This section addresses the potential impacts of the project on water supply to determine whether sufficient water capacity is available to meet the project's demand. Water supply and distribution were analyzed using data from and in consultation with the Mammoth Community Water District (MCWD). The section also contains an analysis of project compatibility with applicable plans.

## 3.11.1 REGULATORY FRAMEWORK

There are several regulations and plans regarding water supply and water use that are applicable to the project site and the proposed development. These regulations and plans are discussed below.

### a. State Level

#### (1) California Urban Water Management Planning Act

Section 10610 of the California Water Code establishes the Urban Water Management Planning Act, which addresses several state policies regarding the conservation of water including the policy that urban water suppliers shall be required to develop water management plans to actively pursue the efficient use of available supplies. In accordance with the Water Code, municipal water suppliers that serve more than 3,000 customers or provide more than 3,000 acre-feet per year[100] of water must adopt an urban water management plan (UWMP). UWMPs are required to include estimates of past, current, and projected potable and recycled water uses, to identify conservation and reclamation measures currently in practice, to describe conservation measures, and to provide a water shortage contingency plan. UWMPs must be updated every five years to identify short-term and long-term water demand management in order to meet growing water demands during normal, dry, and multiple dry years.

[100] *An acre-foot equals approximately 325,829 gallons.*

### (2) Senate Bill 610 and Senate Bill 221

State legislation addressing water supply, Senate Bill (SB) 610 (Costa) and SB 221 (Kuehl), became effective January 1, 2002 and include additional UWMP requirements, which are summarized below.

SB 610, which was codified in the California Water Code, §10910 et seq., describes requirements for both water supply assessments and UWMPs and applies to the CEQA process. SB 610 requires that for specified projects that are subject to CEQA, the urban water supplier must prepare a water supply assessment that determines whether the projected water demand associated with a proposed project was included as part of the most recently adopted UWMP. Included in the requirements for a water supply assessment are the identification of existing water supply entitlements, water rights, or water service contracts held by the public water system, and prior years' water deliveries received by the public water system. The water supply assessment must address project supplies over a 20 year period and consider average, dry, and multiple dry years. In accordance with SB 610 and Section 10912 of the Water Code such projects that are subject to CEQA include:

- Proposed residential development of more than 500 dwelling units;
- Shopping center or business establishment employing more than 1,000 persons or having more than 250,000 square feet of floor space;
- Commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space;
- Hotel, motel, or both, having more than 500 rooms;
- Industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area;
- Mixed-use project that includes one or more of the projects specified in this subdivision; or;
- A project that would demand an amount of water equivalent to or greater than the amount of water required by a 500 dwelling unit project (typical water use for 500 dwelling units: one acre-foot per two to three units).

The water supply assessment must be approved by the public water system at a regular or special meeting and must be incorporated into the CEQA document. The lead agency must then make certain findings related to water supply based on the water supply assessment.

In addition, under SB 610, an urban water supplier responsible for the preparation and periodic updating of an UWMP must describe the water supply projects and programs that may be undertaken to meet the total project water use of the service area. If groundwater is identified as a source of water available to the supplier, additional information must be included in the UWMP, such as: (1) a groundwater management plan; (2) a description of the groundwater basin(s) to be used and the water use adjudication rights, if any; (3) a description and analysis of groundwater use in the past five years; and (4) a discussion of the sufficiency of the groundwater that is projected to be pumped by the supplier.

SB 221 also addresses water supply in the land use planning process and focuses on new large projects in non-urban areas and applies at the subdivision map approval process. SB 221 requires written verification from the water service provider that sufficient water supply is available to serve a proposed subdivision or that the local agency make a specified finding that sufficient water supplies are or will be available prior to completion of a project. While SB 221 applies to residential subdivisions of 500 units or more, Government Code Section 66473.7(i) exempts ". . . any residential project proposed for a site that is within an urbanized area and has been previously developed for urban uses, or where the immediate contiguous properties surrounding the residential project site are, or previously have been, developed for urban uses, or housing projects that are exclusively for very low and low-income households."

Based on the requirements of SB 610, the project does not meet the definition of a project per Section 10912 of the Water Code, and as such, SB 610 does not apply to the proposed project.[101] Therefore, MCWD is not required to provide a Water Supply Assessment for the project. In addition, while the project with the condo/hotel and fractional ownership units option would be part of a residential subdivision, the number of units proposed is under 500. As such, based on the requirements of SB 221, written verification of adequate water supply for the project is not required.

**(3) Assembly Bill 3030**

Assembly Bill (AB) 3030, the Groundwater Management Act, is Section 10750 et. seq. of the California Water Code. AB 3030 provides local water agencies with procedures to develop a groundwater management plan so those agencies can manage their groundwater resources efficiently and safely while protecting the quality of supplies. Under AB 3030, the development of a groundwater management plan by a local water agency is voluntary. Once a

[101] *The project would include 83 dwelling units. With regard to determining whether the project would generate an equivalent demand to 500 dwelling units, as shown later in the section, the project (hotel option) would generate a water demand of up to 30 acre feet. A 500 unit development would generate a demand of 56 acre feet per year. Therefore, the project would not generate a demand equivalent to a 500 unit development.*

plan is adopted, the rules and regulations contained therein must also be adopted to implement the program outlined in the plan.

