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## 4.11 PUBLIC UTILITIES

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This section assesses potential impacts on public utilities, including water, sewer, energy, and communications. An analysis of storm drainage system is provided in Section 4.6, Hydrology and Water Quality. Water supply and wastewater treatment are supplied by the Mammoth Community Water District (MCWD). The analysis of wastewater treatment capacity and water supply is based on an original Water Assessment prepared by memo (September 2004). Additional water supply information was provided by MCWD as an Amendment to the Water Assessment (~~September~~ November 2005). The most recent MCWD Water Assessments Assessment is are provided in Appendix E of this EIR. ~~In addition, the The District MCWD~~ further evaluated its water supply and demand calculations and developed more detailed information that provides greater clarity on water supply and demand issues, as presented in the adopted 2005 Urban Water Management Plan.

Solid waste disposal service in Mammoth Lakes is presently contracted to Mammoth Disposal Inc, however, all waste material ends up at the Benton Crossing landfill located within Mono County and managed by Mono County. Landfill capacity is projected by Mono County.

### 4.11.1 EXISTING CONDITIONS

#### 4.11.1.1 Water Supply

The Mammoth Community Water District (MCWD) is the water supplier (public water system) for the Town of Mammoth Lakes. The MCWD has an Urban Water Management Plan (UWMP) adopted in ~~2004~~ 2005. The MCWD also prepared a water supply assessment pursuant to SB 610 for the project described in the previously circulated Draft ~~PEIR Program EIR~~, which concluded that the District had adequate sources of water to supply the project at General Plan buildout. Subsequently, in response to the NOP for this project, the District prepared a new water supply assessment ~~utilizing different methodology~~. In addition, the District commented on the Revised Draft Program EIR and provided updated information based on the 2005 UWMP. The following discussion regarding water supply (existing and planned sources) is from the ~~most recent water assessments~~ prepared by MCWD and. ~~As indicated in the assessment, the discussion regarding the existing and planned sources of water is taken from the District's current 2005 Urban Water Management Plan. Both The previously prepared water supply assessments and the District's Urban Water Management Plan are contained in the Appendix E. The 2005 UWMP is hereby incorporated by reference.~~

Water supply is provided by local surface water as well as groundwater sources. Surface water within the Mammoth Basin is generally supplied by snowmelt ~~and not by groundwater~~. The diversion point for surface water is located at Lake Mary in the Lakes Basin. ~~In 2006, about~~ based on actual water supply, about ~~fifty~~ 67 percent of potable water for the community ~~comes~~ came from surface water diverted from the Mammoth Creek watershed and ~~fifty~~ 33 percent ~~comes~~ came from groundwater pumped from wells, located within Town boundaries. When lower than normal precipitation years are experienced, the use of groundwater is increased, as less surface water supply is available. As growth in the community occurs, the District will become more dependent on the use of groundwater supplies to meet future increased demand for water. The MCWD has water entitlements from Mammoth Creek for domestic uses, storage rights in Lake Mary, and operates eight groundwater production wells within the MCWD service area. Current maximum water supplies are 6,760 acre feet,<sup>55</sup> of which 2,760 acre feet are from surface sources and 4,000 acre feet are from groundwater sources.<sup>56</sup> Table 4.11-1 on page 4-260 provides the current and projected water supplies.

The District ~~is currently preparing an Updated~~ adopted a Groundwater Management Plan (UGWMP) for the purpose of developing a monitoring and operation plan for the long-term use of local groundwater and surface water resources. ~~The UGWMP will be completed and adopted by January 2006~~ GWMP was approved by the Board of Directors in July, 2005.

The District pumps groundwater from the Mammoth Basin watershed, which is located within the Long Valley Groundwater Basin identified by the Department of Water Resources as part of the South Lahontan Hydrologic Region. The Mammoth Basin is located on the eastern side of the Sierra Nevada Mountain Range. Surface elevations range from a high of about 12,000 feet at Mammoth Crest to 7,000 feet at the downstream easterly extremity. Mammoth Basin is the watershed of Mammoth Creek and is bounded on the south by the drainage divide of Convict Creek; on the west, by Mammoth Crest; on the north by the drainage divide of Dry Creek; and on the east extending along the watershed of Hot Creek. The area of the Mammoth

<sup>55</sup> 1 acre-foot = 325,850 gallons of water.

<sup>56</sup> ~~The MCWD currently is entitled to divert 2,760 acre feet annually from Lake Mary at a maximum diversion rate of 5.0 5.039 cfs., however~~ However, this quantity is dependent upon maximum bypass streamflows in Mammoth Creek. This value includes not necessarily available each year despite treatments plant upgrades. An additional 25,000 gallons per day that may be allowed to be diverted between May 1 and November 1 of each year. MCWD has two licenses and one permit that comprise the total surface water rights. These rights are subject to several constraints and conditions imposed in the permits issued to MCWD by the State Water Resource Control Board and in a Master Operating Agreement between the MCWD and the USFS. The Master Operating Agreement between the District and USFS is currently in the process of being cancelled by the USFS based on their its legal opinion that they do not have legal authority to implement the management constraints listed in the document. The constraints contained in this agreement have been modified and will be contained in the Districts MCWD's SWRCB permits for water rights ~~The District MCWD is currently waiting for the USFS to provide documentation of this cancellation process to the State. (MCWD-Letter Letters April 2005 and November 2005).~~

Table 4.11-1

## Current and Projected Water Supplies

| Water Supply Sources              | Acre-Feet    |              |              |              |              |
|-----------------------------------|--------------|--------------|--------------|--------------|--------------|
|                                   | 2005         | 2010         | 2015         | 2020         | 2025         |
| Lake Mary                         | 2,760        | 2,760        | 2,760        | 2,760        | 2,760        |
| Well #1                           | 500          | 500          | 500          | 500          | 500          |
| GWTP #1                           | 2,000        | 2,000        | 2,000        | 2,000        | 2,000        |
| GWTP #2                           | 1,500        | 1,500        | 1,500        | 1,500        | 1,500        |
| Recycled Water                    | <u>0</u>     | <u>360</u>   | <u>360</u>   | <u>360</u>   | <u>360</u>   |
| <del>Dry Creek</del> Future Wells | <u>0</u>     | <u>0</u>     | <u>1,000</u> | <u>1,000</u> | <u>1,000</u> |
| Total                             | <u>6,760</u> | <u>7,120</u> | <u>8,120</u> | <u>8,120</u> | <u>8,120</u> |

Units of Measure: acre-feet

GWTP = Groundwater Treatment Plant

Source: MCWD, ~~2004~~, 2005

Basin is about 71 square miles and extends approximately 13 miles west to east and 9 miles north to south.

Elevated areas on the north and west that are comprised largely of extrusive igneous rocks generally form the Mammoth Basin; a central trough filled with alluvial and glacial debris; and an abrupt southern flank of igneous intrusive and metamorphic rocks. The central trough area opens and drains to the east to the Owens River and Lake Crowley.

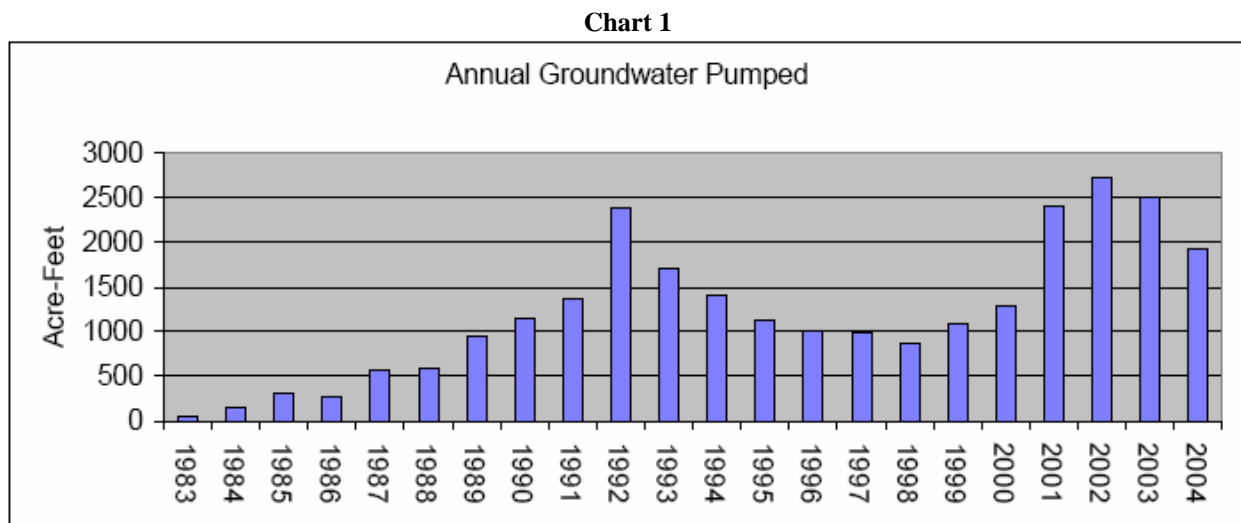
The California Department of Water Resources subdivided the Mammoth Basin into six internal drainage basins in its 1973 report for purposes of determining total water produced in the watershed.

The Mammoth Basin has not been adjudicated or identified by DWR as being overdrafted.<sup>57</sup> In order to prevent the basin from being overdrafted, ~~the District~~ MCWD maintains an extensive groundwater and surface water monitoring system. Groundwater levels are monitored in 8 production wells and in 14 shallow and deep monitor wells in around the service area. Surface water levels and flow rates are monitored at 14 locations throughout the basin watershed. The District prepares an annual groundwater monitoring report that provides an evaluation of groundwater level, surface flow, and water quality monitoring data accumulated

<sup>57</sup> *The Department of Water Resources Bulletin 118 provides the following definition of overdraft: Groundwater overdraft is defined as the condition of a groundwater basin or subbasin in which the amount of water withdrawn by pumping exceeds the amount of water that recharges the basin over a period of years, during which the water supply conditions approximate average conditions (DWR 1998). Overdraft can be characterized by groundwater levels that decline over a period of years and never fully recover, even in wet years.*

throughout the year. In addition, the wells are used to monitor for future potential impacts from the District's MCWD's groundwater operations. Future plans include the use of water level sensors on all production wells connected to the District's MCWD's supervisory control and data acquisition (SCADA) system to allow for automatic shutdown of production wells when targeted groundwater pumping-groundwater levels are sensed.

