Proposed Project (Alternative 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-C1, DEIR/EIS page 16-31, FEIR/EIS page 16-33: Revision made in response to TCPUD comment letter

The Proposed Project (Alternative 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 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.