# 5.4 PUBLIC SERVICES AND UTILITIES

This section is based upon information from public service and utility agencies; refer to Appendix 15.1, *Initial Study and Notice of Preparation,* and Appendix 15.6, *Correspondence*. *O*ther references include and the *Yucca Valley Master Plan – Evaluation of Existing Utilities* (January 2005) prepared by RBF Consulting, the *Water and Wastewater Utility Plan* (January 2005) prepared by RBF Consulting, and the *Preliminary Draft SB 610 Water Supply Assessment* (June 2006) prepared by RBF Consulting. Public services include fire protection, police protection, schools, library services, roadway maintenance, and recreation. Utilities include water, wastewater (sewers), solid waste, electricity, natural gas, telephone, and cable.

This section discusses existing conditions, which provide background information necessary to determine potential impacts of the proposed Project. Criteria by which an impact may be considered potentially significant are provided, along with a discussion of impacts pursuant to Appendix G of the *CEQA Guidelines*. Mitigation measures are identified to avoid or reduce potential impacts to less than significant levels.

## 5.4.1 EXISTING SETTING

### FIRE PROTECTION

The San Bernardino County Fire Department (County Fire Department) provides fire protection and emergency medical services to the Specific Plan Area (SPA). Fire Station 121 (at 57201 Twentynine Palms Highway) is the jurisdictional station for the SPA. Table 5.4-1, *Fire Station Information*, details fire and paramedic resources serving the SPA.

**Table 5.4-1**
**Fire Station Information**

| Fire Station Location | Equipment | Average Response Time[1] (minutes) |
|---|---|---|
| Fire Station 121<br>*Jurisdictional Station*<br>57201 Twentynine Palms Highway<br>Town of Yucca Valley | 1-Type One Paramedic Engine Company<br>1-Paramedic Ambulance<br>6-On duty personnel | 6-7 |
| Fire Station 122<br>58612 Aberdeen<br>County of San Bernardino | 1-Type One Paramedic Engine Company<br>1-Paramedic Ambulance<br>4-On duty personnel | 22-28 |
| Fire Station 36<br>6715 Park Boulevard<br>Joshua Tree | 1-Type One Paramedic Engine Company<br>3-On duty personnel | 17-24 |
| Source: Paul Summers, Division Chief, South Desert Division, San Bernardino County Fire Department, June 23, 2006. | | |
| 1. Average response times for the Town of Yucca Valley. This assumes resources are static in the fire station and does not include call processing (reporting and dispatching) or preparation time. | | |

Response times are measured from the point at which the agency receives notification of the incident at the station, to their arrival on the site. Although the three fire stations are the most likely to respond to the SPA, according to County Fire Department, any County Fire Department emergency unit may respond to an incident anywhere in County Fire Department territory, depending on the need and availability. A major incident would draw multiple response units from four or more stations. The Hi-Desert Water District supplies water for the three stations. The available fire-flow currently supplied by the Hi-Desert Water District is inadequate for the SPA.[1]

The Insurance Services Office (ISO) collects information, which includes evaluations of public fire protection, flood risk, and adoption and enforcement of building codes in individual communities. ISO analyzes the relevant data using the Fire Suppression Classification, which is assigned a rating from 1 to 10. Class 1 represents exemplary public protection and Class 10 indicates that the area's fire-suppression program doesn't meet ISO's minimum criteria. The current ISO rating in Yucca Valley is Class 5.

## POLICE PROTECTION

San Bernardino County Sheriff's Department serves the Town of Yucca Valley. Specifically, the SPA is served by the Morongo Basin Sheriff's Station, located at 6527 White Feather Road, Joshua Tree, approximately ten miles from the SPA. The station serves a geographical area of approximately 5,200 square miles and a population in excess of 65,000 residents.[2]

Law enforcement needs in Yucca Valley are based on several factors, which include population, numbers of calls for service, response times, number of traffic accidents, response times, arrests, bookings, and patrol miles. The Town's law enforcement strategy includes the achievement of a policing ratio or one law enforcement officer per 1,000 citizens. On most days and most shifts, two officers and two patrol cars serve the Town of Yucca Valley, which includes the SPA.

Table 5.4-2, *Law Enforcement*, provides law enforcement projections and indicates that, based on the Towns target policing ratio and the SPA's existing population; the existing law enforcement demand for the SPA is less than one officer.

Response times are measured from the time a call is received until the patrol car arrives at the incident location. Response times vary, as calls are handled by the nearest available patrol car located within the patrol area, not necessarily from the station itself. Currently, emergency response time to the SPA is approximately five minutes.

[1] Paul Summers, Division Chief, South Desert Division, San Bernardino Fire Department, June 23, 2006.

[2] James R. Williams, Captain, County of San Bernardino Sheriff's Department, Morongo Basin Station, June 29, 2006.

**Table 5.4-2**
**Law Enforcement**

| Geography | Population | Officers | |
|---|---|---|---|
| | | Rate[1] | Demand |
| Within SPA - Existing | 821 persons[2] | one officer per 1,000 persons | 0.8 officer |
| Within SPA - General Plan Buildout | 68 persons[3] | | 0.1 officer |
| Town of Yucca Valley- Existing | 20,537 persons[4] | | 21.0 officers |

Notes:
1. James R. Williams, Captain, County of San Bernardino Sheriff's Department, Morongo Basin Station, June 29, 2006.
2. Based on 326 dwelling units (Traffic Impact Analysis) and 2.517 persons per household (California Department of Finance).
3. Based on 27 dwelling units and 2.517 persons per household.
4. State of California, Department of Finance, *E-5 Population and Housing Estimates, for Cities, Counties, and the State, 2001-2006, with 2000 Benchmark*. Sacramento, California, May 2006.

## SCHOOLS

The Morongo Unified School District (MUSD) serves the SPA. Table 5.4-3, *Schools Serving the Project Area*, identifies the schools within the District that serve the SPA, their locations, current enrollment as of June 1, 2006, and enrollment capacities. A review of Table 5.4-3 indicates that the La Contenta Middle School is over capacity.

Seventeen schools are situated within MUSD, all of which have experienced an increase in enrollment since 1980. MUSD anticipates steady growth in student enrollment as a trend for the entire District; this includes an anticipated growth in the SPA. Most of the schools in the District are operating with student enrollment that exceeds the original design capacities.

**Table 5.4-3**
**Schools Serving the Project Area**

| School | Location | Current Enrollment (students) | Enrollment Capacity (students) |
|---|---|---|---|
| Yucca Valley Elementary | 7601 Hopi Trail | 538 | 550 |
| La Contenta Middle School | 7050 La Contenta Road | 710 | 700 |
| Yucca Valley High School | 7600 Sage Avenue | 1,489 | 1,550 |

Sources: Joseph P Sullivan, Director, Facilities Planning, Morongo Unified School District, February 15, 2006 and Telephone Conversation, June 1, 2006.

MUSD collects Level 1 School Fees for residential and commercial development that are matched with the State School Building Program. On January 25, 2006, the State Allocation Board (SAB) increased the amount of the Statutory maximum Level 1 School Fees, which may be levied by a school district on new development. The maximum Level 1 School Fees are currently $2.63 per assessable square foot of residential construction and $0.42 per square foot of enclosed and covered space for commercial/industrial development. Other funds come from MUSD's Measure O (General Obligation Bond) passed in November 2005.

## LIBRARIES

The County of San Bernardino Public Library provides library service to the Town of Yucca Valley and the SPA. The Yucca Valley Library is located at 57098 Twentynine Palms Highway in Yucca Valley, which is approximately three miles east of the SPA. The Library is 8,252 square feet (SF) with a staff of eight full-time employees and 72 volunteers. The facility maintains a collection of 51,000 books and other materials (video tapes, periodicals, etc.).

Table 5.4-4, *Library Resources*, provides library resource projections and indicates that, based on the library's planning standards and the Town's existing population, the target facility size for the Yucca Valley Library is 8,215 SF and the target collection size is 20,537 books/other materials. Thus, both the existing facility and collection exceed the target ratios by approximately 37 SF and 30,463 books/ materials, respectively.

The Public Library relies on property tax and State library funding for revenue. There are no development fees or assessment fees required by the Town at this time. According to the County Library's 2001 Master Facility Plan, there is a projected need of 20,500 additional SF of facility space to accommodate the 2021 anticipated population. At this time, there are no plans for library expansion.

**Table 5.4-4**
**Library Resources**

| Geography | Population | Facility Space | | Collection (Books/Materials) | |
|---|---|---|---|---|---|
| | | Rate[1] | Demand | Rate[1] | Demand |
| Within SPA - Existing | 821 persons[2] | 0.4 SF per person | 328 SF | 1.0 per person | 821 collection |
| Within SPA - General Plan Buildout | 68 persons[3] | | 27 SF | | 68 collection |
| Town of Yucca Valley- Existing | 20,537 persons[4] | | 8,215 SF | | 20,537 collection |

1. Linda Grove, County of San Bernardino Public Library, July 17, 2006.
2. Based on 326 dwelling units (Traffic Impact Analysis) and 2.517 persons per household (California Department of Finance).
3. Based on 27 dwelling units and 2.517 persons per household.
4. State of California, Department of Finance, *E-5 Population and Housing Estimates, for Cities, Counties, and the State, 2001-2006, with 2000 Benchmark*. Sacramento, California, May 2006.

## ROADWAY MAINTENANCE

The SPA is served predominantly by a grid system of local and collector streets that flow to Twentynine Palms Highway (existing State Route 62), which traverses the center of the Town. Twentynine Palms Highway is the main arterial serving the SPA.

The Town of Yucca Valley Public Works/Engineering Department facilitates improvements, inspection, and support for public and private projects, which include streets. Divisions within the Department are responsible for maintenance and

improvements within the Town. The Street Maintenance staff attends to the routine and emergency maintenance of more than 150 miles of paved roads in Yucca Valley. The street crew completes immediate repairs and preventative measures, as necessary. Major road construction is accomplished in conjunction with additional contractors and is completed with available funding. Town repair and maintenance services apply to streets, sidewalks, curbs and gutters, rights-of-way, shoulders, landscape and parkway trees, storm drains, and drainage channels.

## RECREATION

Two public parks providing approximately 5.5 acres of developed parkland serve the SPA. Remembrance Park, formerly known as Triangle Park, is an approximately 0.5-acre passive park situated at the intersection of State Route 62, Yucca Trail, and Apache Trail. The park has served as a focal point, equipped with a pedestrian walkway, benches, public art, and a Veterans Memorial exhibit. Jacobs Park is a 5-acre neighborhood park located less than 1.0-mile from the SPA, at the corner of Onaga Trail and Hopi Trail. Jacobs Park provides the only two publicly-lit tennis courts in Yucca Valley, a playground, community building, and t-ball fields. Residents in and near the SPA utilize the park. The Yucca Valley Community Center is a 22-acre facility located within 2.0 miles of the SPA. The Center consists of the Town Hall, public library, senior center, a museum, and several recreation amenities where many events, meetings, and public activities take place. The current acreage of parkland inventory in the Town of Yucca Valley overall is approximately 174.9 acres.[3]

Table 5.4-5, *Parkland Demand - Existing*, provides parkland demand projections, based on the Town's adopted standard of 5.0 acres of developed parkland per 1,000 persons. Table 5.4-5 indicates the target parkland inventory for the Town of Yucca Valley, based on the Town's existing population, is 102.7 acres. Thus, the existing parkland inventory exceeds the target ratio by approximately 72 acres.