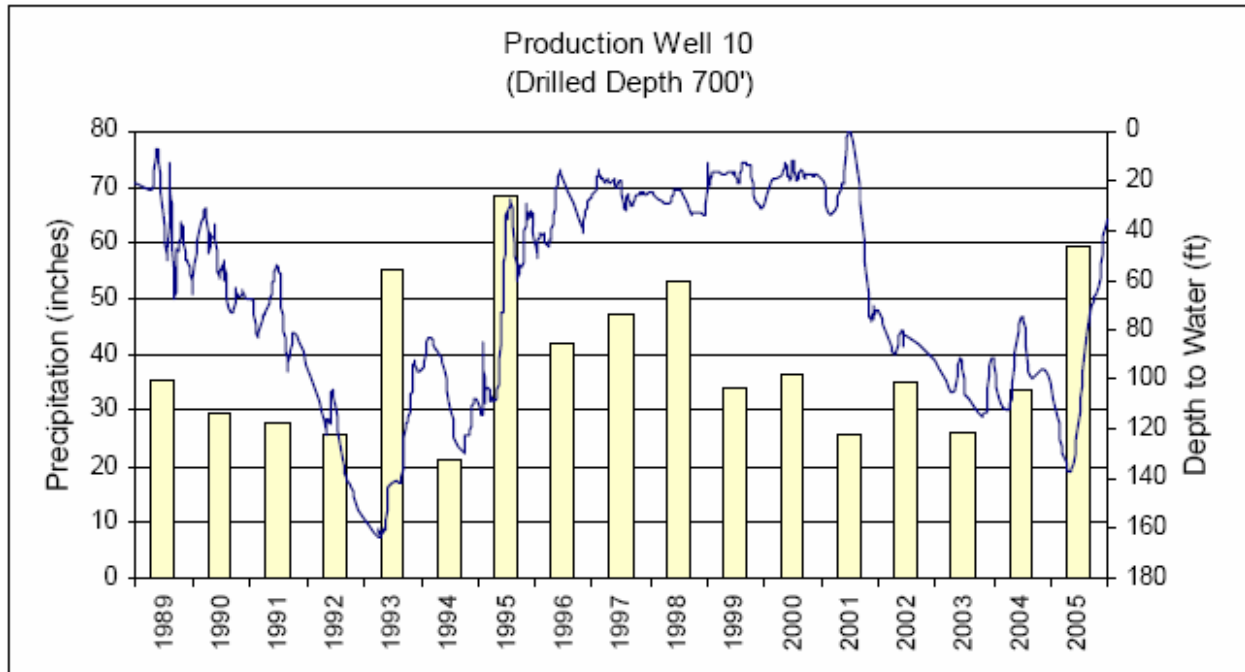
During the past 5-year period, the District pumped a total of 8,367,108.50 acre-feet of groundwater, averaging 1,673,217.0 acre-feet per year. The maximum volume pumped occurred in 2002 and amounted to 2,717 acre-feet. Groundwater was pumped from the District's eight (8) production wells located within the boundaries of the District's service area serving the Town of Mammoth Lakes. Production volumes of groundwater in any one year are dependent on the type of precipitation year experienced and consequent availability of surface water. Chart 1 below shows historical annual groundwater volumes pumped by the District between 1983 and 2004.



During dry-year periods, groundwater levels within the Mammoth Basin decrease due to increased pumping and less recharge. During normal and above-normal precipitation years, groundwater levels increase and tend to fully recover after two years of normal precipitation. Chart 2 on page 4-262 depicts historical groundwater levels in one of the District's production wells and also shows the variability of groundwater levels based on pumping and type of recharge year.

Future groundwater production rates have been projected based on community growth projections and on type of climatic conditions. Tables 4.11-2 and 4.11-3 on pages 4-263 and 4-263 describe projected volumes of groundwater that will be pumped under normal and multiple dry-year water year conditions, respectively.

Chart 2



As indicated by groundwater pumping projections for the future, the volume of groundwater currently available from existing wells is insufficient to meet the total demand under multiple dry-year conditions as the community nears build-out in the year 2015. A study conducted for the Mammoth Community Water District (“Investigation of Groundwater Production Impacts on Surface Water Discharge and Spring Flow”, Wildermuth Environmental, Inc. November 2003) indicates that an estimated volume of 3,800 acre-feet annually could be pumped from the Mammoth Basin, based on current data, to meet projected demands in multiple dry years. There is no verification, however, that pumping this volume of water will not impact surface water or spring flows. As the District’s monitoring program is enhanced and more data is collected, this value may need to be modified.-

~~CDFG and the University of California have expressed concerns regarding potential impacts from groundwater pumping on wildlife, vegetation, and fishery resources within Mammoth Creek, the Hot Creek headsprings, and Valentine Reserve. Several hydrogeologic evaluations have been conducted (Schimdt and Associates 1993, 1994, 1995, 1996, 1997, 1998 and 1999; Wildermuth 1996 and 2003). Although reports from multiple studies in the basin indicated no connection between the Districts’ groundwater pumping and surface flows in Mammoth Creek, spring flows in the Basin, or springs at Valentine Reserve, the District continues to improve and expand its monitoring program to ensure that negative environmental impacts do not occur. The District has recently upgraded its production well monitoring by adding water level traducers to each well. District staff accesses the data through the District’s existing supervisory control data acquisition system (SCADA) to control pumping levels and to~~

Table 4.11-2

Groundwater Pumping Projections (acre-feet) In Normal Year Conditions <sup>a</sup>

| Well No.       | 2003         | 2005         | 2010         | 2015         | 2020         | 2025         |
|----------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 1              | 208          | 50           | 146          | 200          | 74           | 38           |
| 6              | 415          | 200          | 200          | 300          | 400          | 500          |
| 10             | 848          | 200          | 300          | 300          | 400          | 500          |
| 15             | 911          | 200          | 300          | 300          | 400          | 500          |
| 16             | 123          | 100          | 0            | 0            | 0            | 0            |
| 17             | 184          | 200          | 200          | 300          | 400          | 500          |
| 18             | 126          | 50           | 0            | 0            | 0            | 0            |
| 20             | 111          | 200          | 200          | 210          | 200          | 100          |
| Future Well(s) | 0            | 0            | 0            | 0            | 0            | 0            |
| <b>Total</b>   | <b>2,926</b> | <b>1,200</b> | <b>1,346</b> | <b>1,610</b> | <b>1,874</b> | <b>2,138</b> |

<sup>a</sup> Groundwater projections based on utilizing ~~2,500~~ 2,760 ac-ft of surface water in normal year to meet projected demand.

Source: MCWD, ~~2004~~ 2005

Table 4.11-3

Groundwater Pumping Projections (acre-feet) In Multiple Dry Year Conditions <sup>a</sup>

| Well No.       | 2003         | 2005         | 2010         | 2015         | 2020         | 2025         |
|----------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 1              | 208          | 400          | 161          | 256          | 325          | 356          |
| 6              | 415          | 400          | 311          | 415          | 475          | 506          |
| 10             | 848          | 400          | 500          | 726          | 960          | 991          |
| 15             | 911          | 500          | 336          | 440          | 500          | 531          |
| 16             | 123          | 400          | 135          | 139          | 199          | 230          |
| 17             | 184          | 400          | 231          | 335          | 395          | 426          |
| 18             | 126          | 400          | 28           | 41           | 92           | 123          |
| 20             | 111          | 400          | 150          | 154          | 214          | 245          |
| Future Well(s) | 0            | 0            | 0            | 0            | 0            | 406          |
| <b>Total</b>   | <b>2,926</b> | <b>2,400</b> | <b>1,852</b> | <b>2,506</b> | <b>3,160</b> | <b>3,814</b> |

<sup>a</sup> Groundwater projections based on utilizing ~~4,200~~ 1,084 ac-ft of surface water in multiple dry years to meet projected demand. The volume of 1,084 ac-ft is derived from the actual available surface water that could have been available in 1992, the last year of a 6-year drought.

Source: MCWD, ~~2004~~ 2005

~~reduce draw down when necessary. An advisory committee of local stakeholders has been formed to provide guidance on this project with the goal of managing groundwater resources in a manner that avoids negative environmental impacts.~~

~~The USGS reviewed the monitoring data and believes that it is inconclusive (Farrar 1995, 1996, and 1997), and that additional information would be required in order for the USGS to draw a definitive conclusion on the interaction between ground water pumping and surface water resources. Although some uncertainty may exist, available information and expert opinion support the conclusion that there is not a sufficient connection between the ground water aquifer and the surface water aquifer that would result in an impact from the MCWD ground water pumping to the surface flows in Mammoth Creek, or flow discharges at the Hot Creek headsprings.~~

In 1992, CDFG and the University of California expressed concern regarding potential impacts of the District's groundwater pumping program on wildlife, vegetation, and fishery resources of Mammoth Creek, the Hot Creek headsprings, and Valentine Reserve. Under agreements with CDFG and the University of California, the District installed a groundwater monitoring program in 1993 in order to assess the potential hydrologic connectivity between groundwater and surface water. Annual groundwater monitoring reports were prepared for the District by Kenneth D. Schmidt and Associates from 1993 to present.

From data collected as part of the monitoring program, Schmidt has annually concluded that groundwater pumping from the District's new production wells do not influence flows in north spring at Valentine Reserve, at the Hot Creek headsprings, or in Mammoth Creek. In October 1997, at the request of CDFG, the District also conducted a short-term aquifer test involving Well #15. Schmidt's review of the data from the test determined that there were no effects on stream flow, groundwater levels, or the springs at the Valentine Reserve. On behalf of CDFG, the U.S. Geological Survey reviewed the available data. Chris Farrar of the USGS has commented (1995, 1996, 1997) that in his opinion, the results of the annual groundwater monitoring and aquifer tests are inconclusive in proving or disproving a causative connection between the District's groundwater pumping and discharge rates of springs at Valentine Reserve, the Hot Creek headsprings, and Mammoth Creek.<sup>58</sup>

Farrar indicates that patterns in spring and stream flows may show some correlation to groundwater pumping, but that the available data could not definitively distinguish between a change in spring or stream flows due to groundwater pumping or due to natural variation in precipitation. In addition, Farrar suggested that interpretation of the results of the summer 1993

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<sup>58</sup> *MCWD/US Forest Service, Draft EIR/EIS for Changes in Mammoth Creek Instream Flow Requirements, Change of Point of Measurement, and Change of Place of Use, November 2000.*

aquifer tests was complicated by variations in releases to Mammoth Creek, groundwater pumping at wells other than the test well, and variations in pumping rates before, during and after the aquifer test at the test well and other nearby wells.

