# M. UTILITIES

This section describes the various utilities systems serving the project site and evaluates the impacts that would result from the implementation of the proposed project. Mitigation measures are recommended, where appropriate.

## 1. Setting

Existing conditions for the following utilities and infrastructure service systems are described: electricity, natural gas, and telephone service; water supply; sanitary sewer service and wastewater treatment; and solid waste. The information presented was gathered from a variety of sources, including utility operators and service providers.

**a. Electricity, Natural Gas, Telecommunications and Cable Television Services.** The existing land uses on the project site are currently served with electricity, natural gas and communications services. The Pacific Gas and Electric Company (PG&E) provides natural gas and electricity services throughout the City, including the project site, from a variety of renewable and non-renewable sources both within and outside of the State. Within the City's boundaries, there are a number of facilities that produce and transmit power throughout the City.

Single-mast towers supporting high voltage 115-kV transmission lines parallel the project site, adjacent to the rail road tracks. An existing PG&E substation is located on the northwest portion of the project site adjacent to the railroad tracks. This approximately 1.5 acre facility includes 115-kilovolt transmission lines, underground electrical distribution lines, distribution transformers and electrical switch gear that serve the electrical needs in the downtown area.

The majority of electrical distribution lines within the project vicinity consist of overhead and underground 4- and 12-kV electrical lines. Distribution lines running out of the substation provide electricity to the project site and its vicinity. A number of underground distribution lines run out of the substation beneath Otterson Street and continue south along S. Montgomery Street to Bird Avenue and other lines continue north to W. San Fernando Street. Distribution lines also run under S. Autumn Street.

PG&E natural gas lines in the project area are located beneath W. San Fernando Street, S. Montgomery Street, Otterson Street, and Park Avenue.

AT&T/SBC Communications Inc. provides telecommunications service to the project site and Comcast provides cable services to the project site.

**b. Water Supply.** A description of existing conditions related to water sources, storage, and retail providers; conservation; and recycling is presented below.

**(1) Water Sources, Storage, and Retail Providers.** Wholesale water is provided to local water retailers by the Santa Clara Valley Water District (SCVWD). The local water retail agencies in turn supply water to their customers in the City of San Jose. The SCVWD obtains approximately one half of its water from the Santa Clara Valley groundwater basin. The remaining potable water supplies are provided through a combination of local surface water and imported water supplies from the

State Water Project, the Central Valley Project and San Francisco Public Utilities Commission Hetch Hetchy water.

The groundwater basin is divided into three interconnected subbasins: the Santa Clara Valley Subbasin in the northern portion of the County and the Coyote and Llagas Subbasins in the southern portions of the County. The City of San Jose is located in the northern portion of the Santa Clara Valley subbasin. A confined zone of underground water within the northern areas of the Santa Clara Valley subbasin is overlaid with a thick clay layer. The SCVWD manages groundwater supplies through a conjunctive use program, pumping more groundwater in drier years and then replenishing and recharging the groundwater basin during wet and average years. The SCVWD augments natural recharge with a managed recharge program to offset groundwater pumping in order to sustain groundwater storage reserves and minimize the risk of land subsidence and saltwater intrusion. To ensure groundwater levels are sustained, imported surface water from the State Water Project and San Felipe Division of the Central Valley Water Project is stored and recharged via 18 reservoirs, 30 creeks and 71 percolation ponds. Ten reservoirs, with a total storage capacity of approximately 170,000 acre-feet (AF),[1] store runoff from local watersheds.

The SCVWD has a long term agreement with the Semitropic Water Storage District in Kern County and at the San Justo Reservoir in San Benito County, which allows the District to divert some of its surface water allocations for storage for use in future dry years. The Semitropic Water Bank is an "in lieu" storage program, meaning that the District does not retrieve its stored water directly from the groundwater basin at Semitropic. Rather, the District receives its water from Semitropic's State Water Project contract deliveries from the Delta, while Semitropic meets its water needs by increased ground-water pumping of the excesses water stored by the SCVWD allotment during wet and normal water years.[2]

The SCVWD owns and operates an extensive distribution system and three water treatment plants: Penitencia (42 mgd capacity), Rinconada (75 mgd capacity), and Santa Teresa (100 mgd capacity).[3] Upgrades are currently under way at the Rinconada plant to increase production to 100 mgd.