**Table 5.4-5**
**Parkland Demand – Existing**

| Geography | Population | Developed Parkland | |
|---|---|---|---|
| | | Rate[1] | Demand |
| Within SPA - Existing | 821 persons[2] | | 4.1 acres |
| Within SPA - General Plan Buildout | 68 persons[3] | 5.0 acres per 1,000 persons | 0.34 acres |
| Town of Yucca Valley- Existing | 20,537 persons[4] | | 102.7 acres |

1. *Town of Yucca Valley Parks Master Plan*, December 16, 1999.
2. Based on 326 dwelling units (Traffic Impact Analysis) and 2.517 persons per household (California Department of Finance).
3. Based on 27 dwelling units and 2.517 persons per household.
4. State of California, Department of Finance, *E-5 Population and Housing Estimates, for Cities, Counties, and the State, 2001-2006, with 2000 Benchmark*. Sacramento, California, May 2006.

[3] *Town of Yucca Valley Parks Master Plan*, December 16, 1999.

# WATER

In accordance with Water Code Section 10910 and Senate Bill 610, a Water Supply Assessment (WSA) (December 2006) was prepared by RBF Consulting in December 2006. The Assessment is included in Appendix 15.5a, *Water Supply Assessment*. The primary reference for the WSA is the Hi-Desert Water District's Urban Water Management Plan (UWMP). In 2000, the HDWD submitted the Warren Valley Basin Management Plan along with an addendum to comply with the URMP provisions at that time. With the implementation of SB 610, and its impact to subsequent UWMP preparation, the HDWD provided supplements to the 2000 Plan. The HDWD then produced its stand-alone Urban Water Management Plan in 2005.

In early 2007 the Hi-Desert Water District (HDWD) began to draft all WSAs for new development/projects within the district. In May 2007, the Hi-Desert Water District prepared a Water Supply Assessment for the Old Town Yucca Valley Specific Plan. The Assessment is included in Appendix 15.5b, *Hi-Desert Water District, Water Supply Assessment*. The Water Board adopted the final WSA and it's findings pursuant to SB610 at the HDWD Board of Directors meeting May 23, 2007.

## Water Source

The Hi-Desert Water District (HDWD) serves the Town of Yucca Valley and would provide service to the specific plan area (SPA). The HDWD utilizes two principal water sources to meet demands within its service area: imported surface water supplies from the California State Water Project (SWP) and domestic groundwater supplies. Natural recharge, stormwater and wastewater return flows further augment the HDWD's total water supply portfolio. The majority of the HDWD's groundwater water supply is pumped from the Warren Valley Groundwater Basin (WVB). This Basin provides 80 percent of the HDWD's domestic water source while a secondary groundwater Basin known as the Ames/Means Valley Basin, provides the remaining 20 percent of the HDWD's water source. Table 5.4-6, *Existing Water Supply Entitlements Rights and Contracts*, provides a brief overview of the HDWD's existing water, which are discussed in detail below. Historical domestic groundwater production represents the amount of water pumped from the ground regardless of the source of recharge. Table 5.4-7, *Warren Valley Basin Historical Domestic Groundwater Production,* summarizes the historical groundwater production from the WVB by the HDWD and other groundwater right holders since 1995.

**Table 5.4-6**
**Existing Water Supply Entitlements Rights and Contracts**

| Supply | Acre-ft/year | Right | Contract |
|---|---|---|---|
| Warren Valley Basin | 1,622 | Yes | |
| Ames/Means Basin | 800 + 0.5 for each new residential meter | | Yes |
| SWP Supplies | 4,282[1] | | Yes |
| Source: High Desert Water District, Water Supply Assessment for Old Town Yucca Valley Specific Plan. | | | |
| 1. Recharge to the Warren Valley Basin for later extraction. | | | |

**Table 5.4-7**
**Warren Valley Basin Historical Domestic Groundwater Production**

| Year | Warren Valley Basin (acre-feet) | | Total |
|---|---|---|---|
| | HDWD | Private Pumbers[1] | |
| 1995 | 1,613 | 350 | 1,963 |
| 1996 | 1,366 | 330 | 1,696 |
| 1997 | 2,142 | 424 | 2,566 |
| 1998 | 1,677 | 353 | 2,030 |
| 1999 | 1,888 | 342 | 2,225 |
| 2000 | 2,213 | 258 | 2,471 |
| 2001 | 2,167 | 330 | 2,497 |
| 2002 | 2,305 | 503 | 2,808 |
| 2003 | 2,553 | 256 | 2,809 |
| 2004 | 2,378 | 207 | 2,585 |
| 2005 | 2,388 | 230 | 2,618 |

Source: RBF Consulting, Draft Waster Supply Assessment Old Town Yucca Valley Specific Plan, Town of Yucca Valley, December 2006.

1. Includes Blue Skies Country Club, Institute of Mental Physics and individual private pumpers.
2. Includes production of both adjudicated groundwater rights and contractual SWP supplies.

The HDWD currently maintains the following facilities, which provide water supply, storage, and transmission for the HDWD water system:

- 274 miles of pipeline ranging in diameter from 2 to 12 inches;
- 17 groundwater wells on the two basins capable of producing 7,000 gallons per minute;
- 16 storage tanks totaling 12.66 million gallons; and
- 2 percolation ponds atop the WVB.

**Groundwater Sources**

Warren Valley Basin. The Warren Valley Basin covers an area of approximately 26.9 square miles (17,200 acres). The Basin includes the water-bearing sediments beneath the Town of Yucca Valley and the surrounding area. The Basin is bounded on the north by the Pinto Mountain fault, on the south by the bedrock outcrop of the Little San Bernardino Mountains, on the east by a bedrock constriction called the "Yucca barrier", and on the west by a bedrock constriction and a topographic divide between Warren Valley and Morongo Valley. The productive water-bearing materials in this Basin consist of unconsolidated to partly consolidated Miocene to Quaternary continental deposits.

In 1950, the Warren Valley Basin began to overdraft. As significant growth occurred in the Yucca Valley area, this overdraft condition worsened and groundwater levels declined at an accelerated rate. During this time, the groundwater levels declined as much as 20 to 40 feet per year. This overdraft problem has been known for many years. In 1977 the groundwater Basin was approved and the HDWD was appointed

as the Watermaster. The groundwater extraction rights established by 1997 adjudication are shown in Table 5.4-8, *Warren Valley Groundwater Pumping Rights*. As a result of the HDWD's 1990 acquisition of the Yucca Water Company, the HDWD's adjudicated groundwater rights in the Basin total 1,622 AFY.

**Table 5.4-8**
**Warren Valley Groundwater Pumping Rights**

| Party to the Adjudication | Pumping Right (acre-foot/year) |
|---|---|
| Hi-Desert Waste District | 896 |
| Yucca Water Company[1] | 726 |
| Blue Skies Country Club | 585 |
| Institute of Mental Physics | 80 |
| 16 Minimal Producers | 16[2] |
| Total | 2,303 |
| Note: pumping rights exceed the native yield of the basin and are predicted on implementation of a Basin Management Plan. | |
| 1. The HDWD acquired Yucca Valley Company in 1990.<br>2. This figure is being updated by the Warren Valley Watermaster. | |

A Warren Valley Basin Management Plan was adopted in 1991 that called for importing State Water Project (SWP) water from Mojave Water Agency (MWA) through the then-proposed Morongo Basin Pipeline (MBP) to balance demand and replenish past overdraft. The 71-mile MBP has since been constructed and the HDWD has been purchasing SWP water from MWA and replenishing the WVB since 1995.

Groundwater in the WVB is supplemented by recharge at the HDWD's two percolation ponds, natural recharge from precipitation and stream flow, and percolation from return flows. Return flows are a combination of septic tank return flows, irrigation return flows, and wastewater return flows. Supply to the percolation ponds is provided by imported water from the SWP.

HDWD began to notice an increase in nitrate levels in a localized area within the WVB in 1997. The increase is a result of the return flows from the current septic systems used in Yucca Valley, and is the only foreseeable factor that could reduce supply from the WVB. In response to the increase in nitrate levels, the HDWD constructed a nitrate removal facility to treat the water, and is currently treating two groundwater wells. The HDWD is evaluating the construction of a wastewater treatment facility and sewer collection system to provide an additional source of supply, by the use of treated water to recharge the groundwater basin. The construction of a sewer system would eliminate the current septic systems that contribute to the high nitrate levels of the WVB.

Ames/Means Valley Basin. The HDWD pumps groundwater from the Ames/Means Valley Basin, which includes portions of the Ames and Copper Mountain Valley Basins as designated by Department of Water Resources (DWR). Groundwater produced by the Ames/Means Basin is identified as a part of the HDWD's total water

supplies. However, as required by the Ames Basin Agreement, water is only utilized to serve customers in the Ames/Means Basin area and would not be used to serve the SPA or any other HDWD demands in the Warren Valley Basin.

The Ames Valley Basin covers an area of approximately 169.7 square miles (110,000 acres). The Basin underlies Ames Valley, Homestead Valley, and Pipes Wash in the south-central San Bernardino County. The Basin is bounded by non-waterbearing rocks of the San Bernardino Mountains on the west, Iron Ridge on the north, and Hidalgo Mountain on the northeast. The Emerson, Copper Mountain, and West Calico fault also form parts of the eastern and northern boundaries. A surface water drainage divide with the Copper Mountain Valley Basin forms the southern boundary.

The Copper Mountain Valley Basin covers an area of approximately 47.4 square miles (30,300 acres). The basin is bounded on the north by a drainage divide with the Ames Valley Basin, and on the south by the Pinto Mountain fault. The non-waterbearing rocks of the Copper Mountain and the San Bernardino Mountains form the eastern and western basin boundaries, respectively. The total storage capacity is estimated in excess of 1,000,000 acre-feet.

In 1987, the District contracted with the Mainstream Water Development Company to locate and develop a well outside the Warren Valley Basin that would be capable of producing 1,500 acre-ft/yr. Subsequently, the proposed well site was placed within the sphere of influence of the Desert View Water Agency, one of the predecessor agencies to the Bighorn-Desert View Water Agency (BDVWA). This well was successfully drilled on the Bureau of Land Management property. The well can produce up to 2,100 acre-ft/yr from the Ames/Means Valley Groundwater Basin, which much of HDWD's Mesa area overlies.

Prior to this water source, the Mesa area utilized approximately 800 acre-ft/yr from the Warren Valley Basin. In 1989, the environmental issues related to this well resulted in complex litigation with the BDVWA. This litigation prevented the production of groundwater from the well. However, after prolonged negotiations with BDVWA, a settlement agreement, allowing the extraction of 800 acre-ft/yr as well as 0.5 acre-ft/yr for each new residential meter, was executed by both parties in January 1991. The settlement agreement prevents the export of groundwater from the Basin.

**Imported Water Sources**

State Water Project Supplies. The State Water Project (SWP) water is the third water source for the Yucca Valley area. The HDWD obtains its SWP supplies from the Mojave Water Agency (MWA). MWA is a special act district to help meet the water needs within its territory. The MWA's maximum annual water supply through the SWP system is 75,800 acre feet per year (AFY). The HDWD is located within Division 2 (Improvement District M) of the MWA, which is currently entitled to 7,257 AFY. Of the four purveyors within Division 2, the HDWD has a contractual entitlement of 4,282 AFY, which HDWD is able to take full advantage of due to water recharge to the Warren Valley Basin. HDWD recharges the SWP water it receives through the Morongo Basin Pipeline into the Warren Valley Groundwater Basin

through a series of percolation ponds owned and operated by HDWD. An additional recharge facility (Site 3) was recently constructed east of Pioneertown Road that increased the District's total recharge capacity to approximately 11,000 acre-ft/yr.