Farrar also noted that the wet hydrologic conditions of the period following the winter of 1992 through 1993 would greatly affect groundwater conditions in the area. He noted in the 1997 report that “in any year with precipitation comparable to 1996, it is unlikely that groundwater pumpage in Mammoth basin at rates similar to past MCWD pumpage would cause any measurable effect in flow or water temperature at the fish hatchery springs.” The year 1996 was considered a normal year, with streamflows and April 1 snowpack figures both slightly below average.

Mark J. Wildermuth conducted a local groundwater study for the proposed Snowcreek Golf Course expansion project (1996). The Wildermuth study evaluated the potential effects of groundwater pumping expected under the golf course expansion project on the Hot Creek headsprings. Based on a review of available data, Wildermuth concluded that “historical groundwater extraction in the western part of the Mammoth basin has not noticeably impacted the discharge at the AB and CD headspring (the Hot Creek headsprings).” Wildermuth also analyzed stream flows in Mammoth Creek and measured at the LADWP gage and found no evidence of an influence of groundwater pumping on flows in Mammoth Creek, concluding that “groundwater extraction has not impacted the surface discharge measured at this location – groundwater levels are too deep to influence streamflows.

In summary, based on the available information on the interaction between groundwater pumping and surface water in the Mammoth Basin, the weight of expert opinion, based upon available data at the time the Draft EIR was circulated, is that there is insufficient evidence to show a connection between groundwater pumping and surface water flows in the Mammoth Basin. Most of the evidence indicates that there is not connection between District groundwater pumping and the surface flows in Mammoth Creek, or the flow discharges at the Hot Creek headspring. However, USGS evaluation of the data indicates that the existing data is inconclusive and that additional information will be required in order to draw definitive conclusions on the interaction between groundwater pumping and surface water resources. “The MCWD is constantly updating its data and engaging in new and additional studies of groundwater and surface waters. The Final Program EIR reflects the most current information available at the time of its preparation.”

#### **4.11.1.2 Sewage Collection Systems**

The MCWD owns, operates and maintains the sewage collection systems for the Town, including pump stations and over 35 miles of sewer mains and interceptors. There are four main trunks of the District’s sewer collection system located on the following streets: Old Mammoth



Road, Meridian Boulevard, Sierra Star Golf Course to Center Street, and Main Street. The interceptor lines vary in diameter from 18 to 21 inches. MCWD also operates and maintains 13 pump stations and 11 miles of sewers for the USFS. Raw wastewater is delivered to the MCWD wastewater treatment facility, located near the intersection of Meridian Boulevard and SR 203, through two 18-inch interceptor sewer lines.

The MCWD's wastewater treatment facility provides what is termed advanced secondary treatment. This includes biological treatment, filtration, and disinfection through utilization of chlorine. Treated wastewater is currently discharged to Laurel Pond, a pond located approximately 5.5 miles southeast of the Town on USFS land. Disposal occurs at the pond through percolation into the ground and evaporation into the atmosphere.

The ~~total~~ capacity of the ~~affected trunk ten-inch~~ sewer lines at Minaret Road and Main Street, which is the main confluence for the Town, ~~within the Town~~ has been calculated at 310 gallons per minute (gpm) ~~for the ten-inch sewer at Minaret Road and Main Street, which is the main confluence for the Town.~~ Actual flow data are currently being compiled for the entire sewer collection system ~~pipeline~~ within the Town.<sup>59</sup> The MCWD is planning to install a new ~~expand the current~~ wastewater collection pipeline from ~~on~~ Meridian Boulevard from Sierra Park Road to the Sierra Industrial Park. The pipeline expansion ~~installation~~ is expected to be completed by 2009.

~~The existing wastewater treatment facility is designed to provide secondary treatment for peak daily flows of 3.0 million gallons per day (mgd).~~ The current average daily flow is 1.4 mgd with a peak daily flow of 2.4 mgd. Based on the MCWD ~~2000~~2005 Urban Water Management Plan, the average and maximum wastewater generated was 1.47 mgd and 2.6 mgd, respectively, (MCWD ~~2000~~2005). The ~~estimated~~ average wastewater generation for ~~2005~~2006 ~~would be~~ was 1.6 mgd. An expansion of the wastewater treatment plant ~~is expected to be~~ was completed in the ~~summer of 2006, after completion of this work, the~~ resulting in a design capacity of the treatment facility ~~will be~~ of 4.9 million gallons per day (mgd). The wastewater flow projections for the new Updated Plan would be an average daily flow amount of 2.6 mgd, with peak daily flows as high as 4.3 mgd. ~~Design capacity of the wastewater treatment plant is 4.9 mgd.~~ With the projected wastewater flow demands from the Updated Plan, the District's treatment process would continue to meet the effluent limitations and treatment policies set forth by the Lahotan Regional Water Control Board.<sup>60</sup>

<sup>59</sup> *The District is currently preparing a wastewater model of its collection system that will be able to identify needed improvements that may be required on specific development site locations such as increased sizes of existing pipelines to handle wastewater flow requirements. These improvements would be the responsibility of each developer prior to connection into the Districts system. (Gary Sisson, October 20, 2005).*

<sup>60</sup> *MCWD Wastewater Data, Email from Gary Sisson, October 20<sup>th</sup> 2005.*

### 4.11.1.3 Solid Waste

Solid waste collection service for the Town is provided under a franchise agreement with Mammoth Disposal, Incorporated. Solid waste collection service is provided via community trash bins at a centralized collection station on Commerce Drive and by individual customer pickup by Mammoth Disposal, Incorporated. All solid waste generated by the Town is transferred to the Benton Crossing Landfill for disposal.

The Benton Crossing Landfill is owned and operated by the County of Mono. The Benton Crossing Landfill is located approximately five miles east of the intersection of U.S. Highway 395 and Benton Crossing Road on a site leased from the Los Angeles Department of Water and Power. The landfill is approximately 145 acres in size with a landfill footprint of approximately 72 acres. The landfill receives an average of 108 tons per day (tpd) of nonhazardous and hazardous solid waste, with a peak daily loading rate of 400 tpd. The maximum daily permitted throughput is 500 tons per day. The landfill has a remaining capacity of 1.7 million cubic yards of compacted waste. The projected closure date of the landfill is December 2023.<sup>61</sup> The Town also has a five year option to dispose of solid waste at the Pumice Valley Landfill.

The Town operates the waste collection and recycling program in accordance with Assembly Bill 939. The program includes a recycling center at the Mammoth Disposal transfer station where plastics, aluminum, glass, metal, paper and cardboard are accepted. Cardboard containers are available free of charge for any local businesses who choose to participate. Recycling containers are available adjacent to the supermarket and at the parks and at the Visitors Center. The program also includes the use of sludge from the sewage treatment plant for ground cover at the local landfill, grindings from road maintenance as base for newly paved areas, and wood chips from construction projects and/or downed limbs for erosion control and landscaping.

Sierra Conservation Project also provides curbside recycling to residences and businesses located in the Town of Mammoth Lakes for a monthly fee. In addition, both the Mammoth Lakes Transfer Station and the Benton Crossing Landfill accept and safely dispose of batteries, oil, paint, tires, household appliances, electronic appliances and fluorescent bulbs.

The Town has not yet met the 50 percent diversion rate mandated by Assembly Bill 939. The current diversion rate is 38 percent (Steve Mercer, Town, Personal Communication,

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<sup>61</sup> *Projected landfill capacity was provided by Mono County Public Works Department, and based on the estimated waste generated by population projected by the Updated General Plan and annual growth rates projected by the Department of Finance.*

February 9, 2005). Recycling volumes for July 2004 were as follows: aluminum 73.6 pounds; glass 2,731 pounds; plastic No. 1 (water bottles) 348.6 pounds and plastic Nos. 2-7 (milk jugs) 110.8 pounds (Michelle Irwin, Mammoth Disposal, Personal Communication, August 30, 2004). The Town is committed to obtaining or exceeding the 50 percent diversion rate. A new recycling center is planned in the industrial park to handle additional materials. Mammoth Disposal is currently in the preliminary design phases of this facility; construction is anticipated to be completed in the summer of 2006.

#### 4.11.1.4 Electricity

Electricity for the Town is provided by Southern California Edison. Overhead and underground facilities with varying voltages are located throughout the Planning Area. Southern California Edison is currently able to supply enough electricity to accommodate the needs of the region at build-out of the existing General Plan.<sup>62</sup>

#### 4.11.1.5 Propane

Propane is commonly used in the Town to fuel furnaces, water heaters, and stoves. Two private companies, Amerigas and Turner Gas, currently supply the Town with propane.

The Town currently has an agreement with Rock Creek Energy LLP, granting the right, privilege, and franchise to lay and use pipes and appurtenances for transmitting and distributing propane within the Town. As a result of this agreement, ~~there is two an~~ underground pipelines were installed from the Industrial Park to the Village in the Town's rights-of-way. The pipelines can be used for propane or liquefied natural gas. One pipeline currently that distributes propane to portions of the community. The other pipeline is currently not in use. These pipelines are available to anyone living in their vicinity. Extension of the these lines are is an option. Under the franchise agreement any fuel provider can utilize the pipelines.

#### 4.11.1.6 Communications

Land line based phone service in the Town is provided by Verizon Telephone Service, a private company. Cellular phone service is also available within the Planning Area.

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<sup>62</sup> As per correspondence with Southern California Edison.

## 4.11.2 REGULATORY FRAMEWORK

### 4.11.2.1 Water

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 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. The MCWD ~~has~~ adopted an updated Urban Water Management Plan ~~of 2000~~ in 2005.

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.

Additional State legislation, Senate Bill 221 (Kuehl) and Senate Bill 610 (Costa), expands upon the requirements of the California Urban Water Management Planning Act. Senate Bill 610 recognizes the need to link water supply and land use planning as currently required by Section 10910 of the Water Code. Under certain circumstances, a city or county is

required to request in conjunction with a development project a water supply assessment containing specific information from the water service provider.

Under SB 610, it is the responsibility of the water service provider to prepare a water supply assessment requested by a city or county for any “project” defined by Section 10912 of the Water Code that is subject to CEQA. The bill prescribes a timeframe within which a public water system is required to submit the assessment to the city or county and authorizes the city or county to seek a writ of mandamus to compel the public water system to comply with the requirements relating to the submission of the assessment. If the provider determines that water supplies are, or will be, insufficient, plans must be submitted for acquiring additional water supplies. Additionally, the bill requires a city or county to include the water supply assessment and other pertinent information in any environmental document prepared (e.g., EIR) for the project pursuant to the act. ~~CWS~~Mammoth Community Waster District (MCWD), as a water service supplier, has incorporated the provisions of SB 610 into its water supply planning process. Under Senate Bill 610, a water supply assessment must be evaluated and approved for larger projects (i.e., residential projects with more than 500 dwelling units, shopping centers employing more than 1,000 persons or having more than 500,000 square feet of floor space, or commercial office buildings employing more than 1,000 persons or having more than 250,000 square feet of floor space). The approved water supply assessment, which evaluates the quality and reliability of existing and projected water supplies, as well as alternative sources of water supply and how they would be secured if needed, must be incorporated into the EIR for individual projects. Based on the quantity of development proposed, a water supply assessment for the project was prepared ~~and certified by the CWS~~ MCWD.