The San Jose Water Company (SJWC) is the water retail service provider for the project site. The SJWC provides water service for an area encompassing 138 square miles, including portions of San Jose, most of Cupertino, the entire cities of Campbell, Monte Sereno, Saratoga, the Town of Los Gatos and parts of unincorporated Santa Clara County. In 2004, 55 percent of SJWC potable water came from SCVWD treatment plants, 36 percent from SJWC groundwater and 9 percent from SJWC surface water sources.[4] Ninety-four active and ten stand-by wells pump groundwater from the major water-bearing aquifers of the Santa Clara Valley Subbasin. These aquifers are recharged naturally by rainfall and artificially by a system of local reservoirs, percolations ponds and an injection well operated by the SCVWD. Treated SCVWD water from the Rinconada, Penitencia and Santa Teresa water treatment plants is piped into the SJWC system at various turnouts after treatment. Surface water in the local watersheds of the Santa Cruz Mountains is collected in a series of dams and automated

[1] Santa Clara Valley Water District, 2005. *Urban Water Management Plan.* December.

[2] Ibid.

[3] Ibid.

[4] San Jose Water Company, 2005. *Urban Water Management Plan.* October.

intakes and then sent to the SJWC's Montevina Filter Plant for treatment prior to entering the distribution system. The SJWC's projected water supply for normal water years is listed in Table V.M.-1.

**Table V.M-1: SJWC Projected Potable Water Supply for Normal Water Years**

| Potable Water Supply (Acre-Feet) | Year |
|---|---|
| 152,942 | 2005 |
| 163,669 | 2010 |
| 175,377 | 2015 |
| 188,474 | 2020 |
| 199,837 | 2025 |
| 211,464 | 2030 |

Source: Water Supply Assessment, SJWC, January 31, 2006.

Following the 1987-1991 multi-year drought, the SJWC drafted a Water Shortage Contingency Plan which entails specific actions which prohibit certain uses of water, and provides enforcement mechanisms and possible penalties. Increased water efficiency and conservation measures, water metering programs, increased use of recycled water and other possible supplies such as desalinization are being evaluated to ensure that the SJWC will be able to meet the increasing demand for water within its service area.[5]

SJWC water has extensive water sampling and reporting requirements as required by the California Department of Health Services. The SJWC has a Water Quality Department which includes a large monitoring program and deals with all issues related to water quality.

The existing water supply system to the project area consists of water lines of various sizes within the street rights-of-way, including a 6-inch line on W. San Fernando Street, an 8-inch line on Otterson Street, an 8-inch line in S. Montgomery Street, a 6-inch line in S. Autumn Street, a 12.75-inch line in Park Avenue and an 8-inch line for the San Jose Fire Department Training Facility.

**(2) Water Conservation.** The City's water conservation and water recycling programs are intended to minimize flows to the sanitary sewer and sewage treatment systems, and to meet future water needs. Elements of the City's water conservation program include: limited landscape watering hours, restrictions on the use of potable water for construction purposes, ultra-low flow toilet incentives, a showerhead retrofit program, landscape ordinances for non-residential new construction, commercial/industrial water audits, financial incentives for commercial/industrial conservation, water use prohibitions, and a ban on cleaning vehicles without an automatic shut-off valve.

**(3) Recycled Water.** The City of San Jose administers the South Bay Water Recycling (SBWR) Program, a long-term program for the Cities of Milpitas, San Jose, and Santa Clara created to bring a reliable, sustainable, and drought-proof supply of non-potable water to the South Bay area. The SBWR was initially created to reduce the environmental impact of wastewater effluent discharge into the salt marshes of the south end of San Francisco Bay, and to help protect endangered species in the Don Edwards San Francisco Bay National Wildlife Refuge.

Wastewater from the sanitary sewer system travels to the San Jose/Santa Clara Water Pollution Control Plant (SJ/SC WPCP), is treated to tertiary levels, and distributed through the SBWR system. The finished product, SBWR water, is certified by the State Department of Health Services as suitable for non-potable water for uses such as irrigation at golf courses, parks, schools, sports complexes, agricultural lands, and for industrial purposes and cooling towers.[6] All recycled water pipes are color-

[5] Ibid.

[6] City of San Jose, 2005. Environmental Services: South Bay Water Recycling. Website: www.sanjoseca.gov/sbwr/about.htm.

coded purple, the national standard to identify recycled water, and clearly labeled with the words, "Recycled Water- Do not Drink." This follows standard practice that requires separate pipes for drinking water and recycled water. Recycled water produced by the SBWR Program is intended for non-potable uses such as irrigation and industrial use. The recycled water meets the requirements of "unrestricted use" as defined in the State's Title 22 regulations.[7] Recycled water is continually regulated, monitored, and tested using standards set by the U.S. Environmental Protection Agency, Regional Water Quality Control Board and the State Department of Health Services to ensure that recycled water quality far exceeds the quality required for its intended use.[8] In San Jose, recycled water is used primarily for industrial and landscape irrigation purposes.