#### (4) Efficiency Standards

Title 24 of the California Administrative Code contains the California Building Standards, including the California Plumbing Code (Part 5), which promotes water conservation. Title 20 addresses Public Utilities and Energy and includes appliance efficiency standards that promote water conservation. In addition, a number of State laws listed below require water-efficient plumbing fixtures in structures.

- Title 24, California Administrative Code, Sections 25352(i) and (j) address pipe insulation requirements, which can reduce water used before hot water reaches equipment or fixtures. Insulation of water-heating systems is also required.
- Title 20, California Administrative Code, Section 1604(g) establishes efficiency standards that give the maximum flow rate of all new showerheads, lavatory faucets, sink faucets and tub spout diverters.
- Title 20, California Administrative Code, Section 1606 prohibits the sale of fixtures that do not comply with established efficiency regulations.
- Health and Safety Code, Section 17921.3 requires low-flush toilets and urinals in virtually all buildings.
- Health and Safety Code, Section 116785 prohibits installation of residential water softening or conditioning appliances unless certain conditions are satisfied and includes the requirement that water conservation devices on fixtures using softened or conditioned water be installed.

### b. Regional Level – MCWD

#### (1) 2005 Urban Water Management Plan

In accordance with State legislation, MCWD, the water provider for the project area, prepared an updated UWMP, dated December 2005. The UWMP analyzes past, current, and projected future water supply and demand as they relate to population density, types of water use, water quality, climate, water source availability and reliability, alternate water sources, and potential water shortages. In addition, MCWD has developed a strategy to increase water supply and reduce demand through the identification of alternative water sources, the modification of existing wells to improve capacity and drilling of new wells within the Mammoth Basin, and the

use of recycled water, which would be used specifically for golf course and park irrigation. Water conservation measures have also been considered by MCWD, as discussed in the UWMP.

#### (2) Groundwater Management Plan for the Mammoth Basin Watershed

The Groundwater Management Plan for the Mammoth Basin Watershed (the Groundwater Plan) was developed with guidance from AB 3030. MCWD's Groundwater Plan, dated July 2005, generally adheres to the guidelines provided in AB 3030. Information and analysis contained within the Groundwater Plan is based on previously published reports, conclusions of recent research and MCWD data compilations on hydrologic conditions, facility locations, and water production for the Mammoth Basin watershed.

### c. Local Level

#### (1) Town of Mammoth Lakes General Plan (1987)

As discussed in Section 3.2, Land Use, the project site consists of private and public lands. Since the project site is partially located within the Town of Mammoth Lakes, it is subject to the goals and policies set forth in the Town's General Plan of 1987. The following are the goals and policies relating to water supply that are applicable to the proposed project:[102]

**Policies**

1. The Town shall only approve development when adequate water supply and fire flows can be demonstrated at the appropriate stage of development as identified in the Development Code. When evaluating available water supply, the Town shall consider water available during a year where precipitation is less than 50% of normal.

2. The Town shall work with the Mammoth County Water District (MCWD) and other potential water suppliers to provide adequate water. The Town shall support MCWD actions to reduce per capita usage, increase groundwater capabilities and develop additional storage and where feasible, secure additional water rights, initiate appropriate water reclamation and reuse and possible water importation programs.

5. The Town may only permit development which can show that the provision of water service is coordinated with the provision of other public facilities and services.

[102] *Only the policies of the 1987 General Plan that are applicable to water supply as it relates to the project are listed here, and are numbered as they appear in the General Plan.*

6. The Town shall ensure water system improvements are made with the least disruption to the environment and community through its reviewing powers.

**(2) Town of Mammoth Lakes Draft General Plan Update (2005)**

The Draft General Plan includes polices and implementation measures to reduce potential impacts associated with water supply. These policies and measures are as follows:

I.7.A.a.1 Establish water conservation programs that include both drought tolerant landscaping and efficient building design requirements.

I.7.A.a.4 New development will use native and compatible non-native plant species, especially drought resistant species, to the extent possible when fulfilling landscaping requirements. Use of turf shall be limited to avoid or minimize adverse impacts on native trees.

**(3) Town of Mammoth Lakes Municipal Code**

Chapter 15.36 of the Town's Municipal Code requires the installation of water efficient landscaping in new developments to reduce the water demand for landscaping.

## 3.11.2 AFFECTED ENVIRONMENT

### a. Water Sources

MCWD is the water service provider for the Town and for portions of USDA Forest Service land. As such, MCWD provides water service to the temporary Little Eagle Base Lodge. MCWD's service area comprises approximately 3,640 acres of land in the developed portion of the Town. The primary sources of the Town's potable water are from surface water diverted from the Mammoth Basin watershed, as well as eight groundwater production wells within the Town limits, including Well 16, which is located within the southern portion of the project site. Well 16 is contained within an underground vault. MMSA holds fee title to that portion of Lot 5 on which the well is located.[103]

The availability of surface water is directly affected by the amount of precipitation, while groundwater supplies accumulate gradually over several years. The Town experiences the

[103] *The parcel on which Well 16 is located was acquired by MCWD from Lot 5 in a condemnation process for public benefit in 1994.*

greatest amount of precipitation in the form of snow during winter months, when temperatures average between a high of 30 to 40 degrees Fahrenheit and a low of 10 to 20 degrees Fahrenheit. Rain typically occurs during summer and fall months. Yearly precipitation is dependent in part on location within the general area. The northeastern extremities generally receive less than 10 inches while the Mammoth Mountain to the west has experienced more than 80 inches. Average annual precipitation for Mammoth Pass is 43 inches, while the Town averages about 23 inches.