Senate Bill 221 requires “written verification” of water availability for large subdivision projects. It is distinct from Senate Bill 610, but requires a similar demonstration of water availability.

#### **4.11.2.2 Sewer**

Wastewater generated by the community of Mammoth Lakes flows into a collection system and is transported to a central treatment facility where it receives advanced secondary treatment including filtration and disinfection. The treated wastewater is currently discharged to a percolation and evaporation pond known as Laurel Pond that is located in the eastern quarter of the Mammoth Basin and is southeast of the District’s production wells. The wastewater treatment facility operates under a permit issued by the State Water Quality Control Board-Lahontan Region.

### 4.11.2.3 Solid Waste

During the past few decades, as many of the landfills in the State were approaching capacity and the siting of new landfills became increasingly difficult, the need for source reduction, recycling, and composting became apparent. In response to the increasing solid waste disposal issue, three primary pieces of legislation related to solid waste have been passed at the State level. The State Assembly in September 1989 passed the California Integrated Waste Management Act (AB 939:Sher). AB 939 emphasizes conservation of natural resources through the reduction, recycling, and reuse of solid waste. The Act established an integrated waste management hierarchy with the following priorities: 1) source reduction, 2) recycling and composting, and 3) environmentally safe transformation and land disposal. AB 939 requires all cities and counties in the State to divert 25 percent of the solid waste stream from landfills by 1995 and 50 percent by the year 2000, or face potential fines. The Act also requires that all cities conduct a Solid Waste Generation Study (SWGS) and prepare a Source Reduction Recycling Element (SRRE). In accordance with AB 939, local agencies must submit an annual report to the CIWMB summarizing its progress in diverting solid waste disposal.

Senate Bill 1374 (Kuehl), (Construction and Demolition Waste Materials: Diversion Requirements) passed in 2002, requires that the annual report submitted to the CIWMB also include a summary of the progress made in diversion of construction and demolition waste materials. In addition, SB 1374 requires the CIWMB, by March 1, 2004, to adopt a model ordinance suitable for adoption by any local agency to require 50 to 75 percent diversion of construction and demolition (C&D) waste materials from landfills. Local agencies will be required to adopt C&D diversion ordinances with diversion rates by a specified timeframe in accordance with SB 1374. If such an ordinance is not adopted by the local agency, then the model ordinance adopted by the CIWMB will take effect.

The California Solid Waste Reuse and Recycling Access Act of 1991, as amended, requires each development project to provide an adequate storage area for collection and removal of recyclable materials. The size of these storage areas is to be based on ordinances adopted by each jurisdiction. If no such ordinances exist, the size shall be based on the model ordinance prepared by CIWMB.

### 4.11.2.4 Energy

Title 24 of the California Administrative Code, known as the California Building Energy Efficiency Standards, regulates energy consumption in new construction. These energy standards, which are among the strictest in the United States, are typically updated every three years by the California Energy Commission. Revised Title 24 standards became effective on June 15, 2001.

The energy efficiency standards regulate building energy consumption for heating, cooling, ventilation, water heating, and lighting. Title 24 may be met in one of two ways: by meeting performance criteria (measured in British thermal units (BTU) per square foot per year) or by installing a prescriptive list of energy conservation measures. Title 24 is enforced through the local building permit process.

The California Public Utilities Code Division 1, Part 1 (Public Utilities Act), Chapter 2.3, Article 16 (Sections 399.11-399.16) outlines the procedures for attainment of 20 percent renewable energy through the California Renewables Portfolio Standard Program. The purpose of increasing the state's reliance on renewable energy resources is to promote stable electricity prices, protect public health, improve environmental quality, stimulate sustainable economic development, create new employment opportunities, and reduce reliance on imported fuels. The California Renewables Portfolio Standard Program is intended to complement the Renewable Energy Program administered by the State Energy Resources Conservation and Development Commission and established pursuant to Chapter 8.6 (commencing with Section 25740) of Division 15 of the Public Resources Code.”

Division 15, Chapter 8.6, Sections 25740 through 25751 of the Public Resources Code enacts the Renewable Energy Resources Program for the State of California. The program consists of funding and regulations for the implementation of increased renewable energy use. Section 25740 states “it is the intent of the Legislature in establishing this program, to increase the amount of renewable electricity generated per year, so that it equals at least 17 percent of the total electricity generated for consumption in California per year by 2006.”

### 4.11.3 THRESHOLDS OF SIGNIFICANCE

Based on Appendix G in the CEQA Guidelines, the project would be considered to have a significant impact on public utilities if the project would:

- Exceeding sufficient water supplies available to serve the project from existing entitlements and resources; and/or a substantial depletion of ground water supplies or a substantial interference with ground water recharge such that there would be a net deficit in aquifer volume or a lowering of the local ground water table level;
- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;
- Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, and the construction of which could cause significant environmental effects;

- Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments;
- Require or result in the construction of a new landfill or expansion of existing facilities to accommodate the project's solid waste disposal needs;
- Fail to comply with federal, state, and local statutes and regulations related to solid waste; or
- Result in substantial adverse physical impacts associated with the provision of new or physically altered energy or communication facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable levels of service;

#### 4.11.4 IMPACTS AND MITIGATION

*Issue 4.11-1: Would full buildout of the Updated Plan exceed sufficient water supplies available to serve the area from existing entitlements and resources, and/or result in a substantial depletion of ground water supplies or a substantial interference with ground water recharge such that there would be a net deficit in aquifer volume or a lowering of the local ground water table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?*

**Discussion:** The MCWD provides water supply to the Town. Existing sources of water available to the MCWD include both surface water and groundwater. The primary source of water comes from surface water diverted from the Mammoth Creek watershed, plus eight ground water production wells within the Town. In order to prevent Mammoth Basin from being overdrafted, the MCWD maintains an extensive groundwater and surface water monitoring system. The MCWD prepares an annual groundwater monitoring report that provides an evaluation of ground water level, surface flow, and water quality monitoring data accumulated throughout the year (MCWD 2004a).<sup>63</sup>

The MCWD prepared a Water Assessment for the project described in the previously circulated Draft ~~PEIR~~ Program EIR and an Amendment to the Water Assessment to assess the water demands of the project through the year 2020 as required by SB 610. The District adopted an updated UWMP in December 2005, which includes projections through 2025. The water demand projected for ~~that the project~~ was calculated using MCWD generated demand factors based on land use and unit type. The water demand estimates assumed full buildout of the Draft

<sup>63</sup> The 2004 data was the most current available at the time the Revised Draft Program EIR was circulated. Since data for 2005 and 2006 has become available, which are consistent with the trends established through 2004.



General Plan Update with a resulting a-proposed peak population at one time of approximately 60,700. Table 4.11-4 on page 4-275 summarizes the past, current, and projected water use including the Updated Plan. The full reports (including the assumptions and calculations underlying Table 4.11-4) are provided in Appendix E of this EIR and in the 2005 UWMP. As shown in Table 4.11-4, the Updated Plan would result in a reduction in water demand that would increase with each five year increment, beginning with 163 acre-feet per year and increasing to 317 acre-feet per year by the year 2020. As shown in Table 4.11-4, the Draft General Plan Update at buildout would result in a water demand of 4,898 acre-feet per year.

Table 4.11-5 on page 4-276 provides a comparison of the current water supply and the projected demand in acre-feet for a normal year and for multiple dry years. As can be seen in Table 4.11-5, the available water supply under a three dry year period under existing conditions (without the project) would result in a deficiency of 244 acre feet per year at two dry years and a deficiency of 286 acre feet per year at three dry years. With the project, the current available water supply with the water demand that would occur at buildout of the Draft General Plan Update under a single dry year would result in a deficit of 1,488 surplus of 622 acre-feet. In a multiple dry year scenario, At during one and two dry years a surpluses of 292 and 10 73 acre-feet, respectively, is are shown. and at During three and four dry years a deficiency deficiencies of 390 and 406 31 acre-feet per year, respectively, is are shown. (The table and text provide information presented by MCWD. However, it appears that the three dry years would be a surplus of 31 rather than a deficit of 31 acre feet per year. According to the MCWD, with a surplus of only 73-10 acre feet at the end of a two dry year period, presents provides a minimal margin for error in these projections. In comparison with the existing General Plan, because of the greater intensity of buildout and the greater population at one time that would occur under the existing General Plan, the water demand from the existing General Plan would result in a greater deficiency of-acre feet acre-feet per year. The existing General Plan would result in a deficiency of up to 482 acre feet 66 acre-feet per year at three-two dry years (See Section 7.3, No Project Alternative, for a more detailed discussion of the comparison of the existing General Plan with the Updated Plan.)

The revised water supply assessment provided by ~~the District MCWD in September~~ November 2005 addresses detailed analysis of water supply versus demand and evaluates potential impacts of the proposed Updated Plan on a monthly basis. Chart 3 on page 4-275 demonstrates the impacts of projected demand on water supply for each month of the year under multiple dry year periods.

Also, asAs demonstrated in Chart 43, a surplus of available water during the irrigation months of July through September is marginal. This comparison does not include continued delivery of district groundwater supplies to the Sierra Star Golf Course for irrigation, which is now occurring. Sierra Star Golf Course irrigation is not included because of the anticipated future use of recycled water at the Golf Course, which would off-set potable water use.

