3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES
3.12 WASTEWATER

This section addresses the potential impacts of the project on local and regional wastewater facilities and infrastructure. The proposed project's consistency with adopted wastewater plans and policies is also discussed. The information contained in this section is based on data from and in consultation with the Mammoth Community Water District (MCWD) and current and future wastewater flows provided by the MCWD in the 2005 Urban Water Management Plan.

3.12.1 REGULATORY FRAMEWORK

There are several regulations and plans regarding wastewater that are applicable to the project site and the proposed development. The project is subject to the Lahontan Regional Water Quality Control Board (RWQCB), the 2005 Mammoth Community Water District Urban Water Management Plan, the Town of Mammoth Lakes adopted General Plan (1987), the Town Draft General Plan Update (2005)**,** and the Mammoth Mountain Ski Area (MMSA) Development Plan. These are discussed in detail below.

a. Regional

(1) Water Quality Control Plan for the Lahontan Region, North and South Basins

The Town is within the jurisdictional boundaries of the Lahontan RWQCB. The Lahontan RWQCB develops and enforces water quality objectives and implementation plans that safeguard the quality of water resources in its region. Chapter 4.4 of the Water Quality Control Plan for the Lahontan Region, North and South Basins, outlines policies and regulations for municipal wastewater treatment, disposal, and reclamation. The standards contained within the Water Quality Control Plan are designed to provide developers with a uniform approach for the design and installation of adequate systems to control wastewater and wastewater treatment/ sewage disposal impacts from the Town, and to prevent any potential contamination of groundwater at the discharge site.

(2) Mammoth Community Water District 2005 Urban Water Management Plan

Formed in 1958, the Mammoth Community Water District provides water and wastewater service to the community of Mammoth Lakes. The updated 2005 Urban Water Management Plan (UWMP) for the Mammoth Community Water District provides information about MCWD's responsibilities towards water supply and water recycling in the community including wastewater generation, collection, treatment, and disposal. Treated wastewater recycling is currently under evaluation and is anticipated to be used for irrigation purposes on the Sierra Star Golf Course, Snow Creek Golf Course, and the Shady Rest Park in the community.

b. Local

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

The Land Use Element of the Town of Mammoth Lakes General Plan, which was adopted in 1987, includes the following policies regarding wastewater management:

1. The Town shall work cooperatively with the Mammoth County Water District, Mono County and other agencies, to provide the needed sewage facilities for the community's present and future needs.

2. The Town shall monitor growth trends and wastewater tap requirements to assure development does not exceed the capacity of sewage lines and facilities. The Town shall encourage the MCWD to have adequate sewage capacity available when needed.

3. The Town shall permit only that development which can be adequately accommodated by the sewage facilities and lines, through conditions in the Town Development Code.

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

The 2005 Draft General Plan Update includes goals, objectives, policies, and implementation measures regarding wastewater. The following policies and implementation measures regarding wastewater are applicable to the project:

Policy 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.

Implementation Measure

II.1.C.a.1: The Town shall ensure service providers are involved in development review process.