MCWD monitors its surface and groundwater sources to ensure that water supplies are not over-drafted. Surface water levels and flow rates are monitored at 12 locations throughout the Mammoth Basin watershed. Groundwater levels are monitored in the MCWD's eight production wells, including Well 16, as well as 15 shallow and deep monitoring wells. MCWD prepares an annual groundwater monitoring report that evaluates groundwater levels, surface flow, and water quality.

### b. Water Supply

#### (1) Surface Water

Lake Mary is the primary source of surface water for the MCWD service area. Surface water is delivered from Lake Mary to the MCWD water system through a 12-inch pipeline along Lake Mary Road. Water availability from the lake is inconsistent as a result of periods of drought, as well as constraints on lake level drawdown and stream flow requirements for Mammoth Creek. As such, MCWD has obtained water rights from the State Water Resources Control Board (SWRCB) to divert and store surface water from Lake Mary.

Two of the MCWD's three water rights are licensed and one is permitted. License 5715 allows for the direct diversion of 25,000 gpd from May 1 to November 1. License 12593 authorizes the direct diversion of two cubic feet per second (cfs) year round. Under both licenses, the total amount of water diverted cannot exceed 1,463 acre-feet per year. In addition, under Permit 17332, MCWD is authorized to divert three cfs year round. Also under the permit, the SWRCB limits MCWD's storage rights to 660 acre-feet per year, of which 606 acre-feet may be collected between April 1 and June 30. The remaining 54 acre-feet may be collected once each year from September 1 to September 30.

MCWD is limited by SWRCB to a maximum three feet drawdown of Lake Mary between June 1 and September 15, and a total maximum annual drawdown of 5.7 feet. In addition, under its two licenses and one permit, MCWD may divert a maximum of 2,760 acre-feet each year from Lake Mary, at a maximum diversion rate of five cfs from November 2 to April 30, and 5.039 cfs from May 1 to November 1.

### (2) Groundwater

MCWD draws its groundwater from the Mammoth Basin watershed, which is located on the eastern side of the Sierra Nevadas and within the Long Valley Groundwater Basin. The State Department of Water Resources (DWR) has identified the Long Valley Groundwater Basin as part of the South Lahontan Hydrologic Region. Mammoth Basin is the watershed of Mammoth Creek and comprises approximately 71 square miles, extending about 13 miles west to east and nine miles north to south. More specifically, Mammoth Basin is bounded by Mammoth Crest on the west, extends along the watershed of Hot Creek to the east, and is bordered by the drainage divide of Dry Creek to the north and the drainage divide of Convict Creek to the south. Elevations in the Mammoth Basin watershed range from 7,000 feet to 12,000 feet.

Between 2000 and 2004, MCWD pumped approximately 10,850 acre-feet of groundwater, averaging approximately 2,170 acre-feet per year. As shown in Table 63 on page 452, the greatest quantity of groundwater was pumped in 2002, when 2,717 acre-feet were drawn from the Mammoth Basin. According to the Groundwater Plan, groundwater may not be extracted at a rate greater than 4,000 acre-feet annually to ensure a safe yield. According to the UWMP, DWR has not identified the Mammoth Basin as being overdrafted. As discussed earlier, MCWD has an extensive monitoring system in place to prevent overdrafting.

### (3) Water Availability

In accordance with the State Urban Water Management Planning Act, MCWD analyzed water supply in the UWMP by addressing availability of water during normal, single dry, and multiple dry water years. Table 64 on page 452 provides a breakdown of existing water supplies for surface and groundwater water sources. Normal water years are based on a 10% deviation from an April 1 average snow water content of 43 inches, or 38.7 to 47.3 inches. Normal water years historically have occurred every nine years. The base years for normal water years on which MCWD analyzes its data are: 1946, 1949, 1954, 1971, 1984, 1996, and 1997. Single dry years are based on the lowest yearly runoff since the water year beginning in 1928. The year with the lowest April 1 snow pack is 1997, with 12.3 inches of snow water equivalent for the Mammoth watershed. Groundwater data for single dry water years is determined using the driest years for which the MCWD's production wells were in use: 1992 for wells 1, 6, 10 and 15; 2001 for wells 16, 17, 18, and 20. In addition, MCWD bases multiple dry years on the lowest average runoff for a consecutive, multiple year period (i.e., three years or more) since 1903. The driest multiple year period for the Mammoth watershed was the six years from 1987 to 1992, which averaged 28.7 inches of snow water content at Mammoth Pass.