The recycled water system includes pump stations, reservoirs, and over 105 miles of pipe. During the summer months, between 10 and 16 million gallons of recycled water is distributed to over 500 customers per day.[9] Approximately 2,276 million gallons of recycled water was distributed through the SBWR system in 2004.[10] The San Jose Water Company anticipates a 3 percent annual increase in recycled water use within their service area during the next 25 years.[11]

Existing recycled water facilities in the project area are located on E. San Fernando Street between S. 12th and S. 4th Street east of the project site, and along Autumn Street approximately 400 feet south of Coleman Avenue, north of the project site. Additional recycled water lines currently extend to the Guadalupe Gardens and Colman Street, north of the project site.

**c. Sanitary Sewer Service and Wastewater Treatment.** The San Jose/Santa Clara Water Pollution Control Plant (Plant) provides wastewater treatment for the project area. The Plant is a regional facility located in North San Jose, and provides tertiary treatment of wastewater from several surrounding cities and sanitation districts. The cities of San Jose and Santa Clara jointly own the facility, but the City of San Jose operates and maintains the Plant.

The Plant's treatment capacity of 167 mgd is allocated between the several agencies served and two co-owners. The average dry weather from the City of San Jose in 2005 was approximately 118 mgd.[12] The City of San Jose currently has a remaining allotment of 49 mgd in unused treatment capacity.[13]

Most of the final treated water from the Plant is discharged as through Artesian Slough and into South San Francisco Bay. The area contains the South San Francisco Bay wetlands, along the Alviso shoreline, which are part of the Don Edwards San Francisco Bay National Wildlife Refuge. About 10 per-

[7] San Jose Water Company, 2005, op. cit.

[8] Ibid.

[9] Geoffrey Blair, Associate Environmental Services Specialist, City of San Jose Environmental Services Department, 2006, Personal communications with the City of San Jose Department of Planning, Building and Code Enforcement. January.

[10] Ibid.

[11] San Jose Water Company, 2005, op. cit.

[12] Pat Kwok, Division Manager, City of San Jose Environmental Services Division, 2006. Personal communication with LSA Associates, Inc. January.

[13] Ibid.

cent is recycled through South Bay Water Recycling pipelines for landscaping, agricultural irrigation, and industrial needs around the South Bay.

In 1989, the San Francisco Bay Regional Water Quality Control Board ordered the Plant to reduce its discharge of metals (copper and nickel) by more than 50 percent to protect aquatic organisms and meet the State and Federal water quality objectives of the South San Francisco Bay. In addition, the Regional Board imposed a 120 mgd flow limit and required the Plant to reduce the quantity of effluent discharged to avoid converting the habitat of two endangered species, the salt marsh harvest mouse and the California clapper rail. The Plant has had programs in place since 1991 to reduce and maintain flows below 120 mgd and is currently in compliance with this requirement. In 2005, the average dry weather effluent flow was approximately 102mgd.[14] Long-term plans to remain in compliance with the 120-mgd requirement include ongoing water conservation and water recycling.

The existing sanitary sewer collection system which serves the project site consists of a system of pipelines, lateral lines and interconnected main lines in the public right-of-way, draining to treatment at the Plant. Wastewater collection is maintained by the City of San Jose Department of Public Works. The treatment of wastewater is under the authority of the Department of Environmental Services. The General Plan provides standards to ensure that sanitary sewer lines maintain a Level of Service (LOS) D, which represents a free flow of wastewater sufficient to prevent "back up" problems.

A 36-inch high density polyethylene (HDP) and concrete protection liner (CPL) sewer main runs beneath the Park Avenue right-of-way and continues north beneath the S. Autumn Street right-of-way. This sewer main eventually increases to a 42-inch vitrified clay pipe (VCP) downstream of the site to the north. Existing land uses on the site are served by 6- to 8-inch VCP sewer lines beneath the Otterson Street and S. Montgomery Street rights-of-way. These lines connect to a 10-inch VCP line beneath the W. San Fernando Street right-of-way.

**d. Solid Waste.** Commercial solid waste collection in San Jose is provided by private haulers in a competitive, non-exclusive system. Collectors of garbage, rubbish, and mixed recyclables are required to have a franchise issued by the City. Currently, 16 franchised haulers offer commercial garbage and rubbish collection. Seven of these are full-service waste haulers, who provide and service front-load bins and roll-off boxes and also provide recycling services; two provide roll-off service for both garbage and recyclables. An additional nine franchisees provide mixed recycling service only.[15] Many additional firms collect source-separated recyclables, such as corrugated cardboard, beverage containers, office paper, glass, and food waste.[16]

As shown in Table V.M-2, there are five active landfills in San Jose. Four of these are permitted to accept all non-hazardous commercial wastes—Guadalupe Sanitary Landfill, Kirby Canyon Recycling & Disposal Facility, Newby Island Sanitary Landfill, and Zanker Material Processing Facility. The fifth, Zanker Road Class III Sanitary Landfill, is prohibited from accepting putrescible waste (i.e., garbage, as opposed to rubbish). All five landfills have extensive recycling operations, including, at

[14] Ibid.