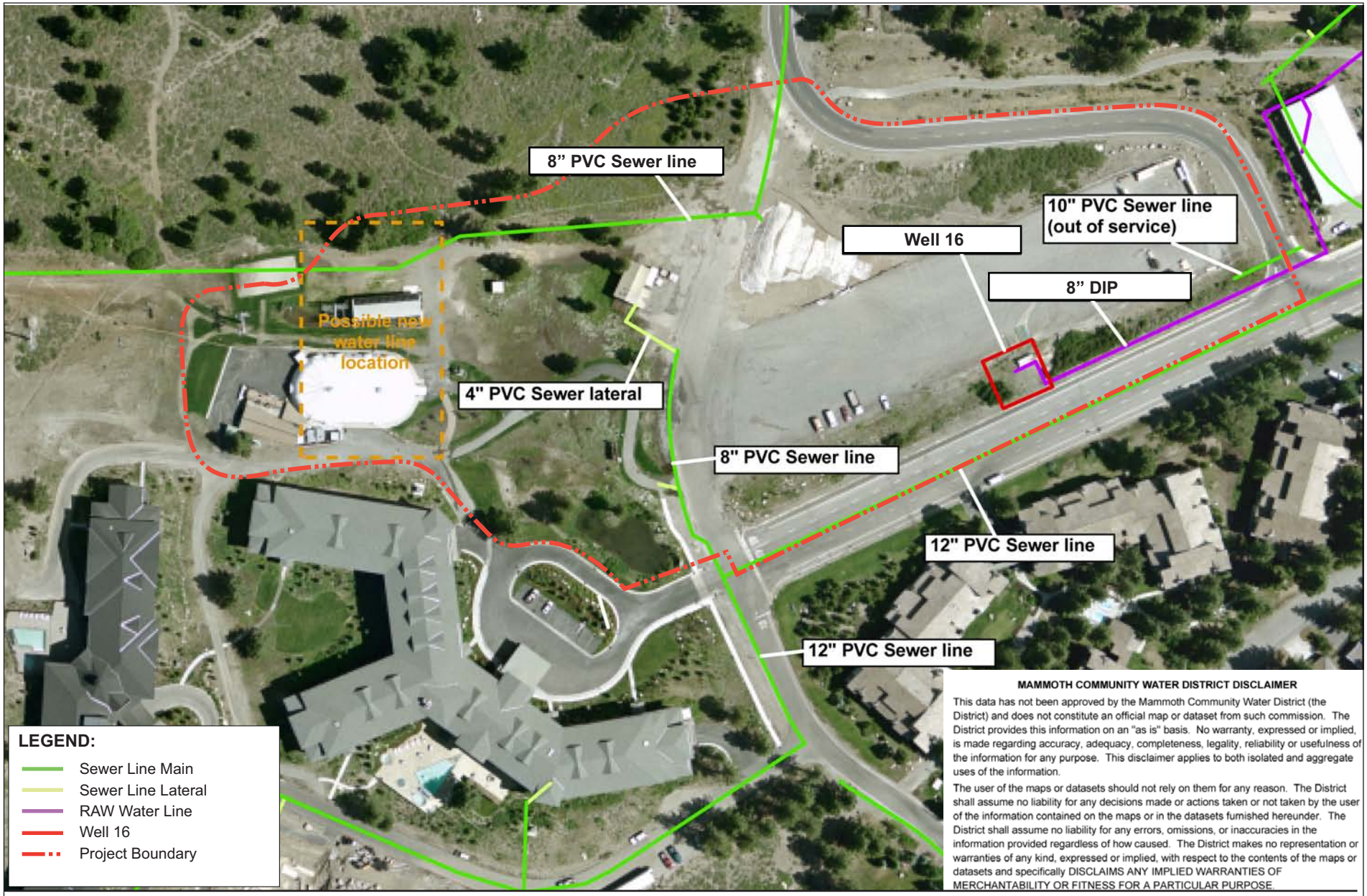
(3) Mammoth Mountain Ski Area Master Development Plan

The MMSA Development Plan (the Development Plan) is the overall operational plan for buildout of MMSA's facilities and provides the foundation for the Forest Service Special Use Permit under which MMSA operates. The Development Plan applies only to lands administered by the Forest Service. The Development Plan proposes to utilize the current existing wastewater facility systems. The two wastewater systems that currently service the area include: the MCWD sewage system and the Mammoth Mountain Ski Area sewage system. Currently, these two wastewater facilities serve 7 base lodges. The project area is considered a part of Base Lodge 7 and would be served by the MCWD. Fee payment is required prior to issuance of a permit to connect to MCWD wastewater facilities.

3.12.2 AFFECTED ENVIRONMENT

The MCWD provides wastewater collection and treatment facilities for the Town of Mammoth Lakes, including the existing temporary facility. MCWD operates and maintains pump stations and over 35 miles of sewer mains and interceptors. There are four main trunks of the wastewater collection system, which are located along Old Mammoth Road, Meridian Boulevard, Sierra Star Golf Course to Center Street, and Main Street. Interceptor lines vary in diameter from 18 to 21 inches.