**Table 63**

**Groundwater Pumped 2000-2004**

| Year | Groundwater Pumped (Acre-Feet) |
|---|---|
| 2000 | 1,288 |
| 2001 | 2,410 |
| 2002 | 2,717 |
| 2003 | 2,511 |
| 2004 | 1,923 |

*Source: 2005 Urban Water Management Plan, MCWD*

**Table 64**

**Existing Water Supply Reliability (Acre-Feet)[a]**

| | | | Multiple Dry Years | | | |
|---|---|---|---|---|---|---|
| **Supply** | **Normal Water Year** | **Single Dry Water Year** | **Year 1** | **Year 2** | **Year 3** | **Year 4** |
| Projected Surface Water | 2,760 | 0 | 1,780 | 1,500 | 1,100 | 1,084 |
| Projected Groundwater Wells | 4,000 | 3,410 | 3,410 | 3,408 | 3,408 | 3,408 |
| **Projected Total Supply** | **6,760** | **3,410** | **5,190** | **4,908** | **4,508** | **4,492** |

[a] *An acre foot equals approximately 325,829 gallons.*

*Source: 2005 Urban Water Management Plan, MCWD*

### (4) Water Demand

In 2004, water demand in the MCWD's service area generated a total annual water demand of 3,427 acre-feet. The Town of Mammoth Lakes water demand is driven largely by population and climate. As a resort destination community, population fluctuates seasonally due to changes in the climate. As discussed in Section 3.8, Employment, Population and Housing of this Draft EA/EIR, the General Plan (1987) measures population by permanent residents and by population intensity or "persons at one time" (PAOT). PAOT in the Town is greatest between October and March, which is the Town's winter ski season, and from July through September, when visitors travel to the area for warm-weather outdoor recreation activities.

With the seasonal fluctuations of population there is an accompanying change in water demand. Residential uses account for the greatest water demand. Condominiums represent the largest share of water use at 30% of overall use, followed by single-family residences at 18%. According to the 2005 UWMP, water demand is highest during summer months due to the irrigation of residential landscaping. The lowest water demand occurs in October and November.

The existing temporary Little Eagle Base Lodge, which is located on Forest Service lands, requires water service for its 15,000 square feet of commercial space that includes food and beverage facilities and restrooms. Based on MCWD water demand factors, the existing facility requires an estimated 2,250 gallons per day (gpd), or 2.5 acre feet per year, and a peak demand of 3,900 gpd.[104]

#### (5) Water Infrastructure

There are several water lines of varying sizes serving the project site, as shown in Figure 46 on page 454. The water pipelines are constructed of either steel, ductile iron pipe (DIP), or polyvinyl chloride (PVC). As shown in Figure 46, the existing water pipelines in the project area are located along Meridian Boulevard and Majestic Pines Drive, with laterals extending to the residential community to the south of the site. A 14-inch DIP line that provides water service to the temporary Little Eagle Base Lodge facility currently runs from the Juniper Springs Lodge to the temporary facility, crossing the western corner of the site.. There are no water lines traversing the surface lot on the project site.

Fire flow or water pressure is the quantity of water available or necessary for fire protection, and is measured in pounds per square inch (psi) and gallons per minute. According to MCWD, existing pressure levels of the water supply infrastructure at the corner of Meridian Boulevard and Majestic Pines Drive range between 97 and 102 psi and are capable of providing flows of up to 3,500 gallons per minute.