[15] Stephen Bantillo, Commercial Solid Waste Manager, City of San Jose Environmental Services Department, 2006. Personal communication with Akoni Danielson, City of San Jose. February 3.

[16] Santa Clara County Center for the Development of Recycling. Website: www.recyclestuff.org.

various sites, composting, construction and demolition debris processing, biomass fuel production, salvaging, and recovery of soils and inert materials for daily cover and on-site construction.

The most recently published projections of closure dates for San Jose landfills were in the County of Santa Clara Five-Year Review Report on the Countywide Integrated Waste Management Plan, dated May 2004. The five sites were projected to have 17 to 25 years of life remaining at that time (see Table V.M 2).[17]

**Table V.M-2: San Jose Disposal Quantities (2004) and Projected Landfill Closure Dates**

| Landfill | Maximum Permitted Daily Throughput (Tons)[a] | Average Amount Of Waste Received Per Day (Tons)[b] | Average Permitted Daily Throughput Available (Tons) | Projected Landfill Closure Date[c] |
|---|---|---|---|---|
| Guadalupe Sanitary Landfill | 3,650 | 1,494 | 2,156 | 2023-2028 |
| Kirby Canyon Recycling & Disposal Facility | 2,600 | 1,220 | 1,380 | 2022 |
| Newby Island Sanitary Landfill | 4,000 | 3,108 | 892 | 2021 |
| Zanker Road Class III Landfill | 1,300 | 672 | 628 | 2020 |
| Zanker Material Processing Facility | 350 | 425 | -75 | 2021 |
| **Total Disposed In San Jose** | **11,900** | **6,919** | **4,981** | |

[a] California Integrated Waste Management Board, Solid Waste Information System. Website: http://www.ciwmb.ca.gov/SWIS/Search.asp.
[b] California Integrated Waste Management Board, Disposal Reporting System. Website: http://www.ciwmb.ca.gov/LGCentral/DRS/Reports/.
[c] County of Santa Clara. Five-Year Review Report on the Countywide Integrated Waste Management Plan, May 2004. Website: http://www.ciwmb.ca.gov/agendas/mtgdocs/2004/09/00016898.pdf.

Source: City of San Jose, 2006.

San Jose generated 831,602 tons of waste in 2004 that was reported to the State as landfilled. Of this, 670,979 was disposed and 160,623 was used as Alternate Daily Cover.[18] Several hundred thousand additional tons were used by landfills as clean cover material, inert construction material, or for other "beneficial uses" on-site. Of the 832,000 tons generated in San Jose, 161,000 were sent to landfills outside of the City, or about 19 percent. The main destinations for disposal were Solano, San Joaquin, and Kings Counties. The main destination for Alternate Daily Cover was Alameda County. The 671,000 tons of San Jose waste landfilled at the five sites inside the City make up 45 percent of the 1,475,000 tons reported by those sites. Almost all of the other 804,000 tons of waste disposed of in San Jose originated in Santa Clara County, with smaller amounts (less than 1 percent) coming from each of the other counties in the San Francisco and Monterey Bay Areas.

The Integrated Waste Management Act of 1989 (AB 939) requires all municipalities to divert 50 percent of its solid waste from landfills by the end of calendar year 2000 through the implementation of various strategies, including source reduction, composting, recycling, and yard waste programs. Using a combination of financial incentives, public education, technical assistance, and recycling collection services, the City increased its diversion rate dramatically from 11 percent in 1990 to 44 percent in 1995. In 2002, the City of San Jose diverted 62 percent of the waste stream through a variety of waste diversion programs including curbside recycling, a free waste assessment program, and policy incentives.[19]

[17] California Integrated Waste Management Board, 2005. Website: http://www.ciwmb.ca.gov/agendas/mtgdocs/2004/09/00016898.pdf.

[18] California Integrated Waste Management Board, 2005. *Disposal Reporting System*. Website: http://www.ciwmb.ca.gov/LGCentral/DRS/Reports/Orgin/WFOrgin.asp?VW=SUBMIT.

[19] California Integrated Waste Management Board, 2005. *Jurisdiction Profile for the City of San Jose*. Website: www.ciwmb.ca.gov/profiles/juris.