Based on general commercial numbers provided by the MCWD a factor of 0.14 gallons per square feet, the existing temporary facility generates 2,250 gpd of wastewater on average with 3,900 gpd on peak days. As shown in Figure 47 on page 467, the existing wastewater infrastructure within the project area consists of five wastewater pipelines ranging from 6 to 18 inches in diameter. East of the project site, there is a 10 inch PVC wastewater line that is out of service. Northwest of the site there is an 8 inch PVC wastewater main line that runs west laterally and a short 4 inch PVC wastewater line that runs southeasterly and connects to an 8 inch PVC wastewater main line running longitudinally. This 8 inch wastewater line connects to a 12 inch PVC wastewater line that continues to run south past Meridian Boulevard and then west on Spring Road. Perpendicular to this 8 inch PVC wastewater main line, at the intersection of Majestic and Meridian Boulevard, there is a 12 inch PVC wastewater main line that runs east



MAMMOTH COMMUNITY WATER DISTRICT DISCLAIMER

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PCR

NOTE TO TOWN/MCWD:
PCR is not able to remove the "Possible new water line location" text & boundary line, and the "8-inch DIP RAW Water line" text box and line from this figure.

N

0 100 200 Feet

Source: Mammoth Community Water District, 2006.

Figure 47
Existing Sewer Lines in Project Area

laterally. Additionally, there is a wastewater line to the south of the project site that only services the existing restrooms.

The wastewater generated by the existing facility is conveyed to the 10-inch wastewater line located in Minaret Road and Main Street, which is the main confluence for the Town and has a total capacity of 310 gallons per minute.

The wastewater treatment plant, which is located in the Valley District east of the Gateway area near the intersection of Meridian Boulevard and State Route 203, is owned and operated by the MCWD. As shown in Table 67 on page 469, the 2005 UWMP indicates that an average of approximately 1.7 million gallons per day (mgd) of wastewater are generated, collected, and treated. Peak wastewater flows in 2005 were 2.6 mgd generated on average during the holiday seasons. By the year 2025, MCWD projects that 2.6 million gallons per day of wastewater will be generated and collected on average with peak flows reaching approximately 4.3 million gallons per day. The current existing design capacity for the plant is estimated at 4.9 million gallons per day (mgd). The existing wastewater treatment plant capacity is designed to accommodate the average and peak amounts of wastewater generated in the community through the year 2025.

All raw wastewater is delivered to the MCWD wastewater treatment facility through two 18-inch interceptor wastewater lines. The treatment facility provides advanced secondary treatment, which includes biological treatment, filtration, and disinfection through the utilization of chlorine. The treated wastewater then discharges into Laurel Pond, an effluent water body located approximately 5.5 miles southeast of the Town on Forest Service land. The District has been discharging treated effluent to this pond since 1985 and holds a waste discharge permit for the discharge. Throughout the years, this effluent water body has become a year round migratory magnet for waterfowl and shorebirds.[107] Disposal occurs at the pond through percolation into the ground and through evaporation into the atmosphere. There are no reported water quality issues associated with the discharged wastewater.

In terms of planned improvements to the system, MCWD anticipates upgrading the filter backwash system at Groundwater Treatment Plant #2, which is located adjacent to the project site. The planned upgrade would increase capacity in the sewer lines by about 300 to 350 gallons per minute. This would be achieved by reclaiming the filtered backwash water and could recycle as much as 95 to 99 percent of the backwash that currently goes into the sewer. Although the improvement has not yet been designed, construction may occur as early as the winter 2006/2007 or as late as winter 2007/2008.[108] Planned improvements to the system include an expansion of

[107] *http://www.fs.fed.us/outdoors/naturewatch/california/Wildlife/laurel-ponds/index.shtml*

[108] *Ericka Hegeman, MCWD May, 2006.*

Table 67

Current and Projected Daily Wastewater Flows Generated and Collected (Million Gallons per Day)

	2005	2010	2015	2020	2025
Average Wastewater Flows collected and treated in service area	1.65	1.89	2.13	2.37	2.6
Peak Wastewater Flows	2.6				4.3
Wastewater Treatment Plant Design Capacity	4.9	4.9	4.9	4.9	4.9

Source: MCWD Urban Water Management Plan, 2005

the current wastewater collection pipeline from Meridian Boulevard to Sierra Industrial Park by 2009.