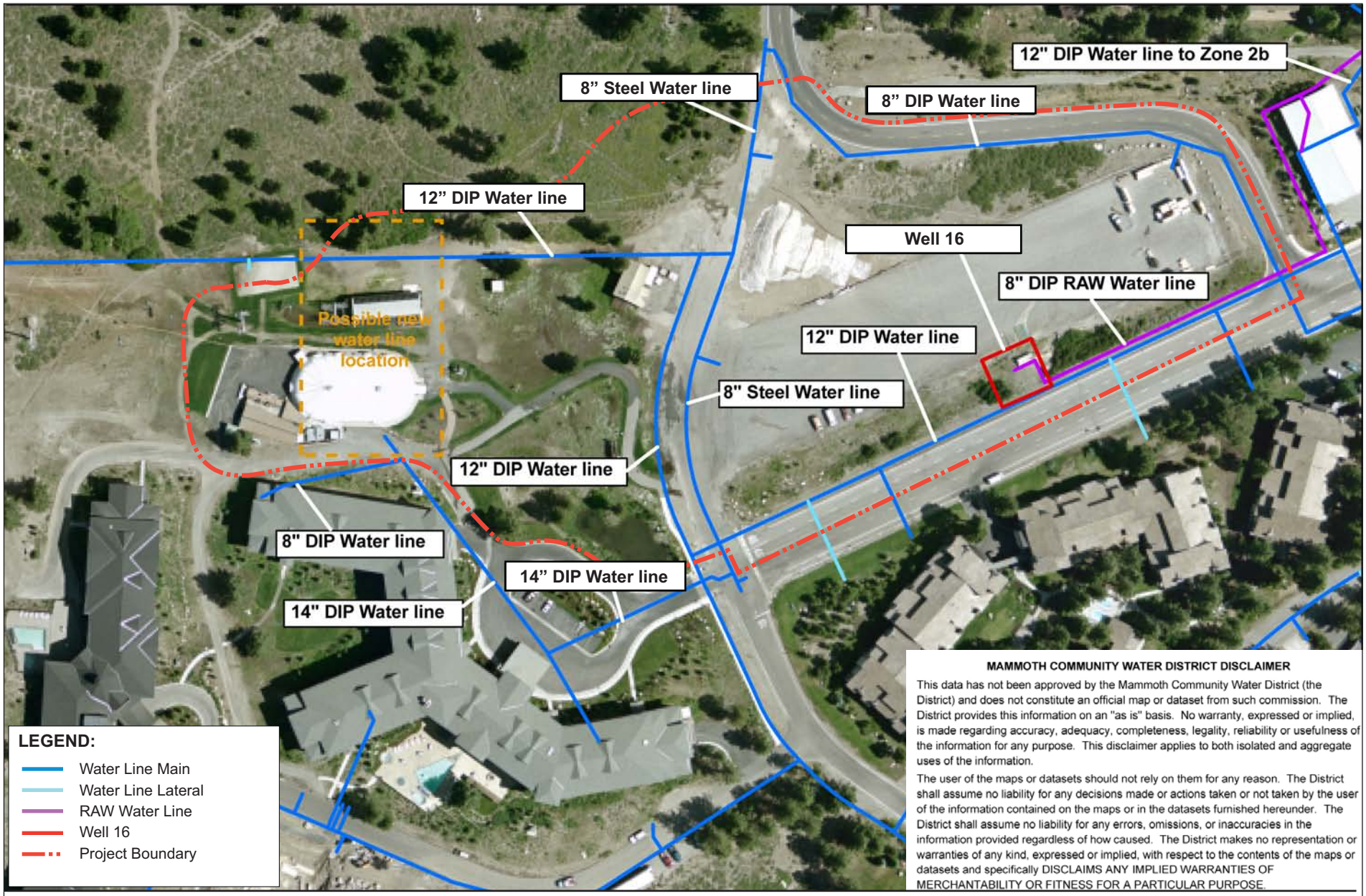
### 3.11.3 ENVIRONMENTAL CONSEQUENCES

#### a. CEQA Significance Criteria

Based on Appendix G of the State CEQA Guidelines, impacts to water supply or infrastructure would be considered significant if:

- The estimated water demand for the proposed project would exceed available water supplies or the capacity of the existing delivery system by a substantial magnitude; or
- The project would require or result in the construction of new water facilities, or expansion of existing facilities, the construction of which could cause significant environmental effects.

[104] *MCWD's water demand factor for commercial uses is 0.15 gallons per day. The peak rate is calculated by multiplying average daily demand by a peaking factor of 1.7.*




PCR

N

0 100 200 Feet

Source: Mammoth Community Water District, 2006

Figure 46
Existing Water Lines in Project Area

### b. Methodology

The analysis of the project's potential impacts on water supply and infrastructure was developed in consultation with the MCWD and also uses data from the 2005 UWMP and the Groundwater Management Plan for the Mammoth Basin Watershed. The analysis is based on the anticipated increase in water demand resulting from project implementation, relative to the MCWD's existing water supply and infrastructure. The respective impacts of the project's two accommodation scenarios, the condo/hotel and fractional use option and the hotel only option, are analyzed in this section.

### c. Environmental Consequences of the Proposed Action

#### (1) Construction

Project implementation would require the realignment of the 12-inch DIP water line that runs east to west on the western portion of the project site. The 8-inch steel and 12-inch DIP water lines in the old alignment of Majestic Pines Drive would be abandoned as part of project implementation. In addition, the project would require tie-ins to the existing water mains. The locations and sizes of such tie-ins would be determined during the final design stages for the project.

Water would be used during the two-year construction period for the project. The temporary Little Eagle Base Lodge would continue to operate during the first year of project construction. As discussed in Section 2.0, Proposed Action and Alternatives, construction in the first year would involve excavation and the building of the parking garage. Construction activities in year two would involve the construction of the facility.

Construction activities would include demolition, excavation, and grading of the site. The demand for water would be for soil watering (fugitive dust control), clean up, masonry, painting, and other short-term activities. During grading and excavation, water demand would be similar to irrigation demand, or approximately 3,000 gallons per acre per day. Due to water demand generated by construction activities, in addition to the water demand generated by the Little Eagle Base Lodge, there would be an increase in water demand over current conditions. Overall, however, project construction would result in a water demand less than that of the project during operation. As such, construction activities would result in a less than significant impact on the existing water supply and infrastructure.

### (2) Operation

#### (a) Water Supply

Implementation of the project would result in a long-term water demand for operational uses, including visitor accommodations, dining facilities, restrooms, day spa, locker club, administrative uses, and landscaping. Table 65 on page 457 shows a breakdown of proposed land uses and their corresponding estimated average total water demands. As indicated in Table 65, operation of the project would have a net total potable water demand of 18,050 gpd or 20.2 acre-feet per year for the condo/hotel and fractional ownership option, with a peak net water demand of 26,915 gpd. The hotel only option would generate a net total potable water demand of 26,790 gpd or 30.0 acre-feet per year, with a peak net water demand of 43,760 gpd. Since the project with the hotel only option would generate a greater water demand than the project with the condo/hotel and fractional ownership use option, this analysis of projected water supply and demand focuses specifically on the impacts of the project with the hotel only option.