**Table 4.11-4**

**Past, Current, and Projected Water Use/Demand (acre-feet) Including Water Demand for the Project Evaluated in the Previously Circulated draft PEIR**

| <b>Water Use Sector</b>     | <b>1992</b>  | <b>1995</b>  | <b>2000</b>  | <b>2005</b>  | <b>2010</b>  | <b>2015</b>  | <b>2020</b>  | <b>2025</b>  |
|-----------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Single Family               | 329          | 393          | 515          | 549          | 586          | 623          | 659          | 696          |
| Condominium                 | 678          | 805          | 961          | 948          | 960          | 973          | 985          | 997          |
| Multi-Family                | 98           | 88           | 144          | 140          | 211          | 282          | 353          | 424          |
| Commercial                  | 206          | 218          | 217          | 278          | 374          | 469          | 565          | 660          |
| Motel/Hotel                 | 117          | 120          | 112          | 111          | 304          | 496          | 689          | 881          |
| Public Sector               | 100          | 107          | 170          | 296          | *            | *            | *            | *            |
| Golf Course <sup>a</sup>    | 21           | 23           | 297          | 255          | 400          | 400          | 400          | 400          |
| Other <sup>b</sup>          | 74           | 100          | 53           | 103          | 80           | 80           | 80           | 80           |
| Unaccounted                 | 942          | 787          | 486          | 746          | 760          | 760          | 760          | 760          |
| <b>Current Total</b>        | <b>2,565</b> | <b>2,641</b> | <b>2,955</b> | <b>3,426</b> | <b>3,674</b> | <b>4,082</b> | <b>4,490</b> | <b>4,898</b> |
| <i>Updated Plan</i>         |              |              |              |              |              |              |              |              |
| <del><i>New Total</i></del> |              |              |              |              |              |              |              |              |

\* Included in commercial

**Note:** Existing hotel/motel water-use sector includes only those units that are separately metered and does not include units that share water meters with commercial. Commercial includes mixed uses such as restaurants, condo/hotel, retail, etc. Public sector is included in the commercial water-use sector for future projections for consistency with data from the Town of Mammoth Lakes General Plan Update effort.

<sup>a</sup> Existing Snowcreek Golf Course (9 holes) pursuant to water rights agreement. Golf course water use based on existing demand from Sierra Star and Snowcreek Golf Courses. This value would be reduced by recycled water use in the future.

<sup>b</sup> Other = treatment plant process water, fire fighting, line cleaning, etc.

Source: MCWD, 2005

**Chart 3**

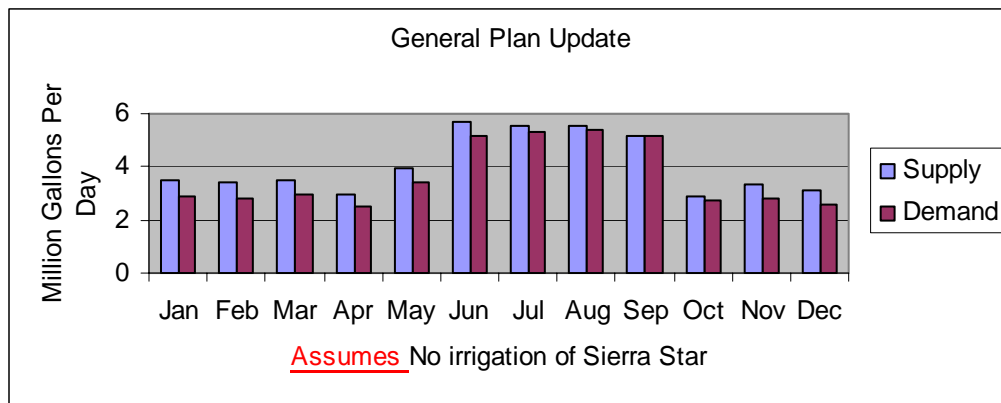


Table 4.11-5

**Comparison of Current Supply and Projected Demand in Acre-Feet  
for Normal, Single Dry, and Multiple Dry Years**

| <u>Supply and Demand</u>                        | <u>Normal<br/>Year</u> | <u>Single<br/>Dry<br/>Year</u> | <u>Multiple Dry Years</u> |                                     |   |                           |
|---|------------------------|--------------------------------|---------------------------|-------------------------------------|---|---------------------------|
|   |                        |                                | <u>Year 1</u>             | <u>Two Dry<br/>Years<br/>Year 2</u> | <u>Three<br/>Dry<br/>Years<br/>Year 3</u> | <u>Year 4<sup>a</sup></u> |
| <u>Projected Surface</u>                        | 2,760                  | 0                              | 1,780                     | 1,500                               | 1,100                                     | 1,084                     |
| <u>Projected Wells</u>                          | 4,000                  | 3,410                          | 3,410                     | 3,408                               | 3,408                                     | 3,408                     |
| <b><i>Existing Supply Total</i></b>             | <b>6,760</b>           | <b>3,410</b>                   | <b>5,190</b>              | <b>4,908</b>                        | <b>4,508</b>                              | <b>4,492</b>              |
| <u>Projected Demand at Buildout (Year 2025)</u> | 4,898                  | 4,898                          | 4,898                     | 4,898                               | 4,898                                     | 4,898                     |
| Surplus or (Deficiency)                         | 1,862                  | (1,488)                        | 292                       | 10                                  | (390)                                     | (406)                     |
| <b><i>Updated Plan</i></b>                      |                        |                                |                           |                                     |   |                           |
| <b><i>Demand Total (Year 2020)</i></b>          | <b>4,461</b>           | <b>4,461</b>                   | <b>4,461</b>              |                                     |   | <b>4,461</b>              |
| <b><i>Surplus or (Deficiency)</i></b>           | <b>2,299</b>           | <b>622</b>                     | <b>73</b>                 |                                     |   | <b>(31)</b>               |

*Note: The table and text provided by MCWD indicate a deficiency of 31 acre feet in three dry year period. This appears to be in error and should be a surplus of 31 acre feet.*

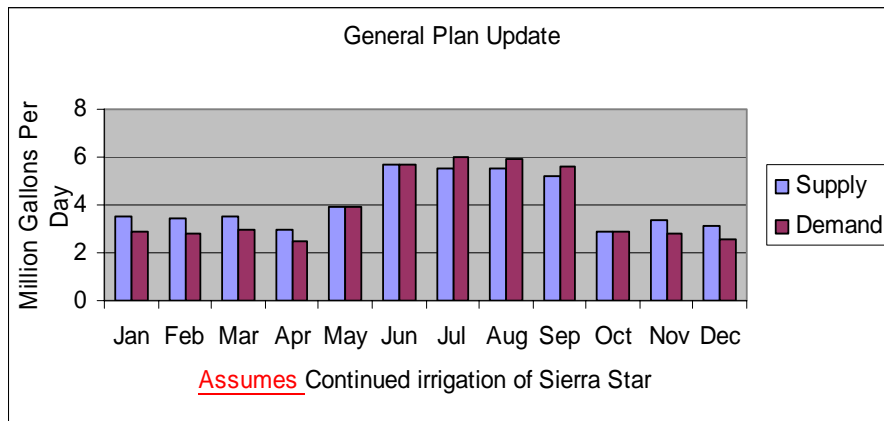
<sup>a</sup> *This data regarding a fourth year among multiple dry years was not available at the time the Revised Draft Program EIR was circulated.*

*Source: MCWD, 2005*

Chart 3 ~~also demonstrates the impacts at build-out of continuing without deliveries of district MCWD groundwater supplies for Sierra Star Golf Course golf course irrigation.~~ This scenario could occur if, ~~for some currently unforeseen reason, the district MCWD is unable to~~ follows through with plans to provide recycled water to the Sierra Star Golf Course and other large turf irrigators in Mammoth Lakes. The District ~~has completed and adopted certified~~ an EIR in 1998 for the portion of the recycled water project dealing with the wastewater treatment plant upgrades and potential impacts to Laurel Pond. The District ~~has recently begun work on completed and certified a second~~ Subsequent EIR covering the recycled pipeline and recycled water use sites. ~~Until completion of this EIR, the utilization of recycled water is still speculative- uncertain until use contracts are signed with both Sierra Star and Snowcreek Golf Course, which will be utilizing the majority of the recycled water system capacity.~~

Chart 4 on page 4-277 compares water supply versus demand on a monthly basis including golf course irrigation demands and demonstrates the importance of providing recycled water for golf course irrigation and pursuing alternatives to meet water supply deficiencies.

The 2005 UWMP includes a reliability analysis, which focuses on June through September. Table 4.11-6 on page 4-278 provides a summary of the existing supply relative to water demand during the months of June through September. In a normal precipitation year, 2,872 acre-feet would be available (969 acre-feet of surface water and 1,902 acre-feet of groundwater) during the June through September period based on normal year supply

**Chart 4**

projections. Single dry year estimates are projected using actual groundwater rates pumped during June through September during 1992 and 2001, with no surface water being available. Multiple dry year estimates are based on surface water availability during the 1992 drought year and actual groundwater pumped during 1992 and 2001.

As can be seen in Table 4.11-6, estimated water demands are projected to exceed supplies during dry years for the June through September period. It should be noted that golf course irrigation demands are included in the estimate; therefore, use of recycled water will reduce any deficits in multiple dry years. Under any scenario, landscape irrigation controls would be required during June through September in order to meet demands in extreme dry year conditions.

### **District Plans for Acquiring Future Water Supplies**

Under Water Code Section 10911 it is required, that if, as a result of a water supply assessment, the provider concludes that its water supplies are, or will be, insufficient, the public water system shall provide to the city or county its plans for acquiring additional water supplies. The 2005 UWMP contains a Water Shortage Contingency Plan, which is summarized below.

The projected additional supply volumes associated with these plans are shown in Table 4.11-7 on page 4-279.

### **New Groundwater Supplies**

Overall, depending upon supplies needed, about 1,000 acre-feet of additional groundwater supplies may be developed in the future from the Mammoth Basin watershed or other sources such as the Dry Creek watershed. Volumes of groundwater projected to be available from such sources are estimated at 1,000 acre-feet per year during normal and multiple

**Table 4.11-6****Supply/Demand Analysis  
June through September**

|                     | Existing Supply | Water Demand <sup>a</sup> |           | Surplus or (Deficiency) |           |
|---------------------|-----------------|---------------------------|-----------|-------------------------|-----------|
|                     |                 | Year 2005                 | Year 2025 | Year 2005               | Year 2025 |
| Normal Water Year   | 2,872           | 1,711                     | 2,264     | 1,161                   | 608       |
| Single Dry Year     | 1,636           |                           |           | (75)                    | (628)     |
| Multiple Dry Years  |                 |                           |           |                         |           |
| Year 1 <sup>b</sup> | 2,223           |                           |           | 512                     | (41)      |
| Year 2 <sup>b</sup> | 2,042           |                           |           | 331                     | (222)     |
| Year 3              | 2,035           |                           |           | 324                     | (229)     |

Unit of measurement: acre feet per year

<sup>a</sup> Demand is actual demand for June-September 2005 and projected demand at build out for June-September.

<sup>b</sup> Years 1 and 2 estimated at 45.3 percent of total minimum supply for year.