3.12.3 ENVIRONMENTAL CONSEQUENCES

a. CEQA Significance Criteria

Based on the criteria set forth in Appendix G of the CEQA Guidelines, the project would have a significant impact on wastewater conveyance and treatment if:

- the project would require or result in the construction of new wastewater treatment facilities or an expansion of the existing MCWD treatment facility, the construction of which could cause significant environmental effects;
- the project would result in the determination by MCWD, the wastewater treatment service provider which serves the project, that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments;
- the project would exceed wastewater treatment requirements of the Lahontan Regional Water Quality Control Board.

b. Methodology

The analysis estimates and compares the expected demand for service to the capacity of the existing collection, conveyance, and treatment facilities. Wastewater generation estimates for

the proposed project were evaluated by the MCWD to determine the potential impacts on the wastewater conveyance and treatment facilities. MCWD staff installed wastewater line flow monitoring equipment downstream of the proposed location of Eagle Lodge to collect data on the pipeline capacity. Water meter data was then used to develop wastewater generation rates. Then, the generation rate (the average wastewater flow per unit) was multiplied by the amount of units (or square feet respectively) to determine the total average and peak wastewater flows to be generated by each project option. The total amount of wastewater generated for each option was then compared to the existing wastewater generation rates onsite to calculate the net increase of wastewater that would be generated by the site. The wastewater and treatment facility capacities were considered to determine if sufficient capacity exists to serve the site.

c. Environmental Consequences of the Proposed Action

(1) Construction

Portable toilets are anticipated to be provided during construction, as well as maintained during all phases of construction by a private contracted vendor who would dispose of waste off-site. Construction personnel would generate a negligible amount of wastewater. Thus, no measurable wastewater flows are anticipated to constrain the existing wastewater capacity during construction.

Project construction activities would include the realignment or abandonment of the 12 inch PVC wastewater lines servicing the restrooms, the expansion of the wastewater system on Majestic Pines Drive and Meridian Boulevard where an 8 inch on site PVC wastewater line would tie in to the main system, and the possible installation of a new line at the corner of Old Mammoth Road and SR-203. Wastewater line abandonment would include capping off of pipelines and plugging manholes with water tight plugs or completely removing manholes. In cases where abandoned wastewater lines interfere with construction of underground facilities, the lines must be removed. Any sewer line abandonment would be completed to the satisfaction of MCWD requirements. In addition, construction would include the installation of tie-ins of new wastewater lines to the existing lines. Final determination of the necessary size and capacities of the wastewater tie-ins for the project is dependent upon the final design of the project.

In compliance with Lahontan RWQCB policies, Best Management Practices (BMPs) would be incorporated during pre-and post-construction. All wastewater lines to be sited shall be a minimum of 50 feet from any well and 25 feet from any drainage course or ephemeral stream (as measured from the edge of the channel). Any further upgrades to the wastewater system collection would be the responsibility of the MCWD. In addition, no disruption of service is expected to occur as a result of construction activities with regard to public utilities and

wastewater services. Therefore, impacts related to construction of the proposed project expected to occur as a result of wastewater construction would be less than significant.

(2) Operation

Table 68 on page 472 provides the estimated wastewater generation rates that would result from the project. As shown in Table 68, the project would generate peak wastewater flows of 30,700 gallons per day (gpd) for the condo/hotel option and 45,830 gpd for the hotel only option. The project would result in a net increase on a peak day of 26,500 gpd for the condo/hotel option and 41,630 gpd for the hotel only option. Based on the MCWD Urban Water Management Plan, the existing capacity at the MCWD treatment facility is 4.9 million gallons per day (mgd) of which 1.65 mgd is generated and collected on average and a peak of 2.6 mgd is currently treated in the Town. The project net increase in wastewater generation would represent an approximately 0.010 percent increase out of the current 2.6 million gallons per day that is treated in the Town on a peak day for the condo/hotel option and an approximately 0.016 percent increase for the hotel only option. Therefore, the 4.9 mgd design capacity of the wastewater facility would be able to accommodate wastewater generated by the project.