As previously discussed, the amount of precipitation directly impacts water supply, including the supply during drought conditions. MCWD has analyzed existing and projected water supply in normal, single dry,[105] and multiple dry years. According to MCWD, assuming a normal water year at project build out in 2009, there would be a water supply of 6,760 acre feet and a total water demand of 3,656 acre feet, resulting in a surplus of 3,104 acre-feet in 2009. Therefore, in a normal water year MCWD would have an adequate water supply to meet the potable water demand of the project in combination with other water demand. As such, 2009 operation of the project would result in a less than significant impact on water supply.

As shown in Table 66 on page 458, based on MCWD 2009 projections of water supply and demand in a single dry year, there would be a shortage of 246 acre feet per year of water if the use of recycled water or loss reduction measures were not implemented. However, the implementation of Level 1 Conservation Controls, which would occur three days a week at four hours per day, would provide for a 12% reduction of overall demand. In addition to water conservation measures, MCWD has planned and implemented a number of programs to address anticipated water supply deficiencies and meet water demands. These include water system loss reduction, the use of recycled water, and development of new water supplies. MCWD has initiated a water pipeline loss reduction program that is expected to be completed by 2010.

[105] *A single dry year is generally considered to be the lowest annual runoff for a watershed since the water-year beginning in 1903. The records for the Mammoth Basin begin in 1928 and the lowest April 1 snow water content, which generally equates to the runoff for the watershed occurred in 1977 with about 12 inches. This data was used in the 2005 UWMP to prepare projections for a single dry year where essentially no surface water would be available for the District to divert.*

**Table 65**

**Proposed Project - Estimated Water Demands**

| Use Type | Amount of Development | Units | Average Water Use Per Unit (gal/day)[a] | Total Average Demand (gal/day) [b] | Total Average Demand (acre-feet/year) | Peak Water Use Per Unit (gal/day)[c] | Total Peak Demand (gal/day) |
|---|---|---|---|---|---|---|---|
| **Condo/Hotel and Fractional Use Option** | | | | | | | |
| Condo/Hotel | 62 | units | 100 | 6,200 | 6.9 | 105 | 6,510 |
| Fractional Ownership Use [d] | 21 | units | 100 | 2,100 | 2.4 | 105 | 2,205 |
| Commercial | 80,000 | sq ft | 0.15 | 12,000 | 13.4 | 0.28 | 22,400 |
| **Subtotal** | | | | **20,300** | **22.7** | | **31,115** |
| Less Existing Development | 15,000 | sq ft | 0.15 | 2,250 | 2.5 | 0.28 | 4,200 |
| **Net Total** | | | | **18,050** | **20.2** | | **26,915** |
| | | | | | | | |
| Hotel Only Option | | | | | | | |
| Hotel | 213 | units | 80 | 17,040 | 19.1 | 120 | 25,560 |
| Commercial | 80,000 | sq ft | 0.15 | 12,000 | 13.4 | 0.28 | 22,400 |
| **Subtotal** | | | | **29,040** | **32.5** | | **47,960** |
| Less Existing Development | 15,000 | sq ft | 0.15 | 2,250 | 2.5 | 0.28 | 4,200 |
| **Net Total** | | | | **26,790** | **30.0** | | **43,760** |

[a] *Factors obtained from MCWD. Average day is the average day calculated from the average of 36 months of usage. Factors are inclusive of irrigation water use.*

[b] *An acre-foot equals approximately 325,829 gallons*

[c] *Peak day is the daily average of the peak month water usage over 36 months. Peak factors for commercial were calculated by multiplying the average water use per unit by a peaking factor of 1.7.*

[d] *The water demand for fractional ownership units are considered the same as for condo/hotel.*

*Source: PCR Services Corporation, 2006*

**Table 66**

**Projected Demand Plus Project with Hotel Only Option in a Single Dry Water Year (acre feet per year)**

| | Projected Demand | Project Demand | Total Demand | Projected Supply in Single Dry Water Year | Available Supply in 2009 |
|---|---|---|---|---|---|
| 2009 Demand Plus Project in a Single Dry Water Year | 3626 | 30 | 3656 | 3410 | -246 |
| 2009 Demand Plus Project in a Single Dry Water Year With Level 1 Conservation Controls[a] | 3191 | 30 | 3221 | 3410 | 189 |
| 2010 Town Demand Plus Project in a Single Dry Water Year With Level 1 Conservation Controls and Recycled and Loss Reduction | 2644 | 30 | 2674 | 3410 | 736 |

[a] *Level 1 Conservation Controls, which would occur three days a week at four hours per day, would provide for a 12% reduction of overall demand*

*Source: MCWD and PCR Services Corporation, 2006*

Overall, this reduction program would reduce demand by 310 acre feet per year. The use of recycled water, which is planned to begin in 2008, would reduce demand by 360 acre feet per year.