Contractual deliveries of up to 4,282 acre-feet in wet years allow the HDWD to include in its total projected water supplies a long-term average of 3,297[4] acre-ft/yr of SWP water from MWA.

Additional SWP Supplies. Under the 1991 Agreement, the HDWD has the first option to take delivery of contractual amount that is not utilized by the three other purveyors in District 2. Since completion of the Morongo Basin Pipeline, none of the other purveyors have requested or received any portion of their SWP supplies. This creates an opportunity for HDWD to purchase up to an additional 2,011 acre-ft/yr. This long-term annual average may also be stored in the Warren Valley Basin.

Additional SWP Table A Supplies Available to the HDWD. In addition to the HDWD's contractual rights to SWP water, the HDWD is able to acquire such additional surplus SWP supplies from MWA's "Table A" by purchase under MWA's Ordinance No. 9 (refer to Appendix C in Appendix 15.5b). This allows HDWD to purchase annual amounts of SWP water from MWA for domestic, industrial, municipal, agricultural, recreational, and/or groundwater replenishment purposes. Such water may be placed in a storage account under the Rules and Regulations of the Warren Valley Basin. As a conservative estimate for purposes of this WSA, the HDWD may purchase between 5,000 and 10,000 acre-feet of unused SWP supplies from MWA over the next 10-year period, either as a one-time purchase or as incremental purchases. Those deliveries will be made to the HDWD via the Morongo Basin Pipeline.

Interruptible SWP Supplies Available to the HDWD. The HDWD also has an opportunity to purchase "interruptible" or "Article 21" water from MWA. Article 21 water is typically available only in wet months, such as December through March, and is only available to SWP Contractors who can use the water directly or store it in their own system, such as in a groundwater basin. It is has estimated that an average of at least 120,000 acre-ft/yr of interruptible water will be available for purchase by the Contractors in years 2005 through 2025. Similarly, because of the HDWD's ability to store water in the Warren Valley Basin, it is appropriate for HDWD to incorporate future purchases of Article 21 water from MWA into the HDWD's projected water supply portfolio. As a conservative estimate for purposes of this WSA, the HDWD projects it may purchase between 5,000 and 10,000 acre-feet of interruptible SWP supplies from MWA over the next 10 to 20-year period, either as a one-time purchase or in annual increments.

In 2004, the HDWD and MWA renegotiated the conjunctive use agreement. Under the new agreement HDWD's entitled to extract and purchase 12,900 acre-feet of SWP water from the WVB from 2006 to 2012. The goal of both agencies is to store the additional water in the WVB in preparation for extended drought cycles. Both agencies would have access to this recharged groundwater, once the initial storage requirement of 2,500 acre-feet is fulfilled. HDWD would reimburse the 12,900 acre-

[4] 3,297 is derived using a 77 percent reliability rate of total water deliveries, refer to Appendix 15.5 for additional information.

feet of SWP water to MWA by receiving 478 acre-feet per year less of their SWP entitlement from 2020 to 2046.

### Water Supply

Historical water supply represents the measured and estimated inflows to the WVB and imported water from the Ames/Means Valley Basin and other sources. The sources of the WVB recharge include precipitation on the Basin, runoff from its limited watershed (80 AFY), return flows from irrigation, septic, and wastewater systems, conjunctive use water from Mojave Water Agency, and SWP water imported from the MWA through the Morongo Basin Pipeline. Table 5.4-9, *Historical Water Supply*, summarizes the total historical water supplies the HDWD received from 1995 through 2005.

**Table 5.4-9**
**Historical Water Supply**

| Year | Total Water Supply (acre-feet) |
|---|---|
| 1995 | 3,600 |
| 1996 | 5,986 |
| 1997 | 6,278 |
| 1998 | 4,465 |
| 1999 | 3,380 |
| 2000 | 5,136 |
| 2001 | 5,061 |
| 2002 | 3,866 |
| 2003 | 4,005 |
| 2004 | 5,236 |
| 2005 | 4,761 |

Source: RBF Consulting, *Draft Water Supply Assessment Old Town Yucca Valley Specific Plan*, Town of Yucca Valley, December 2006.

Note: Refer to Appendix 15.5, *Water Supply Assessment*, for a breakdown of specific sources.

### Reliability of Water Supply

Several important factors contribute to the reliability of the HDWD's existing and future water supplies. First, the HDWD is fortunate to have a diversified set of water rights, including adjudicated groundwater rights, contractual groundwater rights, and contractual rights to SWP supplies. Second, the HDWD is advantaged by having the Warren Valley Basin to use as a regulating reservoir.

### Groundwater

As discussed throughout the HDWD WSA, the District utilizes the WVB to coordinate its groundwater and SWP rights, storing water in excess of demand during wet cycles and producing stored reserves during dry cycles. This utilization of the WVB allows the HDWD to plan for and serve the water demands of its existing and future

customers throughout wet, normal, and dry water years. Other key factors in the HDWD's water supply reliability are the significant amounts of local return flows to the Basin and conservation and demand management measures implemented by the HDWD. During dry years when SWP deliveries are reduced, SWP water previously stored in the Basin is extracted. As of June 2006, the Warren Valley Basin Watermaster has estimated that recharge in excess of extraction totaled 21,910 acre-feet, a 7.1 year reserve based on current production levels (WVBWM, 2006). Consequently, the groundwater supply is reliable to the extent that adequate SWP water is available for recharge and to maintain an adequate reserve. Table 5.4-10, *Groundwater Storage by Year – Warren Valley Basin*, indicates the banked groundwater storage by year for the WVB (data for the MVB was not available).

**Table 5.4-10**
**Groundwater Storage by Year – Warren Valley Basin**

| Calendar Year | Groundwater Storage (acre-feet) |
|---|---|
| 1995 | 526 |
| 1996 | 3,276 |
| 1997 | 6,389 |
| 1998 | 7,973 |
| 1999 | 8,354 |
| 2000 | 10,419 |
| 2001 | 12,327 |
| 2002 | 12,588 |
| 2003 | 13,211 |
| 2004 | 15,052 |
| 2005 | 16,608 |

Source: *Draft Water Supply Assessment Old Town Yucca Valley Specific Plan*, RBF Consulting, August 2006.

Return flows play a key role in maintaining the health and reliability of the Warren Valley Basin. Currently, return flows to the WVB from precipitation and natural recharge, irrigation returns, septic returns, and stormwater runoff are approximately 900 AFY, a significant portion of which are attributable to irrigation and septic system returns. The HDWD estimates that approximately 32 percent of the water used within the portion of the HDWD overlying the WVB returns to the Basin. That calculation is based on dividing the estimated average return flows by the Warren Valley groundwater pumping over the past 18 years (refer to Table 5.4-7). Based on the projected annual water use increase within the HDWD over the next 20 years, return flows to the Basin in the year 2028 are estimated to be 1,747 AFY without the Old Town Specific Plan Project.

In December 2003, a direct method of establishing the relationship between groundwater reserves and actual growth was approved. Groundwater reserves are based on the amount of water recharged into the WVB. This method removes all restrictions on growth unless water reserves in the groundwater Basin reach a pre-determined level.

The effect of this policy is to maintain minimum groundwater reserves that are adequate to meet current and approved demands during dry years without causing overdraft. If an extended dry period occurs that draws the reserves below the established levels, limitations on approval of additional growth would be implemented. No changes to this policy are anticipated.

Imported Water. Current imported supplies are available to the HDWD from MWA through the Morongo Basin Pipeline. While the HDWD's current entitlement to SWP is 4,282 AFY, actual deliveries vary depending on seasonal climate changes. Table 5.4-11, *HDWD SWP Purchases (1995-2005)* summarizes the amount of SWP deliveries received by the HDWD between 1995 and 2005. Since the execution of the Morongo Basin Pipeline agreement in 1995, reductions to the HDWD have not been necessary due to low overall demand for SWP supplies within the MWA service area. However, as demand for SWP water within the MWA service area increases, reductions in SWP deliveries may become more frequent in dry years. Consequently, the value of 3,297 AFY is considered to be a conservative estimate of the amount of SWP water available to HDWD.

**Table 5.4-11**
**HDWD SWP Purchases (1995-2005)**

| Year | HDWD |
|---|---|
| 1995 | 1,608 |
| 1996 | 3,919 |
| 1997 | 4,848 |
| 1998 | 2,895 |
| 1999 | 1,918 |
| 2000 | 3,631 |
| 2001 | 3,831 |
| 2002 | 2,566 |
| 2003 | 2,681 |
| 2004 | 3,700 |
| 2005 | 3,460 |
| Average | 3,187 |

Source: Hi-Desert Water District, Water Supply Assessment for Old Town Yucca Valley Specific Plan, May 2007.

## Water Demand

The SPA area currently consists of existing land uses that generate a water demand, including residential, commercial, industrial, and civic. Water Demand Factors are necessary in order to estimate existing and ultimate water demands. According to the UWMP (2005), the HDWD assumes a typical household uses 0.28 AFY (250 gallons/day). The UWMP does not specifically state water demand factors for land uses other than residential. The HDWD's Draft Water Master Plan (DWMP) has estimated that a typical household uses 0.39 AFY (350 gallons/day). The DWMP also provides water demand factors for selected land use types. Refer to Appendix

15.5 for a summary of the water demand factors pertinent to the Old Town Yucca Valley Specific Plan area.

Existing water demand within the SPA is estimated to be 1 159.4 AFY( 42,268 gallons per day)(refer to Appendix 15.5 of this EIR for detailed water demand calculations). Table 5.4-12, *Water Demand – Existing*, categorizes the existing water demands based on the proposed planning districts and shows the domestic water demand for existing conditions according to land use types.