Source: Urban Water Management Plan, 2005; PCR Services Corporation, 2007

dry year periods. The MCWD is evaluating whether or not there is additional water available to be pumped from the Mammoth Basin without causing environmental impacts. The potential for new groundwater supplies is currently under evaluation by the MCWD through its recently expanded monitoring system and the current preparation of the groundwater model of the Mammoth Basin. The evaluation of the potential for increased withdrawal from the Mammoth Basin should be completed within two years. The MCWD is currently focusing on increased groundwater extractions from the Mammoth Basin to meet future demand needs for the community. While funding for Dry Creek well development was removed from the District's connection fees in April of 2007, increased monitoring in the Dry Creek Basin is being pursued through a partnership with the Mammoth Mountain Ski Area. If increased pumping from the Mammoth Basin proves infeasible, the District will begin to more actively pursue well development in the Dry Creek Basin.<sup>64</sup>

Any new groundwater supplies would require permits and approvals from the State Department of Health Services and the U.S. Forest Service where potential well sites are located on federal land. New groundwater wells would require both State of California and federal environmental review.

<sup>64</sup> Due to the Board's April 2007 decision to remove the Dry Creek project from the District's connection fees, the MCWD is currently budgeting \$1,965,198 for future well development in the Mammoth Basin. The cost for the Dry Creek well development project at \$15,955,000 is still a current estimate of the MCWD developing new wells and infrastructure to bring Dry Creek groundwater to the Mammoth Basin for municipal use. In addition, the Dry Creek well development project may be revisited in the future.

Table 4.11-7

**Demand Reduction Measures and Potential Additional Water Supply Sources**

| <b>Source</b>                                     | <b>Potential Volume (afy)<br/>(<del>Reduction in Demand</del>)</b> |
|---|--|
| Water Conservation                                | 500 (demand reduction)   |
| <del>Decrease Water System Loss Reduction</del>   | <del>300 (demand reduction)</del>                                  |
| Recycled Water for Irrigation Supply <sup>a</sup> | 360 (demand reduction)   |
| Future Well Development <sup>b</sup>              | 1,000 (increased supply)   |
| <b>Total</b>                                      | <b><u>2,220</u></b>  |

<sup>a</sup> *Includes irrigation for Shady Rest Park*

<sup>b</sup> *Future well development includes Dry Creek wells and/or additional Mammoth Basin wells*

Source: MCWD, 2005

**Recycled Water**

As indicated in Section 4.11.1.2, MCWD operates and maintains the wastewater collection and treatment system for the wastewater generated in the Town of Mammoth Lakes as well as in surrounding U.S. Forest Service campground and permittee areas located in the Lakes Basin and Sherwin Creek area. In 2005, the MCWD collected and treated an average of 1.65 million gallons per day of wastewater. The use of recycled water has been identified as a potential source of water supply for large turf irrigation, such as golf courses and Shady Rest Park. A Final Subsequent EIR was certified by the MCWD Board in March 2007, which analyzes the use of recycled water for irrigation on existing and future golf courses as well as at Shady Rest Park.<sup>65</sup> The MCWD currently supplies untreated groundwater for irrigation of the Snowcreek and Sierra Star Golf Courses and supplies potable water to Shady Rest Park. The volume of groundwater supplied to the Sierra Star Golf Course over the past seven years (2000 to 2006) has averaged 238 acre-feet per year. The volume of groundwater supplied to the Snowcreek Golf Course over the past seven years has averaged 85 acre-feet per year. Water supplied to Shady Rest Park over the past four years averaged about 30 acre-feet per year. The maximum water supplied to these locations in dry water years has totaled about 440 acre-feet. Depending upon customer demands, the recycled water project could potentially supply about

<sup>65</sup> *In addition, a pilot project was conducted in 2001 at the Mammoth Pacific Geothermal Power Plant utilizing recycled water for cooling purposes. The power plant was able to increase efficiency and the use of recycled water for cooling purposes appears to be promising. Estimated demand for future recycled water needs would be approximately 600 acre-feet per year for cooling purposes at the power plant. Adequate supply would not exist from the District's facilities during the summer irrigation months if recycled water is also used for golf course irrigation. Also, if recycled water were to be used for the power plant, the water demand from the community would not be further reduced.*

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550 acre-feet annually to large turf irrigators in the community during the summer irrigation season.<sup>66</sup>

It is currently estimated that the total project would take three construction seasons to fully complete. Therefore, recycled water is projected to be available for use by the summer of 2010. Permits that would be required to provide recycled water for irrigation include a waste discharge permit from the Regional Water Quality Control Board and a design and use permit from the State Department of Health Services.

### **Reductions in Water Demand**

In addition to exploring options for increasing water supply, the UWMP presents various opportunities to reduce the water demand. The District's water demand management measures that are being or will be implemented include the following:

- Interior/Exterior Water Audits – The audit would include a checklist to review such items as inspection of interior showerheads, fixtures, and toilets for leakage and efficiency. Replacement of inefficient devices with updated conservation devices would be offered. Water irrigation systems would be inspected for use of efficient irrigation equipment and watering practices would be reviewed. A written report would be prepared and advice offered to assist the customer in reducing water consumption.
- Large Landscape Audits – The audit of large landscape areas, which include condominium projects, parks, ball fields, and school landscape areas, would include a checklist for inspection of irrigation system sprinkling and control equipment, calculation of water usage per 1,000 square feet of landscaping, use of evapotranspiration data, type of vegetation, and general review of watering practices. A written recommendation would be provided to increase water use efficiency. Since many landscaped areas, both residential and large landscape areas, are maintained by private landscape companies, representatives of these companies would be contacted and included in the audits and recommendations prepared by the MCWD.
- Plumbing Standards and Retrofits - The MCWD's Water Service Code requires the installation of water conservation devices in new buildings and those that require permits for remodeling. These devices include showerheads, faucet aerators for sinks, and water conservation toilets.

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<sup>66</sup> *The Mammoth Mountain Ski Area (Sierra Star Golf Course) has already paid a connection fee of \$1,040,000 for their portion of recycled water once it is made available. The remaining costs of the project would be paid through additional connection fees and through the District's water capital expansion program budget.*

- Commodity Rates - Each MCWD customer pays a monthly water fee, which consists of a minimum service charge and a quantity rate charge. All residential customers pay a minimum service charge of \$11.46 per month, while commercial customers pay a minimum service charge that is based on the size of water meter serving their property. Quantity rate charges are imposed in addition to the minimum service charge. The quantity rate charge ranges from a minimum of \$1.05 per 1,000 gallons of water used to \$7.40 per 1,000 gallons depending on the volume of water used per month.
- Public Information - As part of the MCWD's Water Service Code, a public relations officer has been empowered to provide the public with information in an effort to promote knowledge and understanding of the area's water situation in general and methods to conserve the water supply. Information about all MCWD Board meetings and all other important MCWD activities are promptly routed to the appropriate sources for local news and information.
- School Education - Local school education programs have been enacted in the past and will continue to be considered for the future to teach local students about the importance of conserving water. An annual budget of \$18,500 has been approved for the 2007/2008 fiscal year for water conservation/education purposes.
- Ultra-Low-Flush Toilets -- The MCWD reinstated a toilet rebate program in 2006 in which customers may receive a cash rebate for installing an ultra-low-flush toilet in place of older model water-wasting toilets. All new construction in the community is required to meet current plumbing code standards, which mandate low-flush toilets.
- Water Audits and Incentives - Through its water meter radio read system and computer monitoring of pressure zones and water storage tanks, the MCWD performs water audits to determine the locations of leaking pipes in the distribution system.
- Efficient Washing Machine Rebate Program - The MCWD will be evaluating the potential benefits of establishing an efficient washing machine rebate program. Water use records will be evaluated to estimate water savings from replacement of older washing machines. A standard of 40 percent reduction in water usage, and 50 percent reduction in energy consumption using a high-efficiency washer would be used in estimating projected savings. The MCWD will also evaluate adding a new policy to its water code that would require efficient washing machines for new construction. The power supply company (Southern California Edison) would be contacted to see if they would be interested in partnering with the MCWD in providing rebates to customers.



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In addition, the MCWD has been implementing an aggressive main water pipeline replacement program to replace old leaking water pipes since 2001. Over the past several years, an average of 10,000 feet of pipeline per year have been replaced.<sup>67</sup> The MCWD has also invested in underground pipeline leak detection equipment. In addition, the MCWD performs routine leak detection surveys to locate leaks for repair before the leaks appear at the surface. The MCWD estimates a water demand reduction of 300 acre-feet per year from the implementation of the distribution system leak-detection project.

In addition, water conservation measures are included in the MCWD's Water Code. The implementation of measures, such as landscape irrigation restrictions, would occur by action of the Board of Directors. The MCWD has certain mandatory prohibitions that require the public to become water conscious and to conserve water. The four water conservation measures that are required for all MCWD customers at all times are as follows:

1. Water from the MCWD's potable water system allowed to pool, pond, or run-off of applied areas is considered a waste of water and as such is not permitted.
2. Leaks occurring on the customer side of each meter in the MCWD's potable water system are considered a waste of water and as such are not permitted.
3. Any hose, including those used to wash vehicles, used in conjunction with the MCWD customer's water service shall be equipped with an automatic shut-off device, except that no such shut-off device shall be required for irrigation purposes.
4. District water supplied through the MCWD's potable water system, which is used for watering vegetation outside of any building, shall not be permitted between the hours of 10:00 A.M. and 5:00 P.M. Projections of available water supply are prepared each year after final snowpack measurements are made on April 1. At that time, if projections indicate possible water supply insufficiencies, the MCWD's Board of Directors may declare the existence or threatened existence of a drought and may then implement any level of restrictions as deemed necessary throughout the irrigation season.

During water shortages, the MCWD implements mandatory prohibitions. There are five levels of prohibitions that the MCWD can implement based on the duration and severity of the drought.

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<sup>67</sup> *This project is budgeted for approximately \$2,300,000 per year over the next 8 years. The District funds water line replacement projects through its capital replacement program, which is derived from primarily property tax revenues.*

In 1992, the MCWD implemented water restrictions that included limiting landscape irrigation to 3 days per week. This restriction resulted in an average reduction in water demand of 25% for the irrigation period of June through September. At build-out of the community under the April 2005 Draft General Plan Update, the projected reduction in water demand from implementation of water conservation measures would be about 500 acre-feet annually.

Table 4.11-8 on page 4-284 shows the future water demand with varying assumptions regarding demand reduction. Table 4.11-9 on page 4-284 shows the future water supply with supply reduction measures and also includes future water supply development. As can be seen in Table 4.11-9, with the future water supply and the full water demand at buildout of the Draft General Plan Update, a deficit of 488 acre-feet would occur in a single dry water year.