AB 2176 established requirements for large venues and events (with average daily attendance, including staff, of more than 2,000 people) to plan for solid waste reduction, and requires the largest to annually report the progress of their recycling and waste reduction programs to their local government. It also requires provision of adequate space for the collection and loading of recyclable materials in new development projects as a necessary condition of permit approval. AB 2176 requires that operators of large venues and event facilities meet with recyclers and solid waste handlers to select appropriate waste diversion programs and to prepare a waste reduction plan.

The proposed baseball Stadium will be one of the largest venues in San Jose. Pursuant to AB 2176, its operators will be required to prepare a waste reduction plan and submit it to the Environmental Services Department for approval prior to opening. The operator will also be required to submit annual reports showing the amounts of waste disposed and diverted from disposal, documenting their progress in achieving their waste reduction plan, and explaining any delays in implementing elements of that plan.[20]

The City of San Jose's Construction and Demolition Diversion Deposit Program (CDDD) is an incentive program to encourage the recovery of construction and demolition debris through the use of a deposit that is refunded if the construction and debris are recovered or recycled at a CDDD-certified facility.

**e. San Jose 2020 General Plan Policies.** The following policies from the *San Jose 2020 General Plan* are related to utilities systems and are relevant to the proposed project.

**Natural Resources**

- *Water Resources Policy 1:* The City, in cooperation with the Santa Clara Valley Water District, should restrict or carefully regulate public and private development in watershed areas, especially those necessary for the effective functioning of reservoirs, ponds, and streams, and for the prevention of excessive siltation.
- *Water Resources Policy 2:* Water resources should be utilized in a manner which does not deplete the supply of surface or ground water, and efforts to conserve and reclaim water supplies, both local and imported, should be encouraged.
- *Water Resources Policy 5*: The City should protect groundwater recharge areas, particularly creeks and creeksides, and riparian corridors.

**Services and Facilities**

- *Sewage Treatment Policy 7:* The City should monitor and regulate growth so that the cumulative sewage treatment demand of all development can be accommodated by San Jose's share of the treatment capacity of the San Jose/Santa Clara Water Pollution Control Plant.
- *Sewage Treatment Policy 8:* The operation of the Water Pollution Control Plant should comply with the water quality standards for the South San Francisco Bay established by the Regional Water Quality Control Board and implemented through NPDES (National Pollutant Discharge Elimination System) permits.
- *Sewage Treatment Policy 9:* The City should continue to encourage water conservation programs which result in reduced demand for sewage treatment capacity.
- *Solid Waste Goal 2:* Extend the life span of existing landfills by promoting source reduction, recycling, composting and transformation of solid wastes.

[20] California Integrated Waste Management Board, 2006. *Waste Reduction at Venue Facilities and Large Events.* Website: http://www.ciwmb.ca.gov/venues/.

- *Solid Waste Policy 1:* Monitor the continued availability of long-term disposal capacity to ensure adequate solid waste disposal capacity.
- *Solid Waste Policy 20:* Solid waste reduction techniques including source reduction, reuse, recycling, source separation and energy recovery, should be encouraged.

**f. Regulatory Framework.** Public electricity providers (such as PG&E) within the State are subject to both State and local jurisdictions' utilities regulations. These regulations are discussed below.

**(1) California Public Utilities Commission.** The California Public Utilities Commission (CPUC) regulates the activities of private utilities within the State, including privately held electrical service providers such as PG&E. PG&E is required to comply with the provisions of CPUC General Order No. 131-D, when constructing, modifying, or relocating its electrical facilities, specifically substations.[21] General Order No. 131-D, Section III, Need for Commission Authorization, B. Permit to Construct, states:

> No electric public utility shall begin construction in this state of any electric power line facilities or substations which are designed for immediate or eventual operation at any voltage between 50-kV or 200-kV or new or upgraded substations with a high side voltage exceeding 50-kV without the Commission's having first authorized the construction of said facilities by issuance of a permit to construct in accordance with the provisions of Sections IX.B, X, and XI.B.

## 2. Impacts and Mitigation Measures

The following section evaluates impacts related to utilities and infrastructure service systems that could result from the implementation of the proposed project. The section begins with the criteria of significance, which establish the thresholds to determine whether an impact is significant and concludes with impacts of the project and mitigation measures, if required.