**Table 5.4-12**
**Water Demand – Existing**

| District/ Land Use Type | Gross Area (ac) | Dwelling Units (du) | Building Area (SF) | Water Demand Factor[1] | Average Day | |
|---|---|---|---|---|---|---|
| | | | | | (gpd) | (AFY) |
| **Old Town Mixed Use** | | | | | | |
| Auto repair | 1.006 | 0 | 5,476 | 1,000 gpd/ac | 1,006 | 1.1 |
| Auto sales | 0.398 | 0 | 1,041 | 1,000 gpd/ac | 398 | 0.4 |
| Car wash | 0.148 | 0 | 1,182 | 1,000 gpd/ac | 148 | 0.2 |
| Commercial | 5.601 | 0 | 63,474 | 1,000 gpd/ac | 5,601 | 6.3 |
| Dental office | 0.215 | 0 | 10,640 | 1,000 gpd/ac | 215 | 0.2 |
| Gas station | 0.610 | 0 | 3,858 | 1,000 gpd/ac | 610 | 0.7 |
| Hotel/Motel[2] | 0.309 | 1 | 6,072 | 3,520 gpd/ac | 1,089 | 1.2 |
| Industrial | 5.256 | 0 | 46,607 | 850 gpd/ac | 4,468 | 5.0 |
| Low density residential | 0.461 | 1 | 0 | 540 gpd/ac | 203 | 0.2 |
| Medical office | 0.962 | 0 | 13,130 | 1,000 gpd/ac | 962 | 1.1 |
| Mini-storage | 2.411 | 0 | 4,265 | 850 gpd/ksf | 2,050 | 2.3 |
| Office | 1.146 | 0 | 7,000 | 1,000 gpd/ac | 1,146 | 1.3 |
| Restaurant | 1.407 | 0 | 17,368 | 1,000 gpd/ac | 1,407 | 1.6 |
| Vacant | 9.121 | 0 | 3,057 | 0 gpd/ac | 0 | 0.0 |
| **TOTAL** | **29.053** | **2** | **182,170** | **-** | **19,303** | **21.6** |
| **Old Town Highway Commercial** | | | | | | |
| Auto repair | 3.081 | 0 | 19,249 | 1,000 gpd/ac | 3,081 | 3.5 |
| Auto sales | 2.636 | 0 | 11,222 | 1,000 gpd/ac | 2,636 | 3.0 |
| Commercial | 17.394 | 0 | 97,652 | 1,000 gpd/ac | 17,394 | 19.5 |
| High density residential | 0.523 | 0 | 0 | 3,520 gpd/ac | 1,840 | 2.1 |
| Hotel/Motel | 2.371 | 12 | 55,907 | 3,520 gpd/ac | 8,345 | 9.3 |
| Low density residential | 0.994 | 1 | 0 | 440 gpd/ac | 437 | 0.5 |
| Medical office | 0.687 | 0 | 4,800 | 1,000 gpd/ac | 687 | 0.8 |
| Meeting hall | 1.800 | 0 | 9,938 | 800 gpd/ac | 1,440 | 1.6 |
| Mini-storage | 6.464 | 0 | 40,952 | 850 gpd/ac | 5,494 | 6.2 |
| Office | 2.574 | 0 | 22,954 | 1,000 gpd/ac | 2,574 | 2.9 |
| Park-n-ride | 1.055 | 0 | 0 | 0 gpd/ac | 0 | 0.0 |
| Restaurant | 3.083 | 0 | 13,430 | 1,000 gpd/ac | 3,083 | 3.5 |
| RV park | 1.305 | 0 | 1,740 | 800 gpd/ac | 1,044 | 1.2 |
| Unknown | 0.012 | 0 | 0 | 1,000 gpd/ac | 12 | 0.0 |
| Vacant | 14.379 | 0 | 0 | 0 | 0 | 0.0 |
| **TOTAL** | **58.355** | **13** | **277,844** | **-** | **48,067** | **53.8** |

**Table 5.4-12 [continued]**
**Water Demand – Existing**

| District/ Land Use Type | Gross Area (ac) | Dwelling Units (du) | Building Area (SF) | Water Demand Factor[1] | Average Day | |
|---|---|---|---|---|---|---|
| | | | | | (gpd) | (AFY) |
| **Old Town Commercial/Residential** | | | | | | |
| Church | 2.577 | 0 | 16,887 | 800 gpd/ac | 2,061 | 2.3 |
| Civic | 0.634 | 0 | 944 | 800 gpd/ac | 507 | 0.6 |
| Commercial | 3.307 | 0 | 33,408 | 1,000 gpd/ac | 3,307 | 3.7 |
| High density residential | 3.360 | 22 | 0 | 2,100 gpd/ac | 11,828 | 13.3 |
| Hotel/Motel | 0.247 | 9 | 2,864 | 4,300 gpd/ac | 868 | 1.0 |
| Industrial | 1.921 | 0 | 18,288 | 850 gpd/ac | 1,633 | 1.8 |
| Medium density residential | 18.747 | 83 | 0 | 1,250 gpd/ac | 19,215 | 21.5 |
| Medical office | 3.435 | 0 | 56,902 | 1,000 gpd/ac | 3,435 | 3.8 |
| Office | 1.785 | 0 | 19,596 | 1,000 gpd/ac | 1,785 | 2.0 |
| Pet hospital | 0.451 | 0 | 6,334 | 1,000 gpd/ac | 451 | 0.5 |
| Vacant | 20.910 | 0 | 0 | 0 | 0 | 0.0 |
| **TOTAL** | **57.373** | **114** | **155,223** | **-** | **45,091** | **50.5** |
| **Old Town Industrial** | | | | | | |
| Civic | 2.065 | 0 | 993 | 800 gpd/ac | 1,652 | 1.9 |
| Industrial | 32.530 | 0 | 96,603 | 850 gpd/ac | 27,650 | 31.0 |
| Mini-storage | 0.595 | 0 | 0 | 8500 gpd/ac | 506 | 0.6 |
| Vacant | 4.399 | 0 | 0 | 0 | 0 | 0.0 |
| **TOTAL EXISTING Demand** | **184.370** | **129** | **712,833** | **-** | **142,268** | **159.4** |

1. Water demand factors based on District's Draft Water Master Plan.
2. Hotel/Motel assumed as high density residential.

Unknown land uses were assumed at 1,000 gpd/ac.
Results may not add correctly, as figures were rounded for the purpose of compiling this table.

## WASTEWATER

Currently, all wastewater in the SPA is treated though septic systems located on each lot. A septic system has two main components: a septic tank; and an absorption area, sometimes constructed horizontally (leach field) or vertically (seepage pit). Septic tanks are buried between five and ten feet from the source structure. The liquid rises and leaves the septic tank through a pipe, which then branches out to the absorption area (or drainfield). Most of the liquid from the drainfield eventually seeps down toward the Town's aquifer to be pumped up to the surface again through wells.

The HDWD provides water service to the Town of Yucca Valley. The generation rates for domestic contribution to the wastewater system is assumed to be 90 gallons per capita per day (gpcd), while specific generation rates are applied to the other types of land uses. Table 5.4-13, *Wastewater Generation - Existing*, outlines the wastewater generation and indicates that an estimated 92,045 gpd of wastewater are currently generated within the SPA.

**Table 5.4-13**
**Wastewater Generation – Existing**

| Geography | Square Feet/ Population | Rate[1] | Wastewater Generation |
|---|---|---|---|
| Within SPA - Existing | | | |
| Commercial/Retail | 551,335 SF | 30 gpd/1,000 SF | 16,540 gpd |
| Industrial | 161,498 SF | 10 gpd/1,000 SF | 1,615 gpd |
| Residential | 821 persons | 90 gpd/person | 73,890 gpd |
| *Total* | | | *92,045 gpd* |
| Within SPA - General Plan Buildout | | | |
| Commercial/Retail | 2,516,798 SF | 30 gpd/1,000 SF | 75,504 gpd |
| Industrial | 862,241 SF | 10 gpd/1,000 SF | 8,622 gpd |
| Residential | 68 persons | 90 gpd/person | 6,120 gpd |
| *Total* | | | *90,201 gpd* |

1. *Hi-Desert Water District Wastewater Collection and Treatment Master Plan, Final Report*, January 1998.

The HDWD pumps water out of the ground (from an aquifer), up through wells to the surface. Poorly functioning, not maintained, and/or failing septic systems have contributed to the contamination of the Town's groundwater and aquifer, causing a rise in nitrates in some of the HDWD wells. Concerned with rising nitrates, the HDWD constructed a nitrate removal facility, which was in full operation by fall 2002.

The nitrate removal facility is considered an interim solution to the Town's wastewater treatment limitations. To determine the technical aspects of these improvements, the HDWD has prepared the Wastewater Collection and Treatment Master Plan (January 1998). The Plan identifies the wastewater flow projections for the Town, based on the land uses identified in the General Plan (1995). The Plan also evaluates alternative treatment processes for groundwater percolation and water reuse, and presents the recommended infrastructure for the District-wide sewer system and wastewater treatment facility. In addition to controlling nitrate contamination resulting from septic systems, the wastewater system would also provide the opportunity to recharge an estimated 1,000-acre-feet of treated wastewater per year into the WVB using recharge basins.

As of August 2006, the HDWD is attempting to finalize plans for construction of a new wastewater treatment facility in Yucca Valley.[5] It is noted that plans have altered from the 1998 *Wastewater Collection and Treatment Master Plan* and neither of two previously recommended sites are presently being considered. Construction of the treatment facility is anticipated to consist of seven phases. The initiation of this process is currently under discussion and negotiation by the HDWD Board of Directors and a private developer. Anticipated start of the new facility would begin within one year, however, whether all parties will agree on treatment facility level type and start of construction remains undetermined at this time. It is anticipated that private septic systems would continue to be used for the wastewater disposal until sufficient development has occurred to extend sewer system infrastructure to Yucca Valley.

[5] Telephone Conversation, Greg Snyder, Assistant General Manager, Hi-Desert Water District, August 2006.

Assessment fees are also currently a pending item for the HDWD. The implementation of Development Fees, which are not currently required for new development, is up for discussion by the Board of Directors in August 2006. The specific requirement and dollar amount is pending at this time.[6]

## SOLID WASTE

Solid waste disposal service for residents and businesses in Yucca Valley is provided through Burrtec Waste Management Inc., which is the Town's franchise hauler. Burrtec is contracted by the County of San Bernardino to maintain landfills (both open and closed) and collection centers. Their on-site recycling programs are for white paper and scrap metal, and at certain sites, cardboard, bottles, cans, plastics, green waste, wood and construction/demolition debris. Services for curbside household hazardous waste and greenwaste collection is not available at this time. A local recycling company, Hi-Desert Recycling, accepts glass, plastic, aluminum, tin, newspaper and other non-ferrous scrap metal. The Yucca Valley does not have a transfer facility (waste-to-energy facility).

Table 5.4-14, *Solid Waste Generation - Existing*, outlines the estimated solid waste generation and indicates that an estimated 3,448 tons per year of solid waste are currently generated within the SPA.

**Table 5.4-14**
**Solid Waste Generation – Existing**

| Geography | Square Feet/ Dwelling Units | Rate[1] | Solid Waste Generation |
|---|---|---|---|
| Within SPA - Existing | | | |
| Commercial/Retail | 551,335 SF | 0.0024 tons/SF | 1,323 tons/year |
| Industrial | 161,498 SF | 0.0108 tons/SF | 1,7443 tons/year |
| Residential | 326 DU | 1.17 tons/DU | 381 tons/year |
| *Total* | | | *3,448 tons/year* |
| Within SPA - General Plan Buildout | | | |
| Commercial/Retail | 2,516,798 SF | 0.0024 tons/SF | 6,040 tons/year |
| Industrial | 862,241 SF | 0.0108 tons/SF | 9,312 tons/year |
| Residential | 27 DU | 1.17 tons/DU | 32 tons/year |
| *Total* | | | *15,384 tons/year* |

1. Estimated Solid Waste Generation Rates, California Integrated Waste Management Board website www.ciwmb.ca.gov, August 2006.

Solid waste generated in the SPA is disposed of at the Landers Landfill or the Trail's End Transfer Station in Morongo Valley. The Lander's Landfill has a total capacity of 3,080,000 cubic yards (cy), and currently has a remaining available capacity of approximately 15.1 percent (463,785 cy). This facility is estimated to remain open through 2008. San Bernardino County has landfill capacity in compliance with State regulations for a minimum of 12 years.

[6] Gary Snider, Hi-Desert Water District, Telephone Conversation, July 2006.

In 1992, the Town adopted a Source Reduction and Recycling Element to help them achieve the goals of AB 939. The Town participates in the Education and Outreach Committee of the County Waste Disposal Agreement involved in education on waste reduction and proper disposal.