While the wastewater treatment plant would accommodate the project's increase in wastewater, the existing off site wastewater infrastructure has insufficient capacity to accommodate the project flows. The main collection line at Old Mammoth Road and Meridian Boulevard is at capacity and additional wastewater flows would exceed capacity. In order to resolve this shortfall in capacity the District anticipates upgrading the filter backwash system at Groundwater Treatment Plant #2. In conjunction with the filter backwash recycling project, the District is currently working on ways to reduce infiltration to this pipe, which plays a major role in the lack of capacity in this pipe. If these two projects do not create enough capacity for increased flows as a result of the Eagle Lodge project, then the District may need to upsize the sewer pipeline on Meridian Boulevard near the Bell Shaped Parcel and/or construct a new main line from the intersection of Old Mammoth Road and Meridian Boulevard down Meridian Boulevard to the wastewater treatment plant.

As indicated previously, MCWD anticipates upgrading of the filter backwash system at Groundwater Treatment Plant #2, which is located adjacent to the project site. This upgrade is anticipated to increase capacity in the sewer lines by approximately 300 to 350 gallons per minute. This would be achieved by reclaiming the filtered backwash water, possibly recycling as much as 95 to 99 percent of the backwash that currently goes into the sewer. Construction is likely to begin as early as during the winter of 2006/2007 or as late as winter 2007/2008.[109] However, this upgrade is necessary to provide services to the project. Therefore, a mitigation

[109] *The upgrade of the wastewater collection system will be the responsibility of the MCWD.*

Table 68

Estimated Wastewater Generation Rates[a]

Use Type	Amt of Development	Unit of Measure	Average Wastewater Flow (gal/day)	Peak Wastewater Flow [b] (gal/day)	Average Total Wastewater Flow (gal/day)	Peak Daily Flows (gal/ day)
Condo/Hotel Option						
Condo/Hotel	62	Units	60/ unit	100/unit	3,720	6,200
Fractional Ownership Use[c]	21	Units	60/unit	100/unit	1,260	2,100
Commercial	80,000	sq ft	0.15/sq ft	0.28/sq ft	12,000	22,400
Subtotal					**16,980**	**30,700**
Less Existing Development	15,000	sq ft	0.15/sq ft	0.28/sq ft	2,250	4,200
Net Total					**14,730**	**26,500**
Hotel Option						
Hotel	213	Units	75/unit	110/ unit	15,975	23,430
Commercial	80,000	sq ft	0.15/sq ft	0.28/sq ft	12,000	22,400
Subtotal					**27,975**	**45,830**
Less Existing Development	15,000	sq ft	0.15/sq ft	0.28/sq ft	2,250	4,200
Net Total					**25,725**	**41,630**

[a] *Factors obtained from MCWD. Average day is the average day calculated from the average 36 months of usage.*

[b] *Wastewater peak day is based on the peak winter month water usage.*

[c] *The wastewater generation rates for fractional ownership units are considered the same as for condo/hotel.*

Note: sq ft= square feet

Source: PCR Services Corporation, 2006

measure is included to require that the upgrade be operational prior to the occupancy of the project.

In conclusion, the project would result in an increase of wastewater generated, but not to the extent that it would constrain the capacity of the existing wastewater infrastructure at the MCWD Wastewater Treatment Facility. The proposed project would not require the construction of new facilities or the expansion of the existing wastewater treatment facilities. In addition, the proposed project would not exceed wastewater treatment requirements of the LRWQCB. Furthermore, the increase of wastewater generated on site that would result from the project would be accommodated by MCWD's planned improvements to the existing infrastructure. Therefore, impacts regarding wastewater associated with the project implementation would be less than significant.

(3) Consistency With Applicable Regulations

The project would comply with all polices and regulations outlined within the Water Quality Control Plan to be reviewed and approved by the Town and/or the Lahontan RWQCB. As stated above, construction would incorporate BMP's during pre- and post-construction in compliance with Lahontan RWQCB policies. Additionally, the proposed project would ensure compliance with the minimum distances for siting any wastewater lines. Thus, project implementation would comply with the Water Quality Control Plan for the Lahontan Region, North and South Basins.

As the project would be served by the MCWD, all wastewater generated, collected, treated, and disposed would comply with the MCWD 2005 Urban Water Management Plan. Additionally, any efforts to undergo treated wastewater recycling would be supported by the project in compliance with the 2005 Urban Water Management Plan.