**a. Criteria of Significance.** Implementation of the proposed project would have significant impacts on utilities and infrastructure service systems if it would have the following effects:

- Exceed wastewater treatment requirements of the Regional Water Quality Control Board (RWQCB);
- Create substantial demand for water beyond the existing or planned City's water supply, requiring additional water storage capacity;
- Interfere with the accomplishment of waste diversion goals mandated by the California Integrated Waste Management Act;
- Require or result in the construction of a new water, stormwater, or wastewater facility or expansion of existing facilities, the construction of which could cause significant environmental effects;
- Result in a determination by the wastewater treatment provider that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments;

[21] Public Utilities Commission of the State of California, 2005. *Rules Relating to the Planning and Construction of Electrical Generation, Transmission/Power/Distribution Line Facilities and Substations Located in California*, General Order No. 131-D, Adopted June 8, 1994, modified August 11,1995.

- Require new or expanded entitlements for water supplies;
- Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs; or
- Directly affect a major energy line or facility.

**b. Less-than-Significant Utilities Impacts.** The proposed project would create a small increase in demand for each of the utilities and service systems addressed in this section. However, in each case, the extent of the increased draw on those services would be within the physical and financial capability of the provider.

**(1) Natural Gas and Telecommunication and Cable Television Services.** Facilities providing electricity, natural gas and telephone services are built and maintained by the private utilities that provide these services under their franchise agreements with the State of California. New and expanded facilities are paid for from capital funds financed by fees paid by users. The project site is within an area which is currently urbanized and served by existing electricity, natural gas and telephone infrastructure.

Comcast Cable provides verification of services for new businesses and prior to construction a technician would visit the site to determine where the existing cable network is located, how to provide service to the proposed development and would give Comcast a quote on the cost of installation. Since the proposed project is within an area which is currently developed, it is likely that cable infrastructure would be readily available in the vicinity of the project site. Comcast seeks to expand their customer base and works to provide service to new customers in order to gain new accounts.

AT&T/SBC Communications currently provides communications service to the existing facilities on the project site. Depending on the communication needs of for the proposed project, AT&T/SBC may install a fiber optic cable to provide service to the site. Because the project site is within an urbanized area currently served by communications services, extending additional communication lines to the site would be feasible. Further refinement of the proposed project will determine the communication needs of proposed project and which type of infrastructure AT&T/SBC Communications would utilize to service the project site.

All of the utilities monitor the plans and growth patterns of the urban jurisdictions that they serve and, in doing so, maintain adequate backbone infrastructure to serve new development of the scale of the proposed project. (Potential impacts related to energy supplies are also addressed in Chapter V.O, Energy.)

**(2) Water Supply.** California Senate Bill 610 (SB 610) requires that water retailers must demonstrate whether their water supplies are sufficient to meet the projected demand of large development projects. The Water Supply Assessment (WSA) prepared for the proposed project by the SJWC determined that the project would increase the demand for water by approximately 54 million gallons per year (165 AF/year).[22] The WSA is included in Appendix H. This amount of water is well within the SJWC's future water demand projections as included in the 2005 UWMP.[23]

[22] San Jose Water Company, 2006. *Water Supply Assessment*. January 31.

[23] Ibid.

New lateral water supply lines within the site would have to be constructed and connected to the main lines described above.

The City would be responsible for the construction of these lines. At the time that a specific project design is finalized, water-conserving technologies and design features would be incorporated into the project. These elements of the project would include both indoor and outdoor features.

Existing recycled water lines are located on E. San Fernando Street east of the project site, and along Autumn Street extending approximately 400 feet south of Coleman Avenue, north of the project site.[24] Additional recycled water lines currently extend to the Guadalupe Gardens and Colman Street, north of the project site. Recycled water could be provided to the project site since planned and existing pipelines are close to the project site and water use at the site would be conducive to use of recycled water.[25] Recycled water is typically used for irrigation, but could also be used in toilets. The proposed project would be similar to the San Jose City Hall. The use of recycled water and conservation measures would minimize the effects on water supply during a drought.

Coordination with South Bay Water Recycling to extend recycled water lines to the site would provide recycled water to be utilized for all non-potable water needs of the proposed project, such as irrigation of the baseball field, water features, landscaping, and in urinals and toilets. The extension of recycled water lines to the site could also provide non-potable water to other locations along the way, including the HP Pavilion and Arena Green. Approved uses of recycled water are administered by South Bay Water Recycling (SBWR) Program and the California Department of Health Services.

**(3) Wastewater.** Based on an average daily flow rate of 5 gallons[26] per day (gpd) the proposed project would generate an average daily wastewater flow of approximately 225,000 gpd.[27] Using the City of San Jose Department of Public Works peak hour formula, the proposed project would generate a peak hour flow of approximately 650,000 gpd.[28] This increase in wastewater flow could be accommodated by the SJ/SC WPCP, which has a remaining excess treatment capacity of 49 mgd.[29]

The 36-inch HDP sewer line which runs beneath Park Avenue has an available capacity to accommodate 1.5 million gallons per day (MGD.)[30] The average daily flow of 225,000 gpd and the peak flow of 650,000 gpd from the proposed project could be accommodated by the remaining 1.5 million gpd

[24] Geoffrey Blair, Associate Environmental Services Specialist, City of San Jose Environmental Services Department, 2006. Personal communications with the City of San Jose Department of Planning, Building and Code Enforcement. January.