As Table 66 shows, in the case of a single dry year in which the Town could experience a shortfall of water supplies, MCWD would initiate Level 1 Conservation Controls. Given 2009 projections, this reduction would represent a decrease in water demand by 435 acre feet per year, and in turn would result in a water surplus of 189 acre feet in 2009. Additionally, in 2010, with the inclusion of recycled water use and water loss reduction measures in conjunction with Level 1 Conservation Controls, water demand would be further reduced, resulting in a surplus of 736 acre feet in 2010. As such, with the implementation of recycled water use, loss reduction measures, and Level 1 Conservation Controls, impacts to water supply in a single dry year would be less than significant at the time of project completion in 2009.

As shown in Table 64, in a multiple dry year scenario, the water supply from groundwater wells in Year 2 would be approximately 3,408 acre-feet per year. The surface water supply would decline each year due to reduced availability. In Year 4, the total projected supply would be 4,492 acre-feet. Therefore, the projected demand plus the project's demand of 3,656 acre feet in 2009 would be met in a four-year multiple dry water year scenario. During a multiple dry water year scenario, MCWD would implement Level 1 Conservation Controls,

which would reduce the demand. In addition, planned improvements discussed above (water pipeline loss and use of recycled water) would also provide additional water supply.

The project would be required to comply with Title 24 and Title 20 of the CAC, which relates to water conservation. Compliance could result in a reduction of water consumption and, therefore, a decreased demand on MCWD water supplies.

The project would be consistent with the policies of the Town's 1987 General Plan, which ensure that a project is approved only when sufficient water supplies can be demonstrated and which support activities that provide for water use reduction and increased water storage, reclamation, and reuse. The project would also comply with policies and implementation measures in the Town's 2005 Draft General Plan Update relating to water supply. In addition, the project would be consistent with the Town's Municipal Code through the installation of drought resistant landscaping and water efficient landscaping practices.

### (b) Infrastructure

As discussed above, a 12-inch DIP water line is located on the project site that would require realignment. Aside from this modification, existing water infrastructure would be able to accommodate the proposed project, and no upgrades to the water distribution system would be necessary. In addition, the construction or expansion of new water facilities would not be required.

Water quality of Well 16 would continue to be tested monthly by MCWD. The well pump and approximately 550 feet of discharge piping may require periodic maintenance and repair. This maintenance would involve pulling the piping from the vault using a drilling rig, as well as the storage of the piping in 21-foot sections. Approximately 40 square feet of work area to conduct maintenance activities would be necessary. As such, with the incorporation of a mitigation measure relating to maintenance activities involving Well 16, impacts to the water distribution infrastructure would be less than significant.

The Town of Mammoth Lakes Fire Protection District (MLFPD) would provide fire protection and emergency response to the project site. MCWD has concluded that there is sufficient pressure and volume in the water distribution system to provide fire protection services to the project site. However, as the maximum building height proposed by the project would be 77 feet, a standpipe would be required to supply the necessary water pressure to the top floors of the structure. During the plan check review process, the MLFPD would determine the required fire flow for the project. The project would comply with the requirements of the MLFPD relative to the installation of a standpipe, as well as any necessary fire hydrants or the provision of sprinklers to ensure that adequate fire flow is provided.

### d. Mitigation Measures

Project demand would exceed water supply in a single dry year scenario without the implementation of the District's Level 1 Conservation Controls. Under the MCWD's current policies, Level 1 Conservation Controls are implemented if a single dry year supply scenario occurs. These Conservation Controls allow the MCWD to meet District-wide demand during the applicable period. The project would have a less than significant impact on MCWD water supplies in normal years and in dry years with the implementation of the District's Level 1 Conservation Controls. Therefore, no mitigation measures are required with regard to water supply.

Mitigation Measure WTR-1, below, is recommended to assure the availability of space required for periodic maintenance and repair of MCWD's well pump and approximately 550 feet of discharge piping. In addition, WTR-2 is recommended to ensure that potentially significant impacts to fire flow are reduced to a less than significant level.

**WTR–1:** The Applicant shall ensure the provision of 40 square feet of work area adjacent to Well 16 on the project site that shall be used by MCWD as needed during periodic maintenance of Well 16.

**WTR-2:** The project applicant shall install a standpipe along the northwest side of the site, near the ice rink and plaza, as approved by MLFD to ensure that adequate fire flows are available at this location. The standpipe shall be operational prior to occupancy of the facility.

With the incorporation of the mitigation measures, above, impacts to water infrastructure would be less than significant.

### e. Environmental Consequences of Alternative 1 – Development in Accordance With Existing Regulations Alternative

Development of the commercial facility would result in a long-term water demand for operational uses. Operation of the commercial uses under Alternative 1 would generate an average potable water demand of 5,250 gallons per day (gpd), or 5.9 acre feet, and a peak water demand of 9,100 gpd.[93] There is adequate water supply to meet the demand of Alternative 1.

Assuming a normal water year at build out of Alternative 1 in 2009, there would be a water supply of 6,760 acre feet, and a water demand of 3,626 acre feet, resulting in a surplus of

[93] *Based on the MCWD's water consumption factor of .015 for commercial uses, and a peaking rate of 1.7.*

3,134 acre feet in 2009. Therefore, in a normal water year MCWD would have an adequate water supply to meet the potable water demand of Alternative 1 in combination with other water demand. As such, 2009 operation of Alternative 1 would result in a less than significant impact on water supply.