Wastewater Management Policy 1 in the 1987 General Plan requires that the Town work cooperatively with the MCWD, Mono County, and other agencies to provide the necessary wastewater facilities for the community's present and future needs. As discussed in this section, the Town has coordinated with MCWD to ensure that adequate wastewater facilities exist to accommodate the proposed project. As required by Policy 2 of the General Plan, the Town monitors growth trends and wastewater generation to ensure that the service provider can accommodate the projected growth. In compliance with Policy 3, occupancy of the development would not occur prior to a necessary upgrade of the wastewater system.

With regard to the 2005 Draft General Plan Update, Policy II.1.C.a requires that new development densities do not exceed the capacity of public service infrastructure and utility systems. The project would comply with the Policy and its associated implementation measures as the Town has coordinated with MCWD to ensure that adequate capacity exists to serve the proposed development.

d. Mitigation Measures

WW-1: Prior to the issuance of a Certificate of Occupancy for the commercial and residential components of the project, MCWD shall install and have operational the filter backwash system upgrade at Groundwater Treatment Plant #2.

With incorporation of the recommended mitigation measure above, impacts to existing wastewater treatment facilities and wastewater systems would be reduced to a less than significant level.

e. Environmental Consequences of Alternative 1 - Development in Accordance with Existing Regulations Alternative

Based on generation factors provided by the MCWD, the Alternative would generate 4,900 gallons per day on average with peak wastewater generation rates at 9,800 gallons per day. When compared to existing conditions, these rates represent a 0.0012 percent increase in wastewater generated on an average day in the Town and a 0.0022 percent increase in wastewater flows on peak days. Conveyance facilities onsite would be re-aligned to accommodate the project. Wastewater generated onsite would be conveyed to the MCWD wastewater treatment facility plant and discharged to Laurel Pond. The wastewater treatment facility plant has a design capacity of 4.9 million gallons of wastewater per day, which would be sufficient to accommodate the wastewater generated under Alternative 1. Therefore, the construction of new facilities or the expansion of existing facilities would not be required. Construction and operation of the Alternative would comply with all applicable policies and regulations, including compliance with LRWQCB wastewater treatment requirements. Thus, impacts with regard to wastewater facilities for Alternative 1 would be less than significant.

f. Environmental Consequences of Alternative 2 - Reduced Intensity Alternative

Under Alternative 2, the development would contain either 138 hotel rooms or 54 residential units. The 138 hotel room option under this Alternative would create 8,280 gallons per day on an average day and 13,800 gallons per day during a peak day. The 54 residential units that would occur under Alternative 2 would create 3,240 gallons per day of wastewater and 5,400 gallons per day on peak days. Either scenario would result in an increase considerably less than one percent (0.009 and 0.007, respectively) when compared to the existing peak wastewater flows produced by the existing land uses. Wastewater would continue to be accommodated by the existing wastewater facilities and conveyed in the same manner as under existing conditions. Construction and operation of this Alternative would comply with all applicable policies and regulations of the LRWQCB and impacts with regard to wastewater would be considered less than significant.

g. Environmental Consequences of Alternative 3 - Alternate Design Alternative

Average wastewater flows would be 16,980 gallons per day with peak flows of 30,700 gallons per day, which represents an approximately 0.012 percent increase in wastewater flows generated per day in the Town on a peak day. Wastewater conveyance pipelines would continue to direct flows to the MCWD wastewater treatment facility and discharge into Laurel Pond. The treatment facility has the design capacity to accommodate wastewater generated under Alternative 3. As the Alternative would be accommodated by the existing wastewater facilities, the Alternative would not require the construction of a new facility nor an expansion of the existing one. In addition, the construction and operation of the Alternative would comply with all

applicable policies and regulations of LRWQCB. Therefore impacts with regard to wastewater facilities would be less than significant.

h. Environmental Consequences of Alternative 4 - No Action Alternative

Under the No Action Alternative, the existing tent would be removed and the Alternative would result in a reduction of wastewater generation compared with existing conditions. The minimal flow rates that would occur could be accommodated by the existing wastewater conveyance system and wastewater treatment plant. Therefore, impacts to the existing wastewater collection and treatment system would be less than significant under the No Action Alternative.