### OTHER UTILITIES

The SPA and its vicinity are currently served with natural gas, electricity, telephone, and cable services. Facilities are located both above and below-ground throughout the SPA, including a portion of Twentynine Palms Highway and Santa Fe Trail. Existing mainlines occur throughout the SPA. The relevant providers and their respective facilities are identified below:

- Electricity: Southern California Edison.
- Natural Gas: Southern California Gas Company: Nearest existing gas facilities include a two-inch main located seven feet N/S parallel to Eucalyptus Avenue.
- Telephone: Verizon.
- Cable: Time Warner Cable.

## 5.4.2 REGULATORY SETTING

### STATE OF CALIFORNIA

#### Senate Bills 221 and 610

Senate Bills 221 and 610 were signed into law in 2001 and took effect January 1, 2002. The two bills amended State law to better link information on water supply availability to certain land use decisions by cities and counties. The two companion bills provide a regulatory forum that requires more collaborative planning between local water suppliers and cities and counties. All Senate Bill (SB) 221 and 610 reports are generated and adopted by the public water supplier.

SB 610 requires a detailed report regarding water availability and planning for additional water suppliers that is included with the environmental document for specified projects. All projects that meet any of the following criteria require the water availability assessment:

- A proposed residential development of more than 500 dwelling units;
- A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 SF of floor space;
- A proposed commercial office building employing more than 1,000 persons or having more than 250,000 SF of floor space;
- A proposed hotel and/or motel having more than 500 rooms;

- A proposed industrial, manufacturing, or processing plant or an industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 SF of floor area;

- A mixed-use project that includes one or more of the projects specified in this subdivision; or

- A project that would demand an amount of water equivalent to or greater than the amount of water required by a 500 dwelling unit project.

While SB 610 primarily affects the Water Code, SB 221 principally applies to the Subdivision Map Act. The primary effect of SB 221 is to condition every tentative map for an applicable subdivision on the applicant by verifying that the public water supplier (PWS) has sufficient water supply available to serve it. Under SB 221, approval by a city or county of certain residential subdivisions requires a written verification of sufficient water supply. SB 221 applies to any subdivision, defined as:

- A proposed residential development of more than 500 dwelling units (if the PWS has more than 5,000 service connections); or

- Any proposed development that increases connections by 10 percent or more (if the PWS has fewer than 5,000 connections).

### ASSEMBLY BILL 939: THE INTEGRATED WASTE MANAGEMENT ACT

In 1989, Assembly Bill 939, known as the Integrated Waste Management Act, was passed because of the increase in waste stream and the decrease in landfill capacity. As a result, the current California Integrated Waste Management Board (CIWMB) was established. A disposal reporting system with CIWMB oversight was established, and facility and program planning was required. AB 939 mandates a reduction of waste being disposed: jurisdictions were required to meet diversion goals of 25 percent by 1995 and 50 percent by 2000.

## Town Of Yucca Valley Municipal Code

Code Chapter 3.40, *Development Impact Fees*, establishes development impact fees intended to recover from each new development, its reasonable share of the cost of each type of public facility and infrastructure improvement needed to serve that development. Code Section 3.40.040, *Public Infrastructure Facilities*, states:

> *General Facility, Park Facility, Trail Facility, Storm Drain Facility, and Street and Traffic Facility development impact fees shall be paid by applicants for development projects as set forth in this chapter and in the amounts adopted by the Town Council by resolution from time to time. No building permit, or occupancy permit, shall be issued for any new development project unless the fees specified in this chapter as adopted by Resolution of the Town Council are paid. Fees collected pursuant to this chapter shall be deposited into a separate fund and used only for the purpose of acquiring, designing, constructing, improvement, providing and maintaining, to the extent permitted*

*by law, the General Facilities provided for in the Study and the Plans as adopted and amended from time to time by the Town Council.*

Code Section 6.02.050, *Recycling and Solid Waste Processing Services*, discusses responsibilities of solid waste and recycling collection and states:

*The Town may provide for recycling and solid waste processing services, which may include recycling from designated collection locations of all commercial and residential premises within the Town. Such services may include designation of an authorized recycling agent.*

## 5.4.3 IMPACT THRESHOLDS AND SIGNIFICANCE CRITERIA

Pursuant to Appendix G of the *CEQA Guidelines*, *Environmental Checklist Form*, a project would normally have a significant adverse impact on public services if it would:

### PUBLIC SERVICES
**(Fire and police protection, schools, libraries, and roadway maintenance)**

A significant impact would occur if the project would:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or result in the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services, including fire protection, police protection, schools, or other public facilities.

### RECREATION

A significant impact would occur if the project would:

- Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

- Includes recreational facilities or requires the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

### UTILITIES AND SERVICE SYSTEMS
**(Water, wastewater/sewers, and solid waste)**

A significant impact would occur if the project would:

- 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, the construction of which could cause significant environmental effects.

- Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

- Have insufficient water supplies available to serve the project from existing entitlement and resources, and new or expanded entitlement is needed.

- Result in a determination by the wastewater treatment provider, which serves or may serve the project that does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

- Be served by a landfill that does not have sufficient permitted capacity to accommodate the project's solid waste disposal needs.

- Not comply with federal, state, and local statutes and regulations related to solid waste.

## 5.4.4 IMPACTS AND MITIGATION MEASURES

### FIRE PROTECTION

- **THE PROPOSED PROJECT COULD RESULT IN SIGNIFICANT PHYSICAL IMPACTS WITH RESPECT TO FIRE PROTECTION SERVICES.**

***Impact Analysis:*** According to the County Fire Department, any development within the Town of Yucca Valley, including within the SPA, would increase demands on existing fire protection resources. Additional manpower, equipment and facilities are already needed in the area. The County Fire Department anticipates that an additional fire station and staffed engine company with four on duty personnel would be required for the Specific Plan. However, because the Specific Plan is conceptual, analysis is based on maximum development potential, and thus the County Fire Department is unable to provide specific comments regarding land development within the SPA.[7]

Specific fire and life safety requirements for construction would be addressed at the building and fire safety plan check for individual projects and entitlements in the SPA. Development proposed would be subject to compliance with all relevant County Fire Department general requirements, including the following:

General Requirements

- Multiple ingress/egress access for circulation of traffic and emergency response;

[7] Paul Summers, Division Chief, San Bernardino County Fire Department, June 23, 2006.

- Compliance with all applicable code and ordinance requirements for construction, access, water mains, fire flows and fire hydrants;
- Specific fire and life safety requirements during the construction phase;
- Specifications for the accessibility of access roadways to Fire Department apparatus;
- Maintenance of access roads;
- Specific requirements for subdivisions; and
- Fire sprinkler systems.

Specific Requirements for Commercial, Industrial, Institutional, and Residential

- Fire flow;
- Fire hydrant location and spacing;
- Fire Department access;
- Turning radii and street and driveway width and length specifications; and
- Identification of fire lanes.

The current ISO rating for the SPA is Class 5. Project implementation may result in changes to this existing rating. Depending on the construction type, additional fire stations, fire apparatus and personnel, built-in fire protection, and water distribution upgrades, the ISO classification may be lower.

Assessment fees are assessed by the Fire Department and would be determined on a project-by-project basis, when more detailed development information is available. Future development would be required to pay fees sufficient to cover mitigation costs. Potential fire service impacts are concluded to be less than significant, following compliance with all applicable requirements and payment of assessment fees.

Fire flow requirements are addressed in the *Water* discussion below.

***Mitigation Measures:*** No mitigation measures are recommended.

***Level of Significance:*** Less Than Significant Impact.

## POLICE PROTECTION

- **PROJECT IMPLEMENTATION COULD RESULT IN SIGNIFICANT PHYSICAL IMPACTS WITH RESPECT TO POLICE PROTECTION.**

***Impact Analysis:*** Buildout of the SPA would result in an increased demand for law enforcement services beyond existing conditions. Table 5.4-15, *Law Enforcement - Projections*, provides law enforcement projections and indicates that the proposed Specific Plan would generate a demand for three patrol officers, or two officers more than the demand generated by existing conditions. Comparatively, the proposed Specific Plan would generate a demand for two officers more than demand generated by the existing General Plan. However, the Specific Plan proposes less commercial floor area than the *General Plan* buildout (a net decrease of 478,435 SF), thus, the patrolling requirements would be proportionately less.

Law enforcement needs are determined and adjusted annually, thus, the Town would be able to respond to Police protection needs prior to buildout of the SPA. Additional information is required as to the specific use of the commercial/industrial development to determine the potential policing impacts of this component of the Specific Plan. At this time it is not anticipated that Project implementation would result in the need for physical additions to the existing department facilities. However, the inclusion of a satellite police department office in the SPA should be considered. Any increased demand for law enforcement and traffic services would be coordinated between the Sheriff's Department and the Town of Yucca Valley. With mitigation, which requires further consultation between the Sheriff's Department and the Town of Yucca Valley regarding the provision of a satellite office and law enforcement needs, the Project would result in less than significant impacts.

**Table 5.4-15**
**Law Enforcement – Projections**

| Geography | Population | Officers | |
|---|---|---|---|
| | | Rate[1] | Demand |
| Old Town Yucca Valley SP - Proposed | 2,806 persons[2] | one officer per 1,000 persons | 3 officers |
| Within SPA – Existing | 821 persons[3] | | 1 officer |
| *Net Change (Specific Plan: Existing)* | *+1,985 persons* | | *+2 officers* |
| Within SPA - General Plan Buildout | 68 persons[4] | | 1 officer |
| *Net Change (Specific Plan: General Plan)* | *+2,738 persons* | | *+2 officers* |

1. James R. Williams, Captain, County of San Bernardino Sheriff's Department, Morongo Basin Station, June 29, 2006.
2. Based on 1,115 dwelling units and 2.517 persons per household (California Department of Finance).
3. Based on 326 dwelling units (Traffic Impact Analysis) and 2.517 persons per household.
4. Based on 27 dwelling units and 2.517 persons per household.

***Mitigation Measure:***

PSU-1 The Town of Yucca Valley shall consult with the Sheriff's Department, on a project-by-project basis, regarding the provision of a satellite police department office in the SPA and potential increased demand for law enforcement and traffic services.

***Level of Significance:*** Less Than Significant Impact After Mitigation Incorporated.

## SCHOOLS

- **PROJECT IMPLEMENTATION WOULD NOT RESULT IN SIGNIFICANT PHYSICAL IMPACTS ON EXISTING SCHOOL FACILITIES.**

***Impact Analysis:*** Table 5.4-14, *Student Population - Projections*, provides the projected student population growth, based on the MUSD student generation rate of 0.7 student per dwelling unit. As indicated in Table 5.4-14, buildout of the SPA would generate approximately 781 elementary, middle, and high school students in the MUSD, or 553 more students than existing conditions. Based on the *School Accountability Report Card* desired class size of 30 students, the Project (at buildout) would generate a demand for 26 classrooms, or 18 classrooms more than the demand generated by existing conditions. According to the MUSD, additional funds and facilities would be required in order to meet the demand generated by the proposed Specific Plan. Comparatively, buildout of the SPA would generate approximately 762 students more than the student population projection, based on *General Plan* buildout; refer to Table 5.4-16.