In summary, with the inclusion of future water supplies, demand reduction measures, and implementation of the water shortage contingency plan, the projected water demand from buildout of the Draft General Plan Update would not exceed the water supply. However, due to the uncertainty of the timing of implementation of the measures, the EIR concludes that the Draft General Plan Update would have a significant impact on water supply. Mitigation Measure 4.11-1, which would ensure the existence of water supply prior to development, would reduce the impact to a less than significant level.

~~To address these anticipated water supply insufficiencies, MCWD has developed a number of plans including water conservation measures, water system loss reduction, use of recycled water, and development of new water supplies. The projected additional supply volumes associated with these plans are shown in Table 4.11-6 on page 4-269.~~

~~As indicated above, the additional sources would augment available supply by an estimated 1,047 AFY, which is considerably greater than the deficit that would result from implementation of the Updated Plan under the multiple dry year scenario considered. However, two of these programs (i.e. recycled water and new groundwater sources) would require additional entitlements to implement and therefore, cannot be considered as firm supply. While additional water volumes available from more firm supply sources (i.e., water conservation and system loss reduction) would augment supplies by 797 AFY, certainty of these sources occurring does not exist.~~

~~MCWD is now pursuing a set of actions to develop the additional supply sources described above. Water conservation activities are initiated as needed, based on projections of available water supply that are developed on April 1<sup>st</sup> each year. MCWD is also pursuing permits to provide recycled water for irrigation and upgrade the wastewater treatment plant to meet applicable Health Department standards for the proposed uses. MCWD has already completed an EIR for the overall Recycled Water Project and improvements at the treatment plan, but has not yet completed engineering and environmental studies for required pipeline~~

**Table 4.11-8****Future Water Demand with Demand Reduction Measures**

| <b>Reduction</b>               | <b>2005</b>  | <b>2010</b>  | <b>2015</b>  | <b>2020</b>  | <b>2025</b>  |
|--------------------------------|--------------|--------------|--------------|--------------|--------------|
| No reduction                   | <u>3,426</u> | <u>3,674</u> | <u>4,082</u> | <u>4,490</u> | <u>4,898</u> |
| Reduce water loss <sup>a</sup> | <u>3,116</u> | <u>3,364</u> | <u>3,772</u> | <u>4,180</u> | <u>4,588</u> |
| Use Recycled Water             | <u>N/A</u>   | <u>3,004</u> | <u>3,412</u> | <u>3,820</u> | <u>4,228</u> |
| Level 1 Restriction @ 25%      | <u>N/A</u>   | <u>2,644</u> | <u>3,003</u> | <u>3,362</u> | <u>3,721</u> |

*Units of measurement: acre feet per year*

<sup>a</sup> *Reduces water loss to 2004 level (450 ac-ft)*

*Note: Water savings from restricted use applied only during months of June, July, August, and September (these months represent 48% of annual demand). Level 1 restrictions historically reduce water use by 25% during summer irrigation periods.*

*Source: Urban Water Management Plan, 2005*

**Table 4.11-9****Future Water Supply Including Future Wells**

| <b>Supply</b>  | <b>Normal</b>       | <b>Single Dry</b>   | <b>Multiple Dry Years</b> |                     |                     |                     |
|--|---------------------|---------------------|---------------------------|---------------------|---------------------|---------------------|
|  | <b>Water</b>        | <b>Water</b>        | <b>Year 1</b>             | <b>Year 2</b>       | <b>Year 3</b>       | <b>Year 4</b>       |
|  | <b>Year</b>         | <b>Year</b>         |                           |                     |                     |                     |
| Projected Surface  | <u>2,760</u>        | <u>0</u>            | <u>1,780</u>              | <u>1,500</u>        | <u>1,100</u>        | <u>1,084</u>        |
| Projected Existing Wells   | <u>4,000</u>        | <u>3,410</u>        | <u>3,410</u>              | <u>3,408</u>        | <u>3,408</u>        | <u>3,408</u>        |
| Projected Future Wells   | <u>1,000</u>        | <u>1,000</u>        | <u>1,000</u>              | <u>1,000</u>        | <u>1,000</u>        | <u>1,000</u>        |
| <b>Projected Total Supply</b>                                      | <b><u>7,760</u></b> | <b><u>4,410</u></b> | <b><u>6,190</u></b>       | <b><u>5,908</u></b> | <b><u>5,508</u></b> | <b><u>5,492</u></b> |
| Projected Demand at Buildout                                       | <u>4,898</u>        | <u>4,898</u>        | <u>4,898</u>              | <u>4,898</u>        | <u>4,898</u>        | <u>4,898</u>        |
| Surplus or (Deficiency)  | <u>2,862</u>        | <u>( 488)</u>       | <u>1,292</u>              | <u>1,010</u>        | <u>610</u>          | <u>594</u>          |
| Projected Buildout Demand<br>w/Water Demand Reduction <sup>a</sup> |                     | <u>4,228</u>        |                           |                     |                     |                     |
| Surplus or (Deficiency)  |                     | <u>182</u>          |                           |                     |                     |                     |

*Units of measurement: acre feet per year*

<sup>a</sup> *Assumes 310 afy from decrease water loss in system plus 360 afy from use of recycled water at Sierra Star golf course and Shady Rest Park. Alternatively, Level 1 Restriction could be used if water system losses are not complete or recycled water were not available. Level 1 Restriction would reduce the demand to 3,721 afy, which would result in a surplus of 689 afy.*

*Source: Urban Water Management Plan, 2005; PCR Services Corporation, 2007*

~~improvements or installations at the irrigation sites. MCWD anticipates that these permits and improvements can be completed by the summer of 2007. System water losses are primarily due to leaks in old pipelines, and MCWD has initiated a pipeline replacement program in which 11,000 feet of old pipelines have already been replaced. Over the next 20 years, MCWD would continue to replace about 11,000 feet annually, with full implementation anticipated by 2025.~~

~~Efforts to develop new supply sources would focus on the Dry Creek Watershed. MCWD would also explore options for added supply from Mammoth Basin, but this would depend largely on the results of monitoring data that are now being developed and would become available in 2007. MCWD anticipates that supply from Dry Creek would not become available before 2014.~~

### **Policies and Implementation Measures in the Updated Plan**

The Plan Update proposes the adoption of several policies 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.2 The Town shall use drought tolerant landscaping and water efficient irrigation practices for all town maintained landscaped areas, new parks, and park improvement projects where feasible.
- I.7.A.a.3 The Town shall work collaboratively with Lahontan Regional Water Control Board, Mammoth Community Water District and other interested stakeholders to determine the feasibility of utilizing domestic gray water for landscape irrigation purposes. If it is determined that the use of domestic gray water for landscape irrigation does not pose a threat to the community and its environmental resources, the Town shall develop the criteria to allow and encourage its safe and efficient use for golf courses, parks, town maintained landscaped areas and any other appropriate use.
- 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.
- II.1.C.a.2 As part of the project review process, conditions of approval and implementation of the Development Impact Fee schedule, the Town shall require that new

development adequately mitigates its impact on: fire protection, public safety, workforce housing availability, road capacity, and pedestrian connectivity.

In addition to implementation measures contained in the Updated Plan, Chapter 15.36 of the Municipal Code requires the installation of water efficient landscaping, which would serve to reduce the water demand for landscaping.

Based on the ~~water assessment 2005 UWMP, prepared by the MCWD, the District~~ MCWD is implementing a variety of programs to reduce the water demand and increase the water supply. However, due to the uncertainty of the implementation as well as the effectiveness of the future programs, based on the information provided in the ~~Amended Water Assessment UWMP~~, the Updated Plan would have a significant impact on water supply.

### **Mitigation Measures**

- 4.11-1 The Town shall not approve new development applications that would result in a water demand in excess of available supplies as determined by the MCWD. ~~based on the multiple drought year scenario presented above.~~ The Town shall work with MCWD to ensure that land use approvals are phased ~~in tandem with~~ so that the development of necessary water supply sources is established prior to respective development approvals. This shall be made a policy of the Updated General Plan.

### **Level of Significance After Mitigation**

Implementation of the mitigation measures outlined above would reduce potential impacts associated with development of water supply sources sufficient to meet demands associated with the implementation of the Updated Plan. Mitigation Measure 4.11-1 would ensure that development does not occur without available water supply.

***Issue 4.11-2:** Would the Project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?*

**Discussion:** With the projected wastewater flow demands for the project estimated to be an average of 2.6 mgd with peak daily flows of 4.3 and the design capacity of the wastewater treatment plant at 4.9 mgd, the District's treatment process would continue to meet the effluent limitations and treatment policies set forth by the Lahontan Regional Water Quality Control

Board. Therefore, the project would have a less than significant impact and no mitigation measures are necessary<sup>68</sup>.

### **Policies and Implementation Measures in the Updated Plan**

II.1.C.a: Ensure that new development densities do not exceed the capacity of public service infrastructure and utility systems. Require new development to upgrade or fund facilities to meet increased demand or require reduced density or project redesign for any project that would result in deterioration of service levels or cause available capacity to be exceeded if capacity expansion is infeasible.

II.1.C.a.1 The Town shall ensure service providers are involved in development review process.<sup>69</sup>

### **Mitigation Measures**

Impacts with regard to wastewater treatment requirements of the LRWQCB would be less than significant and no mitigation measures are required.

### **Level of Significance After Mitigation**

Impacts with regard to wastewater treatment requirements of the LRWQCB would be less than significant and no mitigation measures are required.

***Issue 4.11-3:** Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, and the construction of which could cause significant environmental effects?*

**Discussion:** The population increase and structural development associated with the project would increase the quantity of wastewater generated and associated requirements for collection, treatment and disposal. The existing treatment facility has a capacity for 4.9 mgd. Revised wastewater collection values provided by MCWD based on the estimated peak population under the project (60,700) are estimated to be 2.6 mgd (average) and 4.3 mgd (maximum). The estimated maximum quantity of wastewater requiring treatment would not exceed the capacity of the treatment facility.

<sup>68</sup> Information provided by Gary Sisson of MCWD e-mail "MCWD Waste Water Data", October 20, 2005.

<sup>69</sup> Routing of projects for Agency review is required by CEQA.

### **Policies and Implementation Measures in the Updated Plan**

- II.1.C.a: Ensure that new development densities do not exceed the capacity of public service infrastructure and utility systems. Require new development to upgrade or fund facilities to meet increased demand or require reduced density or project redesign for any project that would result in deterioration of service levels or cause available capacity to be exceeded if capacity expansion is infeasible.

### **Mitigation Measures**

No new construction of water or wastewater treatment facilities or expansion would be required. ~~Therefore~~ Therefore, impacts would be less than significant and no mitigation measures are required.