Based on MCWD's 2009 projections of water supply and demand in a single dry year in addition to Alternative 1's demand of 5.9 acre feet, there would be a shortage of 222 acre feet of water if the use of recycled water or loss reduction measures were not implemented. With the implementation of Level 1 Conservation Controls, 2009 demand plus Alternative 1 would result in a surplus of 213 acre feet. Additionally, with the inclusion of recycled water use and water loss reduction measures in conjunction with Level 1 Conservation Controls, water demand would be further reduced, resulting in a surplus of 760 acre feet in 2010. As such, Alternative 1 would result in a less than significant impact with regard to water supply in 2009 with the implementation of recycled water use, loss reduction measures, and Level 1 Conservation Controls.

In a multiple dry year scenario, the water supply from groundwater wells in Year 2 would be approximately 3,408 acre-feet per year. The surface water supply would decline each year due to reduced availability. In Year 4, the total projected supply would be 4,492 acre feet. During a multiple dry water year scenario, MCWD would implement Level 1 Conservation Controls, which would reduce projected demand plus Alternative 1 demand to 3,191 acre feet. In addition, with the implementation of recycled water use and loss reduction measures in conjunction with Level 1 Conservation Controls, overall demand would be reduced to 2,644 acre feet. Therefore, the water demand that would result under Alternative 1 would be met in a four-year multiple dry water year scenario. As such, Alternative 1 would result in less than significant impacts to water supply in a multiple dry year scenario.

### f. Environmental Consequences of Alternative 2 – Reduced Intensity Alternative

Alternative 2 would generate a net total potable water demand of 10,950 gpd or 12.3 acre-feet per year for the residential option, with a peak net water demand of 16,030 gpd. The hotel only option would generate a net total potable water demand of 16,590 gpd or 18.6 acre-feet per year, with a peak net water demand of 26,920 gpd. Since Alternative 2 with the hotel only option would generate a greater water demand than the project with the condo/hotel and fractional ownership use option, this analysis of projected water supply and demand focuses specifically on the impacts of this Alternative with the hotel only option.

There would be adequate supply in a normal dry year to meet projected potable water demand plus the demand of Alternative 2 in 2009. Based on MCWD 2009 projections of water supply and demand in a single dry year, Alternative 2 would result in a shortfall of 234.6 acre

feet per year of water if the use of recycled water or loss reduction measures were not implemented. MCWD would initiate Level 1 Conservation Controls in the case of a single dry year, which would result in a water surplus of 200.4 acre feet per year. In 2010, with the inclusion of recycled water use and water loss reduction measures in conjunction with Level 1 Conservation Controls, water demand would be further reduced, resulting in a surplus of approximately 747 acre feet.

In a multiple dry year scenario, the water supply from groundwater wells in Year 2 would be approximately 3,408 acre-feet per year. The surface water supply would decline each year due to reduced availability. In Year 4, the total projected supply would be 4,492 acre-feet. During a multiple dry water year scenario, MCWD would implement Level 1 Conservation Controls. Therefore, water demand with Alternative 2 would be approximately 3,214 acre feet in 2010 and would be met in a four-year multiple dry water year scenario. As such, Alternative 2 would result in less than significant impacts to water supply in a multiple dry year scenario.

### g. Environmental Consequences of Alternative 3 – Alternate Design Alternative

Alternative 3 proposes the same program of uses as proposed under the Proposed Action. As such, Alternative 3 would generate a net total potable water demand of 18,050 gpd or 20.2 acre-feet per year for the condo/hotel and fractional ownership option, with a peak net water demand of 26,915 gpd. The hotel only option would generate a net total potable water demand of 26,790 gpd or 30.0 acre-feet per year, with a peak net water demand of 43,760 gpd.

Given the above, there would be adequate supply in a normal dry year to meet projected potable water demand plus the demand of Alternative 3 in 2009. Based on MCWD 2009 projections of water supply and demand in a single dry year, Alternative 3 would result in a shortage of 246 acre feet per year of water if the use of recycled water or loss reduction measures were not implemented. MCWD would initiate Level 1 Conservation Controls in the case of a single dry year, which would result in a water surplus of 189 acre feet per year. Additionally, in 2010, with the inclusion of recycled water use and water loss reduction measures in conjunction with Level 1 Conservation Controls, water demand would be further reduced, resulting in a surplus of 736 acre feet in 2010.

In a multiple dry year scenario, the water supply from groundwater wells in Year 2 would be approximately 3,408 acre-feet per year. The surface water supply would decline each year due to reduced availability. In Year 4, the total projected supply would be 4,492 acre-feet. During a multiple dry water year scenario, MCWD would implement Level 1 Conservation Controls. Therefore, water demand with Alternative 3 would be 3,263 acre feet in 2010 and would be met in a four-year multiple dry water year scenario. As such, Alternative 3 would

result in less than significant impacts to water supply in normal water year, single dry year, and multiple dry year scenarios.

### h. Environmental Consequences of Alternative 4 – No Action Alternative

Under the No Action Alternative, no demand for water supply would occur as the existing uses on the site would be removed. Given the above, the No Project Alternative would generate a less than significant impact to water supply and infrastructure.