**Table 5.4-16**
**Student Population – Projections**

| Geography | Dwelling Units | Student | |
|---|---|---|---|
| | | Rate[1] | Generation |
| Old Town Yucca Valley SP – Proposed Project | 1,115 du | 0.7 students per dwelling unit | 781 students |
| Within SPA – Existing | 326 du | | 228 students |
| *Net Change (Specific Plan: Existing)* | *+789 du* | | *+553 students* |
| Within SPA - General Plan Buildout | 27 du | | 19 students |
| *Net Change (Specific Plan: General Plan)* | *+1,088* | | *+762 students* |

1. Joseph P. Sullivan, Director of Facilities Planning, Morongo Unified School District, February 13, 2006.

MUSD would collect, on a project-by-project basis, Level 1 School Fees for residential and commercial development. Payment of these development fees would reduce impacts to school facilities to a less than significant level.

According to the MUSD, spot construction on infill-lots within the SPA would not require additional mitigation, beyond payment of development impact fees.[8] However, housing tract developments in concentrated areas within the SPA may require the establishment of Community Facility Districts. With implementation of the recommended mitigation, which requires further consultation between the MUSD and the Town of Yucca Valley regarding the establishment of a Community Facilities District, the Project would result in less than significant impacts.

***Mitigation Measure:***

PSU-2 For housing tract developments in concentrated areas, the Town of Yucca Valley shall consult with the Morongo Unified School District, regarding the establishment of a Community Facilities District.

[8] Joseph P Sullivan, Director, Facilities Planning, Morongo Unified School District, February 15, 2006.

***Level of Significance:*** Less Than Significant Impact After Mitigation Incorporated.

## LIBRARIES

- **PROJECT IMPLEMENTATION WOULD INCREASE THE DEMAND FOR LIBRARY FACILITIES AND WOULD CONTRIBUTE TO THE EXISTING NEED FOR CONSTRUCTION OF NEW FACILITIES OR ALTERATION OF EXISTING FACILITIES.**

***Impact Analysis:*** Table 5.4-17, *Library Resources - Projections*, provides the library facility projections and indicates that Project implementation would generate a demand for 1,122 SF of facility space and 2,806 books/materials, or 1,095 SF of facility space and 2,738 books/materials more than the demand generated by existing conditions, respectively. Because the existing collection exceeds the Library's target ratio, an excess supply of approximately 30,463 books/materials is available. Thus, the demand for books/materials generated by the proposed Project would be met from the existing supplies and a less than significant impact would occur in this regard. However, additional square footage to meet the new demand generated by the proposed Project (1,095 SF) could not be feasibly added to the existing building and would necessitate a new facility. Comparatively, the Specific Plan would result in more population growth than the existing General Plan, thus, the demand for library space and books/materials would be proportionately greater; refer to Table 5.4-17.

**Table 5.4-17**
**Library Resources – Projections**

| Geography | Population | Facility Space | | Collection (Books/Materials) | |
|---|---|---|---|---|---|
| | | Rate[1] | Demand | Rate[1] | Demand |
| Old Town Yucca Valley SP – Proposed Project | 2,806 persons[2] | 0.4 SF per capita | 1,122 SF | 1.0 per capita | 2,806 collection |
| Within SPA – Existing | 821 persons[3] | | 794 SF | | 821 collection |
| *Net Change (Specific Plan: Existing)* | *+1,985 persons* | | *+328 SF* | | *+1,985 collection* |
| Within SPA - General Plan Buildout | 68 persons[5] | | 27 SF | | 68 collection |
| *Net Change (Specific Plan: General Plan)* | *+2,738 persons* | | *+1,095 SF* | | *+2,738 collection* |

1. Linda Grove, County of San Bernardino Public Library, July 17, 2006.
2. Based on 1,115 dwelling units and 2.517 persons per household (California Department of Finance).
3. Based on 326 dwelling units (Traffic Impact Analysis) and 2.517 persons per household.
4. State of California, Department of Finance, *E-5 Population and Housing Estimates, for Cities, Counties, and the State, 2001-2006, with 2000 Benchmark.* Sacramento, California, May 2006.
5. Based on 27 dwelling units and 2.517 persons per household.

Future development would be subject to payment of development impact fees required by Ordinance 173 of Chapter 3.40 of the *Municipal Code*. Compliance with Code requirements would contribute the funds necessary to mitigate impacts to library facilities to a less than significant level. It is further noted that the Old Town Yucca Valley Specific Plan suggests that new public facilities be relocated to the Old

Town area to enhance the Main Street and Old Town character. To further lessen potential impacts in this regard, mitigation is recommended, which requires consultation between the County of San Bernardino Library and the Town of Yucca Valley regarding the expansion/provision of a library facility.

***Mitigation Measure:***

PSU-3 The Town of Yucca Valley shall consult with the San Bernardino County Library, on a project-by-project basis, regarding the provision of library facility space.

***Level of Significance:*** Less Than Significant Impact After Mitigation Incorporated.

## ROADWAY MAINTENANCE

- **THE USAGE OF AREA ROADWAYS MAY RESULT IN INCREASED MAINTENANCE REQUIREMENTS.**

***Impact Analysis:*** As described in Section 3.0, Project Description, the Circulation Plan proposes a semi-grid system of roadways, emphasizing community and regional linkages to the Old Town area and addressing the potential realignment of SR-62; refer to Exhibit 3-7, *Proposed Circulation Map*. The roadway network includes a variety of cross-sections to encourage a more pedestrian-friendly environment. Right-of-ways range from 110 to 134 feet and include from one to three lanes of travel; refer to Exhibit 3-8, *Street Cross-Sections*. A "Main Street" is proposed (within the existing SR-62 alignment) that extends through the center of the Old Town. The Circulation Plan also identifies the potential SR-62 realignment location and conceptual Gateway lane configurations, currently being studied by Caltrans District 8.[9]

Project implementation would result in an increase of roadways to be maintained by the Town of Yucca Valley. In addition, proposed uses would result in increased traffic in the SPA, resulting in potentially significant impacts to existing roadway conditions. Future development within the SPA would be subject to compliance with Code Section 3.40, which requires payment of an impact fee, in order to mitigate additional traffic burdens and provide maintenance to the Town's arterial and collector street system. The fee would be assessed on a project-by-project basis. Thus, with payment of impact fees, impacts to roadways would be reduced to a less than significant level.

***Mitigation Measures:*** No mitigation measures are recommended.

***Level of Significance:*** Less Than Significant Impact.

[9] A separate study, conducted by Caltrans would assess impacts of the proposed SR-62 realignment. If approved, this primary arterial would be allowed to function as a main street instead of a fast flowing highway. All impacts and issues regarding the realignment would be examined in a separate study.

## RECREATION

- **PROJECT IMPLEMENTATION WOULD GENERATE A DEMAND FOR ADDITIONAL PARK AND RECREATION FACILITIES AND MAY INCREASE THE USE OF EXISTING NEIGHBORHOOD AND REGIONAL PARKS OR OTHER RECREATIONAL FACILITIES.**

***Impact Analysis:*** Table 5.4-18, *Parkland Demand – Projections*, provides the projected demand for parkland and indicates buildout of the SPA would generate a demand for 14 acres of developed parkland, or 9.9 acres more than the demand generated by existing conditions. Comparatively, buildout of the SPA would generate a demand for 13.7 acres of developed parkland more than the parkland demand, based on *General Plan* buildout; refer to Table 5.4-18.

**Table 5.4-18**
**Parkland Demand – Projections**

| Geography | Population | Developed Parkland | |
|---|---|---|---|
| | | Rate[1] | Demand |
| Old Town Yucca Valley SP – Proposed | 2,806 persons[2] | 5.0 acres per 1,000 persons | 14.0 acres |
| Within SPA – Existing | 821 persons[3] | | 4.1 acres |
| *Net Change (Specific Plan: Existing)* | *+1,985 persons* | | *+9.9 acres* |
| Within SPA - General Plan Buildout | 68 persons[4] | | 0.34 acres |
| *Net Change (Specific Plan: General Plan)* | *+2,738 persons* | | *+13.7 acres* |

1. Town of Yucca Valley Parks Master Plan, December 16, 1999.
2. Based on 1,115 dwelling units and 2.517 persons per household (California Department of Finance).
3. Based on 326 dwelling units (Traffic Impact Analysis) and 2.517 persons per household.
4. Based on 27 dwelling units and 2.517 persons per household.

The Town has an adopted Quimby ordinance and also a phased schedule of developer fees that would mitigate the impact on parkland from new residential development. Impacts on recreation would be mitigated through requirements for parkland dedication or in-lieu fees. Following compliance with Code requirements, and in consideration of the existing parkland inventory (exceeds the target ratio by approximately 72 acres), implementation of the proposed Project would generate a less than significant impact on recreation.

As discussed in Section 3.0, *Project Description*, the Project proposes pedestrian and bicycle/equestrian trails, which would further mitigate impacts to recreational facilities. The trail system includes a pedestrian-oriented street system encompassing wide sidewalks and public plazas. On-street Class 1 bike paths are proposed to extend along SR-62/Yucca Trail and Santa Fe Trail, connecting the local street network. The proposed Yucca Wash multi-use trail would be a 10-foot decomposed granite trial for equestrian and pedestrian use, ultimately connecting to the regional California Riding and Hiking Trail System. The Specific Plan also proposes relocation and/or construction of new public facilities currently located within the Community Center area, however, this would not result in net change in recreation acreage.

Implementation of the proposed Specific Plan may alter the existing Remembrance Park, depending on the ultimate site plans for future development; refer to Exhibit 3-5, *Vision Plan*. However, it would remain a passive public area and no net change in acreage would occur.

***Mitigation Measures:*** No mitigation measures are recommended.

***Level of Significance:*** Less Than Significant Impact After Mitigation Incorporated.

## WATER

- **PROJECT IMPLEMENTATION WOULD INCREASE THE DEMAND FOR WATER BEYOND CURRENT CONDITIONS REQUIRING AN INCREASE IN FUTURE WATER SUPPLY.**

***Impact Analysis:***

Water Supply. Water Supply Assessments (WSA) () were prepared by the Town of Yucca Valley and by the HDWD for the proposed Project, in accordance with Water Code Section 10910 and Senate Bill 610. The analysis and calculations by the HDWD (May 2007) supersede the Town's Assessment presented in the December 2006 WSA which was incorporated into the Draft EIR. At buildout, the Specific Plan area would consist of residential, commercial/retail, industrial, office, and civic land uses. Table 5.4-19, *Water Demand – Project* provides the detailed domestic water demand for the proposed Specific Plan, according to planning district and land use type. Water demand for the Project was calculated by the HDWD using water demand factors from Appendix 15.5 of this EIR. The ultimate average day water demands at full build-out are estimated to be approximately 526.7 AFY for the proposed SPA.