[25] Nicole Quesada, Engineer, South Bay Water Recycling, 2005. Personal communications with LSA Associates, Inc., December.

[26] Kam, Alan, 2006. Associate Engineer, San Jose Public Works Department, Sanitary Sewer section. Personal communication with LSA Associates, Inc., January.

[27] 45,000 seat x 5 gpd per seat = 225,000 gpd, average daily flow

[28] Kam, Alan, 2006, op. cit.

[29] Pat Kwok, Division Manager, City of San Jose Environmental Services Division, 2006. Personal communication with LSA Associates, Inc. January.

[30] Kam, Alan, 2006, op. cit.

capacity in the 36-inch sewer lines beneath Park Avenue. New lateral sanitary sewer lines within the site would have to be constructed and connected to the 36-inch trunk line beneath Park Avenue. Further analysis of the sanitary sewer capacity will be required at the project stage to determine the adequacy of the existing sanitary sewer system to accommodate the proposed project. Improvements and upgrades to the sanitary sewer system may be required to serve the proposed project.

**(4) Solid Waste.** Waste generation rates from Camden Yards Ballpark in Baltimore, Maryland are approximately 8 tons of solid waste per event.[31] Camden Yards has a seating capacity of 48,200 and therefore the 8-ton waste generation figure would be a conservative estimate for waste generation at the proposed project. The 80 baseball games and 15 to 20 other events that would occur as a result of the implementation of the proposed project would generate approximately 800 tons of solid waste per year. The increased solid waste generation during events at the stadium would constitute less than 1 percent of the remaining permitted daily throughput of the Kirby and Newby Island Landfills.

Large venues such as professional sports stadiums generate substantial quantities of solid waste, primarily corrugated cardboard, food waste and reusable and recyclable materials such as beverage containers, paper and glass. In accordance with AB 2176, the proposed project would be required to provide adequate space for waste reduction, reuse, and recycling activities. The design of the Stadium should include adequate overhead space to accommodate the overhead height requirements of front-end loading waste hauling vehicles or the length required to accommodate roll-off container transportation. If the Stadium waste handling areas are not designed with adequate space for loading and hauling within the site, space would need to be provided so that solid waste containers could be moved adjacent to the street to for hauling.

Additional solid waste could be diverted from the landfill if the recycling program includes recycling of food and organic waste. The HP Pavilion achieved a 97 percent waste diversion rate in 2002 through a comprehensive recycling and composting program.[32] The HP Pavilion recycling program includes:

- Recycling of all glass and plastics from the concessions, restaurants and bar areas;
- Post-game pick-up of recyclables;
- Provision of receptacles for glass and aluminum; and
- Mixed paper and cardboard recycling facilities.

As noted above, sufficient capacity exists at local landfills until 2021. Consistent with City policies, construction and demolition activities will be subject to recycling standards, and the new buildings will be designed to facilitate recycling activities.

[31] Lettieri-McIntyre and Associates, Inc., 1999. *Final Subsequent EIR for the San Diego Ballpark and Ancillary Development Projects.*

[32] U.S. Environmental Protection Agency, 2005. HP Pavilion at San Jose/Shark Tank: An Arena Recycling Success. Website: www.epa.gov/region09/waste/features/stadiumrecycling/.

**(5) Storm Sewer.** The project site is served by two main storm sewer networks, both of which discharge directly to Los Gatos Creek east of the site.[33] The northern portion of the site is drained by pipes under S. Montgomery Street and W. San Fernando Street. At the Los Gatos Creek outfall, this drainage pipe is 18 inches in diameter. The southern portion of the site is drained by underground pipes in the vicinity of Park Avenue. At the Los Gatos Creek outfall, this drainage pipe is 48 inches in diameter. Further analysis of the storm sewer capacity will be required at the project stage to determine the adequacy of the existing storm sewer system to accommodate the proposed project. Improvements and upgrades to the storm sewer system may be required to serve the proposed project, as discussed in Section V.H, Hydrology and Water Quality, in this EIR.

**c. Significant Utilities Impacts.** Implementation of the proposed project could result in the following significant adverse impact related to utilities and service systems.