### **Level of Significance After Mitigation**

No new construction of water or wastewater treatment facilities or expansion would be required therefore impacts would be less than significant and no mitigation measures are required.

***Issue 4.11-4:** Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

The capacity of wastewater collection and transfer systems could be strained as a result of increased use related to permanent and transient population growth under the project. However, estimates derived from the MCWD 2000 Urban Water Management Plan found that the maximum quantity of wastewater requiring treatment would not exceed the capacity of the treatment facility. The District ~~is currently preparing~~ has prepared a wastewater model of its collection system that ~~will be able~~ has been used to identify needed improvements that may be required on specific development site locations such as increased sizes of existing pipelines to handle wastewater flow requirements. These improvements would be conditioned as the responsibility of each developer prior to connection into the Districts system.

### **Policies and Implementation Measures in the Updated Plan**

- II.1.C.a: Ensure that new development densities do not exceed the capacity of public service infrastructure and utility systems. Require new development to upgrade or fund facilities to meet increased demand or require reduced density or project redesign

for any project that would result in deterioration of service levels or cause available capacity to be exceeded if capacity expansion is infeasible.

### **Mitigation Measures**

The Updated Plan would not result in inadequate capacity for wastewater treatment. Therefore, no mitigation measures are required.

### **Level of Significance After Mitigation**

The Updated Plan would result in a less than significant impact with regard to wastewater treatment capacity.

***Issue 4.11-5:** Would the project require or result in the construction of a new landfill or expansion of existing facilities to accommodate the project's solid waste disposal needs?*

**Discussion:** Solid waste generated in the Town would continue to be disposed of in the Benton Crossing Landfill. The landfill has a remaining capacity of 1.7 million cubic yards of compacted waste and is projected to remain open until 2023. The Benton Crossing Landfill can accommodate the Town's waste generation and disposal needs for the next 20 years, based on site life and loading rate calculations provided by the Mono County Department of Public Works (MCDPW). The MCDPW has indicated that based on their projections, there is sufficient capacity for the projected buildout under the Updated Plan. The Town also has an option for five years at the Pumice Valley Landfill. In addition, the Updated Plan incorporates implementation measures for various recycling programs affecting all types of waste and waste sources. The Town is expanding its recycling capabilities to achieve the state mandated 50 percent diversion rate.

### **Implementation Measures in the Updated Plan**

The Updated Plan proposes the adoption of several implementation measures to reduce potential impacts associated with solid waste. These measures are as follows:

- I.1.D.a.1 The Town shall support programs to recycle paper, cardboard, glass, metal, plastics, motor oil, and to compost or generate energy from tree prunings, brush, and other vegetation.
- I.1.D.a.2 The Town shall institute a program to achieve maximum recycling of waste products generated by the community to prolong the useful life of the landfill.



- I.1.D.a.3 The Town shall develop effective and efficient recycling programs for multi-family developments and businesses.
- I.1.D.a.4 The Town shall provide recycling programs and containers at town facilities, projects, and programs to the extent feasible.

With the existing capacity in the Benton Crossing Landfill as well as the option for disposal for five years at the Pumice Valley Landfill, there is adequate landfill capacity for the population that would occur as a result of buildout of the Updated Plan. In addition, the Plan contains measures to reduce waste and increase recycling in the Town. Therefore, the project would not result in the construction of a new landfill or expansion of existing facilities to accommodate the project's solid waste disposal needs.

### **Mitigation Measures**

The Updated Plan would result in less than significant impacts with regard to disposal of solid waste. Therefore, no mitigation measures are required.

### **Level of Significance After Mitigation**

The Updated Plan would result in less than significant impacts with regard to solid waste.

***Issue 4.11-6:** Would the project fail to comply with federal, state, and local statutes and regulations related to solid waste?*

**Discussion:** The Town would continue to operate the waste collection and recycling program in accordance with the IWMA. Although the Town does not currently comply with AB 939 in terms of achieving a 50 percent diversion rate, the Town has a program in place to achieve the required rate. The Updated Plan includes measures to ensure compliance with applicable federal, state, and local statutes and regulations related to solid waste.

### **Implementation Measures in the Updated Plan**

The Plan Update proposes the adoption of several implementation measures to reduce potential impacts associated with solid waste. These measures are as follows:

- I.1.D.a.1 The Town shall support programs to recycle paper, cardboard, glass, metal, plastics, motor oil, and to compost or generate energy from tree prunings, brush, and other vegetation.

- I.1.D.a.2 The Town shall institute a program to achieve maximum recycling of waste products generated by the community to prolong the useful life of the landfill.
- I.1.D.a.3 The Town shall develop effective and efficient recycling programs for multi-family developments and businesses.
- I.1.D.a.4 The Town shall provide recycling programs and containers at town facilities, projects, and programs to the extent feasible.

With the Town's existing waste collection and recycling program and the measures in the Updated Plan regarding waste reduction, the project would comply with applicable federal, state, and local statutes and regulations related to solid waste.

### **Mitigation Measures**

Implementation of the Updated Plan would comply with federal, state, and local statutes and regulations related to solid waste. Therefore, no impacts would result and no mitigation measures are necessary.

### **Level of Significance After Mitigation**

Implementation of the Updated Plan would comply with federal, state, and local statutes and regulations related to solid waste.

***Issue 4.11:7:** Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered energy or communication facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable levels of service?*

**Discussion:** The following provides a discussion of potential impacts to energy and communication facilities that could result from the implementation of the Updated Plan.

### **Electricity and Geothermal Energy**

Growth and development under the project may increase the demand for electricity delivery services and facilities. Southern California Edison has stated that it is currently able to supply enough electricity to accommodate the needs of the region and anticipates being able to continue its service following implementation of the project. Therefore, electrical services would be available to serve the projected population that would occur under the Updated Plan and no significant environmental impacts associated with electrical services are expected to occur. In addition, the project outlines measures to achieve improvements in energy

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conservation and reduce the quantity of electricity consumed in the Planning Area. These policies include the following:

- I.1.C.a.1 The Town shall encourage reduction of energy demand in existing buildings by facilitating energy audits, disseminating information on available conservation methods and cost savings, and developing incentives for efficiency improvements.
- I.1.C.a.2 The Town shall optimize energy efficiency in all public building construction and building retrofit by adopting “Mammoth Lakes-specific green building policies and standards,” similar to, or patterned on LEED Standards (Leadership in Energy and Environmental Design) with the goal of exceeding 2005 State of California Title 24 minimum requirements by 30%.
- I.1.C.a.3 The Town shall encourage optimal energy efficiency in residential and commercial construction and building retrofit, with the goal of exceeding 2005 State of California Title 24 minimum requirements by 30%.
- I.1.C.c.4 The Town shall offer accelerated and streamlined permitting and other incentives for builders and developers who incorporate energy conservation and resource use efficiency into new building and retrofit construction.
- I.1.C.c.5 Town policies will support the utilization of fuel efficient vehicles and development of housing close to work, commercial services, recreation areas, and transit routes to reduce fuel consumption.
- I.1.C.b.1 The Town shall develop and implement standards that enable and encourage the application of passive and active solar in new and existing residential and commercial buildings, and incorporate solar energy provisions into the Town’s development and design approval process.
- I.1.C.b.2 The Town shall actively evaluate and establish the necessary regulatory framework to encourage the use of decentralized solar electric power production systems.
- I.1.C.b.3 The Town shall work collaboratively with other public agencies and private stakeholders to develop a geothermal heating district for the town and, in pursuit of this, shall seek additional funding sources to initiate geothermal heating projects.
- I.1.C.b.4 The Town shall establish the regulatory framework to encourage and facilitate the use of geothermal heating, including provisions for installation and operation of district heating, and requirements that future buildings be constructed with heating systems that can readily be converted to geothermal.

I.1.C.b.5 The Town shall encourage the use of renewable fuels, such as biodiesel, and develop a regulatory framework and incentives to facilitate the use of these resources.

Further, the project is consistent with the State of California's Public Utilities Act for attainment of 20 percent renewable energy use.

Although commercial geothermal energy supplies are produced in the Mammoth area, there are currently no direct uses of geothermal energy in the Town or for structures and uses in the Town. As noted in Section 4.4 (Geology), however, a working group has been convened to ensure the compatibility of geothermal operations with Town activities and to explore the potential for future direct use of geothermal energy in the Town and surround area. If direct use is eventually found feasible, this would enable the Town to achieve levels of renewable energy use even higher than at present. Project implementation would support efforts to that end. Therefore, the project would result in less than significant impacts and no mitigation measures are necessary.

### **Propane**

Growth and development under the project may increase the demand for propane services and facilities. However, propane services are not anticipated to be significantly impacted by the project. The propane infrastructure is designed for expansion to accommodate the population growth anticipated under the project (Sonya Brynelsen, Town, Planner, email, November 22, 2004). The project would have less than significant impacts so no mitigation measures would be necessary.

### **Communications**

Implementation of the project would not significantly impact existing communication services. Any needed construction or modification would be funded out of user service and connection fees or through developer contributions; therefore, this would be a less than significant impact and no mitigation measures are necessary.

### **Implementation Measures in the Updated Plan**

The Plan Update proposes the adoption of the following implementation measures to reduce potential impacts associated with energy:

I.1.C.b.3: The Town shall work collaboratively with other public agencies and private stakeholders to develop a geothermal heating district for the Town and, in pursuit of this, shall seek additional funding sources to initiate geothermal heating projects.

- I.1.C.b.4: The Town shall establish regulatory framework to encourage and facilitate the use of geothermal heating, including provisions for installation and operation of district heating, and requirements and future buildings be constructed with heating systems that can readily convert to geothermal.
- VII.1.E.a.2 The Town shall continue to investigate and work with private businesses and public agencies to pursue the development of geothermal heating opportunities for snow removal operations.
- I.1.C.b.4 The Town shall establish the regulatory framework to encourage and facilitate the use of geothermal heating, including provisions for installation and operation of district heating, and requirements that future buildings be constructed with heating systems that can readily convert to geothermal.

There are sufficient energy and communication facilities to accommodate the projected growth that would occur under the Updated Plan. In addition, the Town has adopted by Resolution No 04-77, Renewable Energy Policies, for the town which are supportive of energy conservation, renewable energy resources, and community education and outreach. These policies are mirrored in the Updated Plan. Therefore, the project would not result in substantial adverse physical impacts associated with the provision of new or physically altered energy or communication facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable levels of service.

### **Mitigation Measures**

The Update Plan would not result in a significant impact with regard to energy and communication facilities. Therefore, no mitigation measures are required.

### **Level of Significance After Mitigation**

Impacts with regard to energy and communication facilities would be less than significant.