**Table 5.4-19**
**Water Demand – Project**

| District/Land Use Type | Density (du/ac) | Gross Area (ac) | Units (du) | Building Area (SF) | Water Demand Factor[1] (gpd/ac) | Average Day Demand (AFY) |
|---|---|---|---|---|---|---|
| Commercial/Retail | | 17.428 | | 759,317 | 1,000 | 19.5 |
| Residential | 40 | 11.625 | 465 | | 11,730 | 152.8 |
| **Total** | | **29.053** | **465** | **759,317** | **-** | **172.3** |
| Commercial/Retail | | 58.355 | | 889,684 | 1,000 | 65.4 |
| **Total** | | **58.355** | | **889,684** | **-** | **65.4** |
| Commercial/Retail | | 40.165 | | 699,769 | 1,000 | 45.0 |
| Residential | 24 | 17.208 | 413 | | 7,040 | 135.7 |
| **Total** | | **57.373** | **413** | **699,769** | **-** | **166.4** |
| Industrial | | 31.66 | | 551,834 | 850 | 30.1 |
| Residential | 30 | 7.933 | 238 | | 8,800 | 78.2 |
| **Total** | | **39.589** | **238** | **551,834** | **-** | **108.3** |
| **Total Proposed Water Demand** | | **184.370** | **1,116** | **2,900,604** | **-** | **526.7** |
| **Less Existing Demand** | | | **129** | | | **159.4** |
| **Total Projected Water Demand** | | **184.370** | **1,115** | | | **367.3** |

The net change in water demand from existing to ultimate represents the impact the Project will have on HDWD's supply system. The proposed Specific Plan would result in an increase in water demand of 367 AFY.

Growth within the project area is expected to occur linearly over a 50-year period starting in 2008 and ending in 2057. This results in an annual growth in demand of 7.3 acre-ft/yr. Beyond 2057, the Project's additional water demand remains constant at 367 AFY.

Projected Water Demand

The HDWD needs to take into account all additional water demands in deciding whether there is sufficient water supply for the proposed Specific Plan. As of May 2007, there are 62 development projects under some stage of consideration by the Town in addition to this Specific Plan (refer to *Appendix G* in Appendix 15.5 of this EIR). These projects are incorporated in the base demand forecasts which uses a linear growth rate of 2.3 percent to estimate future population and water demand. Table 5.4-20, *Projected Water Demand (2.3 Percent Growth Rate)* displays projected HDWD water demand totals up to the year 2028. The table also displays the HDWD future water demand with anticipated future projects, and anticipated demand from the Old Town Specific Plan Area.

**Table 5.4-20**
**Project Water Demand (2.3 percent Growth Rate)**

| User | 2008 | 2013 | 2018 | 2023 | 2028 |
|---|---|---|---|---|---|
| HDWD – Warren Valley[1] | 2,744 | 3,338 | 3,748 | 4,037 | 4,325 |
| Old Town SP Project (net increase) | 7 | 44 | 81 | 118 | 154 |
| **Total Demand** | 2,751 | 3,382 | 3,829 | 4,155 | 4,479 |

1. HDWD – Warren Valley demand includes existing customers, an annual increase of 58 acre-/yr (2.3 percent of existing demand) and projected demand for the Mountain Vista development.
2. The net demand increase is used because the existing demand of the Old Town area is included in the existing demand projection.

Based on the calculations in Table 5.4-20, the projected demands to the HDWD for a normal year are estimated to increase by approximately 4,479 acre-feet by the year 2028. The Old Town Yucca Valley Specific Plan is anticipated to create an additional water demand of 154 acre-feet by 2028 which is assumed to be only partially built out. This amount would represent approximately 3.4 percent of the HDWD's water 2028 demands.

According to the HDWD's WSA for the Old Town Yucca Valley Specific Plan Area, water supplies are adequate to meet demands in normal, single dry and multiple dry years both without and with the proposed Project through 2028 while maintaining DHWD supply reserves in the Warren Valley Basin exceeding five years. Beyond the 20-year analysis period (2028), the District will need to acquire additional supplies above its current contracted SWP supply to meet the future demand in the SPA.

To meet the future demands of 2028 and beyond, the HDWD would have to plan on obtaining additional sources of water such as increased imported water from MWA, recycled water or desalinated water. HDWD could purchase additional SWP water in early years to buildup a larger groundwater reserve. However, it should ensure that it does not violate its water reserve policies.

Based on existing water supply and demand conditions and future assumptions, the WSA has concluded the following regarding the proposed Project:

- Hi-Desert Water District has been identified as the public water purveyor for the Old Town Yucca Valley Specific Plan.
- Water demand for the proposed Specific Plan is planned to be met through groundwater extraction and imported sources from the SWP.
- Reliability to the groundwater system is provided by natural recharge and recharge in the percolation ponds, which is supplied by MWA and the SWP along with management and conservation measures taken by the HDWD.
- The calculated water demand for the proposed Specific Plan is approximately 526.7 AFY at buildout (2057), and it has been estimated that approximately 159.4 AFY of water is currently used within the SPA.
- The Hi-Desert Water District proposes to deliver water to the Old Town Yucca Valley Specific Plan project from groundwater extracted from Warren Valley Basin, and SWP.

Water Distribution. RBF Consulting prepared the Yucca Valley Revitalization Project Draft Utility Plan (September 9, 2005) for the proposed Specific Plan. According to the Draft Utility Plan, the SPA is located within the 3495W Pressure Zone and is the supply zone that the west side wells pump directly into. During the 1995-96 Pipeline Improvement Project, the HDWD completed several miles of pipeline upgrades to replace old and undersized pipelines; refer to Table 5.4-21, *Water Pipeline Replacements Completed*. The pipeline upgrades included the construction of 22,300 linear feet of replacement pipeline in the District's west side, which would directly benefit the 3495W Pressure Zone and the SPA. This study assumes that all replacement projects completed to date are incorporated into the 2002 Water System Atlas.

**Table 5.4-21**
**Water Pipeline Replacements Completed**

| Fiscal Year of Construction | Area | Lineal Footage Installed |
|---|---|---|
| 2000 / 2001 | Jemez Trail and Highland Trail (Kickapoo Trail to Inca Trail) | 1,500 |
| 2000 / 2001 | Inca Trail and Mariposa Trail, (Mariposa Trail to Fox Trail, and Yucca Trail to Palms Highway) | 2,300 |
| 2002 / 2003 | Coyote Trail and Apache Trail (north of 29 Palms Highway) | 3,400 |

For the purposes of the Water Master Plan Study, the pipe diameter given is based on the typical (and conservative) industry velocity standard of ten feet per second (fps). This ensures a reasonable unit headloss within the system for maximum ability to provide the fire flows at the minimum residual pressure of 20 pounds per square inch (psi), as dictated by the Uniform Fire Code. Fire-flow criteria (as provided in the 2001 Water Master Plan Update) and appropriate system pipeline diameters are indicated in Table 5.4-22, *Fire-Flow Pipe Dimensions*.

**Table 5.4-22**
**Fire-Flow Pipe Dimensions**

| Land Use | Minimum Required Fire Flow (gallons per minute) | Minimum Pipe Diameter |
|---|---|---|
| Low-Density Residential | 1,500 | 8 inches |
| Residential | 2,000 | 8 inches (looping) |
| Commercial/Multi-family Residential | 3,000 | 10 inches (looping) |
| Industrial | 4,000 | 12 inches (looping) |

Although several miles of pipeline upgrades were completed during the 1995-96 Pipeline Improvement Project, several older and smaller pipelines (two-inch, three-inch, and four-inch) are still in operation. Some of these existing pipelines still serve fire hydrants, which are sorely insufficient for providing even the lowest of current-day fire-flow requirements. Thus, based on current information, the available fire flow currently supplied by the HDWD would be inadequate for the Project. Mitigation is recommended requiring hydraulic analysis on a project-by-project basis, at the design phase of each project, to verify that current-day fire-flow requirements would be met and that the fire-flow pipe diameters (Table 5.4-20) would work within the operation of the HDWD transmission system as a whole. However, even with mitigation, this potential impact is concluded as significant and unavoidable.

The Specific Plan would result in the buildout of water infrastructure and presents an opportunity to upgrade and ensure the adequacy of fire hydrant coverage. In locations that cannot be reached by conventional fire department equipment from existing public fire hydrants, new fire hydrants would be required and/or old hydrants replaced/relocated as part of the infrastructure upgrades. The proposed water system upgrades would require prior verification through computer model simulation on a project-by-project basis. Refer to Table 3-2, *Proposed Water Infrastructure Improvements*, and Exhibit 3-8, *Proposed Water Plan*.

Water Storage. The 1995 and 2001 Water Master Plans define water storage requirements due to three separate needs – operational, emergency, and fire. Both the 1995 and 2001 Master Plans discuss the need for additional storage in the 3495W Pressure Zone. The 2001 HDWD Water Master Plan Update (Section VII) describes additional storage capacity needs, based on the 2001 storage capacity of 4.5 million gallons (MG). Projected water demands for the 3495W Pressure Zone (both east and west sides) produce a need for 4.72 MG for 2005, and 5.57 MG for 2020, according to Tables VII-1B and VII-1A of the Update. This represents an additional storage need for the 3495W Zone, as a whole, of approximately 0.2 MG in

2005 and 1.1 MG in 2020. Current storage capacity in the 3495W Zone may be adequate for the additional demands estimated from the Project. The water storage requirements would require prior verification on a project-by-project basis.

***Mitigation Measures:***

PSU-4 Prior to issuance of Grading Permit, future applicants shall consult the HDWD on a project-by-project basis to identify the existing water distribution facilities (pipelines, fire hydrants, etc.) and the necessary upgrades, pursuant criteria specified in the 2001 Water Master Plan Update.

PSU-5 Prior to issuance of Certificate of Occupancy and in consultation with HDWD on a project-by-project basis, new fire hydrants shall be installed and/or old hydrants replaced/relocated, in locations that cannot be reached by conventional fire department equipment from existing public fire hydrants.

PSU-6 Prior to issuance of Grading Permit and on a project-by-project basis, future applicants shall consult with the HDWD to verify through computer model simulation, the proposed water system upgrades outlined in Table 3-2, *Proposed Water Infrastructure Improvements*, and illustrated on Exhibit 3-8, *Proposed Water Plan*.

PSU-7 Prior to issuance of Grading Permit and during the design phase of each future project, applicants shall conduct a hydraulic analysis in consultation with the HDWD to verify that current-day fire-flow requirements would be met and that the fire-flow pipe diameters work within the operation of the HDWD transmission system as a whole, pursuant to the fire-flow criteria specified in the 2001 Water Master Plan Update.

PSU-8 Prior to issuance of Grading Permit and on a project-by-project basis, future applicants shall consult with the HDWD to verify the water storage requirements, based on the 2001 Water Master Plan Update.

***Level of Significance:*** Significant and Unavoidable Impact After Mitigation.

## WASTEWATER (SEWER)

- **PROJECT IMPLEMENTATION WOULD GENERATE ADDITIONAL WASTEWATER BEYOND CURRENT CONDITION.**

***Impact Analysis***: According to the HDWD, the generation rates for domestic contribution to the wastewater system is assumed to be 90 gallons per capita per day (gpcd), while specific generation rates are applied to the other types of land uses. Table 5.4-23, *Wastewater Generation - Project*, provides an estimate of the amount of wastewater that would be generated by implementation of the Specific Plan. As indicated in Table 5.4-23, an estimated 328,521 gpd of wastewater would be generated by the proposed Project, or 236,476 gpd more than the wastewater generated by existing conditions. Comparatively, buildout of the SPA would

generate approximately 238,320 gpd more than the wastewater generation, based on General Plan buildout; refer to Table 5.4-23.