**<u>Impact UTIL-1</u>: The water demand of the proposed project could cause a reduction in water pressure for surrounding land uses being served at the lower end of the pressure range. (S)**

The project site is located in one of the SJWC's largest water pressure zones and experiences lower than average water pressure. A hydraulic analysis was preformed by the SJWC incorporating the worst case scenario of 3,000 gallons per minute (gpm) demand assuming maximum capacity attendance of an event at the stadium on the day of maximum (peak summer) system-wide water usage.

Current downtown pressures during maximum day conditions have been noted to drop to the 45 to 55 psi range during high usage periods. The SJWC hydraulic analysis projected that a stadium demand of 3,000 gpm would cause a reduction in downtown water pressures by 4 psi.[34] This reduction in pressure would be noticed by other water uses currently being served at the lower end of the pressure range. In order to ensure that the proposed project does not impact water pressures in this zone, the following mitigation measure shall be implemented.

> <u>Mitigation Measure UTIL-1</u>: Prior to the issuance of a certificate of occupancy, the City shall either 1) install one new well in an easement within the area with access to the existing water lines, or 2) install inter-zone regulators at two existing SJWC facility stations to supply water from an adjacent, higher pressure zone.
>
> The SJWC preferred mitigation would be a new well facility located near the stadium (possibly in an easement on the southerly portion of the site adjacent to Los Gatos Creek). The well site would be required to meet all setbacks and requirements of the California Department of Health Services and the SCVWD. This well would pump water from the same basin as all of the SJWC's existing wells, the Santa Clara Valley Groundwater Subbasin. A new well would require approximately 5 feet by 5 feet of space for the above-ground well head with sufficient over-head space for well drilling and pump maintenance. The pump would be located in the well and would connect to existing water transmission line adjacent to the site.

[33] City of San Jose, Department of Public Works, 2002. Storm Drain System, maps 83A and 83C, revision date November 1.

[34] San Jose Water Company, 2006, op. cit.

An alternative to providing an additional well would be installing inter-zone regulators at two of the SJWC's existing facility locations. This would not require additional space, but would require additional piping, telemetry, and site modifications funded by the City. This option is not preferred by the SJWC as it would reduce operational flexibility. (LTS)

**Impact UTIL-2: The solid waste generated during the demolition, land clearing and construction could interfere with waste diversion goals mandated by the California Integrated Waste Management Act. (S)**

Demolition, land clearing and construction activities would generate a substantial amount of demolition waste. Implementation of the following mitigation measure would ensure that waste diversion and recycling goals of the California Integrated Waste Management Act and the San Jose Green Building Policies are met.

Mitigation Measure UTIL-2: Prior to the demolition of any structure on the site, the City shall prepare a waste management plan for the recycling of construction and demolition materials. The waste management plan shall ensure that a minimum of 50 percent (by weight) of construction, demolition, and land clearing waste is recycled or salvaged. (LTS)

**Impact UTIL-3: The proposed project may require the relocation of the existing PG&E substation. (S)**

The existing PG&E Substation A located adjacent to the railroad tracks in the northwestern portion of the project site will be modified or may be relocated as part of the proposed project. Should the relocation of the existing PG&E substation be required, the CPUC would be required to review and approve any modifications to or the siting and configuration of the new substation.

The CPUC has exclusive jurisdiction over utility regulation, including the installation of electrical substations, transmission lines, and associated facilities. Local jurisdictions cannot disapprove, impose conditions or environmental mitigation measures, or otherwise assert formal, discretionary jurisdiction over utility projects. Local jurisdictions are requested to supply a position statement during PG&E's preparation of the required Proponent's Environmental Assessment (PEA) and to comment during the CPUC's review process under CEQA.

PG&E is currently in a 90-day process (initiated on December 15, 2005 and expected to be complete March 15, 2006) for the evaluation of the required actions to relocate the substation from the northwest corner of the site to the southern portion of the site, south of Park Avenue.

Underground and overhead distribution lines currently located on the project site may need to be upgraded or modified to accommodate the proposed stadium design. Development of the proposed baseball stadium and associated parking structure and future development site would be required to underground all utility lines within the project site and vicinity.

The new substation would be designed to accommodate the future electrical requirements of the proposed stadium and with additional capacity to serve planned growth in the area.[35] The environmental

[35] Mahyar Congirlu, 2006. Land Agent/Project Coordinator. PG&E. Personal communication with LSA Associates, Inc., January.

impacts associated with the relocation, construction and operation are described throughout this document to the extent they are known at this time. As the design of the substation is finalized, additional detailed environmental review will be performed as required under CEQA.

> Mitigation Measure UTIL-3: The City shall work with PG&E to provide a new substation and transmission and distribution infrastructure. (LTS)