**Table 5.4-23**
**Wastewater Generation – Project**

| Geography | Square Feet / Population | Rate[1] | Wastewater Generation |
|---|---|---|---|
| Old Town Yucca Valley SP – Proposed | | | |
| Commercial/Retail | 2,348,770 SF | 30 gpd/1,000 SF | 70,463 gpd |
| Industrial | 551,834 SF | 10 gpd/1,000 SF | 5,518 gpd |
| Residential | 2,806 persons | 90 gpd/person | 252,540 gpd |
| *Total* | | | *328,521 gpd* |
| Within SPA – Existing[2] | | | 92,045 gpd |
| *Net Change (Specific Plan: Existing)* | | | *+236,476 gpd* |
| Within SPA - General Plan Buildout[2] | | | 90,201 gpd |
| *Net Change (Specific Plan: General Plan)* | | | *+238,320 gpd* |

1. *Hi-Desert Water District Wastewater Collection and Treatment Master Plan, Final Report*, January 1998.
2. Refer to Table 5.4-9, *Wastewater Generation - Existing*.

Private septic systems would be used for disposal of the wastewater generated by future development within the SPA. This would continue until such time as sufficient development has occurred to extend sewer system infrastructure to Yucca Valley. Because septic tank discharges have contaminated some of the groundwater supply with high nitrate levels, the potential exists that future development within the SPA would further aggravate this existing condition. Mitigation is recommended, which requires that the best available technology be used in the selection and installation of the private septic systems. However, even with mitigation, this potential impact is concluded as significant and unavoidable.

The Hi-Desert Water District anticipates constructing a wastewater treatment plant in Yucca Valley, northeast of the SPA. Future wastewater improvements, including the elimination of private septic systems and the construction of new wastewater collection, treatment, and disposal systems, would require a coordinated effort between the Town of Yucca Valley and the HDWD.

***Mitigation Measures:***

PSU-9 Prior to Building Permit issuance, new development on vacant parcels, which do not currently have a septic system, shall implement best available technology in the selection and installation of private septic systems, to the satisfaction of the Town of Yucca Valley and the Hi-Desert Water District (HDWD). New development on vacant parcels shall also provide lateral sewer lines to the center-lines of the nearest adjacent roadways. The lateral sewer lines shall be constructed in accordance with Town and District standards and specifications, to the satisfaction of the Town of Yucca Valley.

PSU-10 Prior to Building Permit issuance, new development or redevelopment on parcels with existing septic systems shall provide evidence to the

satisfaction of the Town of Yucca Valley and the HDWD, that the existing septic system is operating efficiently and that adequate capacity exists to support new/additional development.

PSU-11 Prior to issuance of Certificate of Occupancy, applicants shall provide the Town of Yucca Valley with evidence that the HDWD has reviewed/approved the informational materials regarding the proper maintenance of septic systems that will be distributed to future tenants/residents. Such informational materials, shall include at a minimum, the following provisions:

- Septic tanks shall be inspected and pumped regularly to remove the solid waste (sludge). At a minimum, septic tanks shall be cleaned every four years.

- Chemicals and other hazardous wastes shall be kept out of the septic systems. Hazardous chemicals shall not be poured down the drain or flushed down the toilet (e.g., pesticides, paint thinner, household chemicals, solvents, or engine oil).

- Toilet bowl cleaners, such as the tablets dropped in tanks, shall be "septic system friendly." To prevent the destruction of the bacteria used in septic tanks, cleaners that include chemicals with "benzene" (e.g., dichlorobenzene) or Formaldehyde shall be avoided.

- Chemicals used to clear clogged drains or leach lines (e.g., destroy roots) or any product that has acid in it, shall also be avoided to prevent the destruction of the bacteria.

***Level of Significance:*** Significant and Unavoidable Impact After Mitigation Incorporated.

## SOLID WASTE

- **IMPLEMENTATION OF THE SPECIFIC PLAN WOULD INCREASE SOLID WASTE GENERATION.**

***Impact Analysis:*** Proposed construction and demolition activities would generate construction debris from development of the SPA over an unspecified amount of time until buildout. Compliance with Code requirements would reduce potential impacts in this regard to less than significant.

Table 5.4-22, *Solid Waste Generation – Project*, outlines the estimated solid waste generation for the proposed Specific Plan and indicates post-development operations would generate approximately 12,902 tons of solid waste per year (prior to recycling), or 9,454 tons per year more than existing conditions. Comparatively, buildout of the SPA would generate 2,482 tons of solid waste per year less than the solid waste generation based on *General Plan* buildout; refer to Table 5.4-24. The Specific Plan proposes less commercial/industrial development than the *General Plan* buildout (a net decrease of 478,435 SF). Thus, the solid waste generation

would be proportionately less, more than offsetting the increase in solid waste generation from the residential development proposed by the Project.

**Table 5.4-24**
**Solid Waste Generation – Project**

| Geography | Square Feet / Dwelling Units | Rate[1] | Solid Waste Generation |
|---|---|---|---|
| Old Town Yucca Valley SP – Proposed | | | |
| Commercial/Retail | 2,348,770 SF | 0.0024 tons/SF | 5,637 tons/year |
| Industrial | 551,834 SF | 0.0108 tons/SF | 5,959 tons/year |
| Residential | 1,115 DU | 1.17 tons/DU | 1,305 tons/year |
| *Total* | | | *12,902 tons/year* |
| Within SPA – Existing[2] | | | 3,448 tons/year |
| *Net Change (Specific Plan: Existing)* | | | *+9,454 tons/year* |
| Within SPA - General Plan Buildout[2] | | | 15,384 tons/year |
| *Net Change (Specific Plan: General Plan)* | | | *-2,482 tons/year* |

1. Estimated Solid Waste Generation Rates, California Integrated Waste Management Board website www.ciwmb.ca.gov, August 2006.
2. Refer to Table 5.4-10, *Solid Waste Generation – Existing*.

The proposed new development within the SPA would be subject to the provisions of Section 6.02 of the *Yucca Valley Municipal Code*, which discusses responsibilities of solid waste and recycling collection. The solid waste service provider would continue to provide recycling containers for residential, commercial, and institutional uses, further facilitating the diversion of solid waste and recyclable materials from landfills. Project compliance with the Town's AB 939 waste reduction requirements and the Yucca Valley Municipal Code would reduce the amount of solid waste, which is ultimately disposed of at the landfill. Analysis has concluded that impacts would be less than significant.

***Mitigation Measures:*** No mitigation measures are recommended.

***Level of Significance:*** Less Than Significant Impact.

## OTHER UTILITIES (ELECTRIC, GAS, TELEPHONE)

- **PROJECT IMPLEMENTATION WOULD RESULT IN AN INCREASE IN THE DEMAND FOR PUBLIC UTILITIES (ELECTRICAL, NATURAL GAS, TELEPHONE, AND CABLE SERVICE) BEYOND EXISTING CONDITIONS AND MAY REQUIRE SYSTEM EXPANSIONS.**

***Impact Analysis:*** Implementation of the proposed Specific Plan would increase demand for electricity, natural gas, telephone, and cable services in the SPA. Total demand is expected to increase over an extended period of time. The electricity, gas, and telephone lines to serve the new development can be connected from existing transmission facilities on SR-62. It is anticipated that SCE, SCG, Verizon, and Time Warner Cable would have adequate resources to serve all customer loads on a project-by-project basis, in accordance with agency rules and tariffs.

Future development shall coordinate with SCE, SCG, Verizon, and Time Warner Cable to install electrical, gas, telephone, and cable lines in an individual or joint trench configuration. As previously stated, future development would trench and install the conduit per the utilities' requirements and, where applicable, the utility would inspect the trench and provide, install, and connect service. Each utility company would determine the costs for new services once established. Implementation of the proposed Specific Plan would result in less than significant impacts.

Electricity. SCE would require official development design plans from the Town in order to provide an engineering design for the demolition or conversion to underground electrical lines. Aerial electrical lines are currently located throughout the SPA. Upon Project implementation, future developers may be required to underground all electric lines. Individual development projects would be required to coordinate with the local SCE planner to obtain underground electrical services for proposed construction within the SPA.

Natural Gas. SCG maintains provides natural gas service to the SPA. Two-, four-, and six-inch transmission and distribution lines run throughout Yucca Valley and there is a six-inch gas line running under SR-62.

Telephone. All existing undergrounded telephone lines within the SPA shall be protected in place. In order to disconnect existing overhead telephone lines, the Town would be required to provide Verizon with the addresses of buildings and housing units proposed for removal. Coordination with Verizon would be required to obtain new telephone services for individual developments. A full set of plans, including addresses and site plans for each new property shall be provided to Verizon to obtain new services. Upon receipt of site plans, Verizon would determine if relocation of existing undergrounded telephone lines would be required.

***Mitigation Measures:*** No mitigation measures are recommended.

***Level of Significance:*** Less Than Significant Impact.

## 5.4.5 CUMULATIVE IMPACTS

- **CUMULATIVE DEVELOPMENT WOULD INCREASE THE DEMAND FOR PUBLIC SERVICES AND INCREASE THE CONSUMPTION RATES FOR PUBLIC UTILITIES, POTENTIALLY REQUIRING EXPANSIONS OF THE EXISTING SYSTEMS.**

***Impact Analysis:*** In relation to the cumulative development outlined in Section 4.0 *Basis of Cumulative Analysis*, the proposed Specific Plan would incrementally contribute to an increased demand for fire, police, schools, libraries, water, wastewater (sewer), solid waste and electricity, natural gas, and telephone utilities. The Specific Plan and cumulative projects would add to the cumulative demand for such services and utilities through the introduction of new residents and patrons. The Project is located in an area that is served by all utilities (except wastewater [sewage]) and public services. Existing facilities can be readily extended into the area to serve new development as it occurs, on a project-by-project basis. Excluding

wastewater, no other governmental services or activities would be cumulatively impacted by the proposed Project. Because the respective providers of such services and facilities have indicated that the Project's incremental impacts are sufficiently mitigated, cumulative impacts on public services and utilities anticipated to result from future development are not considered significant. Analysis has concluded that cumulative development is subject to standards and requirements of reviewing agencies and that a less than significant impact would occur in this regard.

Some of the existing pipelines within the Town still serve fire hydrants, which are sorely insufficient for providing even the lowest of current-day fire-flow requirements. Thus, the available fire flow currently supplied by the HDWD would be inadequate for cumulative development. Mitigation is recommended requiring hydraulic analysis on a project-by-project basis, at the design phase of each project, to verify that current-day fire-flow requirements would be met and that the fire-flow pipe diameters work within the operation of the HDWD transmission system as a whole. However, even with mitigation, the inadequate fire-flow is concluded as a significant and unavoidable impact.

Because septic tank discharges have contaminated some of the groundwater supply with high nitrate levels, the potential exists that future cumulative development combined with future development within the SPA, would further aggravate this existing condition. Mitigation is recommended, which requires that the best available technology be used in the selection and installation of the private septic systems. The potential contamination associated with wastewater generation is concluded as a significant and unavoidable cumulative impact.

***Mitigation Measures:*** Refer to Mitigation Measures PSU-1 through PSU-11.

***Level of Significance:*** Significant and Unavoidable Impact After Mitigation Incorporated.

## 5.4.6 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Project and cumulative development would result in significant and unavoidable impacts with respect to:

- The available fire flow currently supplied by the HDWD, which is considered inadequate for the Project and cumulative development.

- The potential for future Project and cumulative development within the SPA to further aggravate the existing contamination of the groundwater supply (with high nitrate levels), which has been caused by discharges from existing septic tanks.

If the Town of Yucca Valley approves the proposed Project, the Town would be required to adopt findings in accordance with *CEQA Guidelines* Section 15091 and prepare a Statement of Overriding Considerations in accordance with *CEQA Guidelines* Section 15093.