

4.8 PUBLIC UTILITIES

The proposed project would result in an increased demand on City water supplies. Current supplies are sufficient to meet this increased demand, though City policies require the payment of fees to offset the cost of meeting cumulative demands. The proposed project would also result in a corresponding increase in wastewater generation, requiring the provision of upgraded wastewater conveyance and treatment facilities in the area. This is considered a less than significant impact. The Water Reclamation Facility and sewer conveyance system have sufficient capacity to handle the increase in wastewater at this time, though the treatment facility would need to be expanded as the City approaches buildout. Therefore, impacts to wastewater systems are considered less than significant. Project construction could result in a disruption of utility service in order to accomplish utility line relocations. This would be considered a significant but mitigable impact. Solid waste generated during project construction and occupancy would be disposed of at the Cold Canyon Landfill, approximately seven miles southeast of the site. Prior to implementation of any recycling programs, the project would result in the generation of 2,067 tons per year (5.6 tons per day) of solid waste. Cold Canyon Landfill has sufficient capacity to accommodate project waste generation however this is considered to be a cumulative solid waste disposal Class II significant but mitigable impact.

4.8.1 Setting

a. Water.

Water Supply in the City of San Luis Obispo. Historically the City of San Luis Obispo has been the sole purveyor of water within the City limits. This has allowed the City to maintain uniformity of water service and distribution standards, and to be consistent in developing and implementing water policy.

The City Utilities Department annually prepares a Water Resources Status Report to provide the City Council and interested members of the community an annual update of the status of existing water resources as well as water supply projects being pursued to meet the community's needs. The following discussion is based on information from the 2002 Water Resources Status Report. The City essentially has three sources of water: the Salinas Reservoir, Whale Rock Reservoir, and groundwater. Each of these sources has a safe annual yield associated with that source. Safe Annual Yield is defined as the amount of water that can be utilized consistently and reliably over an extended period of time. The extended period of time must be long enough to establish patterns that would include a worst-case drought scenario.

Based on available information, the drought of 1986-1991 is the period that defines the City's Safe Annual Yield (SAY) of the two reservoirs. By utilizing the two reservoirs together in the most efficient way possible, the total SAY to the City is greater than the sum of the yield of the two reservoirs individually. The City Utilities Department has a computer model that determines the City's total SAY from groundwater and the conjunctive use of the two surface water supplies. Due to the City's inability to track groundwater extractions by others, and the negative effects of several years of aggressive pumping of the groundwater aquifer, the City's SAY model assumes only a 500 acre-feet per year (afy) contribution of groundwater. This should not be confused with the safe annual yield of groundwater from the entire basin beneath the City. The adopted safe annual yield of the City's combined water supplies in 2002 was estimated at 7,520 acre-feet/year.



The safe annual yield is used to determine whether the City has sufficient water supplies to meet the demands of existing development and development under General Plan buildout. Estimated City water demand is based on a demand factor of 145 gallons/person/day and a current population of 44,426. Table 4.8-1 shows the current estimated annual water demand for the City. This estimate excludes demand from California Polytechnic State University, which has its own sources of water.

Table 4.8-1 Current Water Demand in the City of San Luis Obispo (based on actual population)

Current Population	Acre-Feet/yr
44,426 people	7,216
Current Safe Annual Yield	7,520
Amount Remaining	304
<i>Source: City of San Luis Obispo 2002 Water Resources Status Report, June 2002.</i>	

At full General Plan buildout, water demand in the City is expected to rise to 9,096 acre-feet/year (AFY), as shown in Table 4.8-2. Based on current safe annual yield calculations the City would require an additional 1,576 AFY to meet this forecast demand.

Table 4.8-2 Estimated Water Demand at General Plan Buildout

Source of Demand	Population	Acre-feet/yr*	% of Total
Current Development	44,426	7,216	79.3%
New Development	11,574	1,880	20.7%
Subtotal	56,000	9,096	100%

* at 145 gal/day/person

Source: City of San Luis Obispo 2002 Water Resources Status Report, June 2002.

The City had previously established a goal to find water sources to supply and maintain a water reliability reserve and offset lost yield due to siltation at the reservoirs. The reliability reserve was intended to maintain adequate City water supplies during unpredictable changes, and its purpose is not intended to facilitate new development. On May 14, 2002, the City Council directed staff to initiate an amendment to the Water Management Element to delete the goal of acquiring a reliability reserve. Based on the elimination of the goal for the reliability reserve, and the need to provide an estimated 230 AFY to offset siltation in the supply reservoirs, the additional supplemental water requirement to meet build-out demand is 1,806 AFY (refer to Table 4.8-3).

Table 4.8-3 Estimated Additional Water Supply Requirement at General Plan Buildout

Source of Demand	Acre-feet
Water to Serve New Development	1,576
Reliability Reserve	0*
Siltation (2001 to 2025)	230
Total Water Supply Requirement	1,806

* May 14, 2002 City Council direction to eliminate the goal for a reliability reserve.

Source: City of San Luis Obispo 2002 Water Resources Status Report, June 2002.



To provide the required water resources to accommodate General Plan buildout forecasts, the City is currently pursuing the Water Reuse Project, additional groundwater resources, increased water conservation strategies, a possible desalination facility, the Nacimiento Pipeline Project, and the Salinas Reservoir Expansion Project. The potential yield of each of these projects is summarized in Table 4.8-4, which lists the projects in tiers to illustrate the priority recommended by the City Utilities Department. Each of these supply projects are briefly described in the paragraphs below.

Table 4.8-4 Potential Yield of City Water Supply Projects

Project (by priority)	Potential Yield (AFY)
1. Water Reuse	1,200
1. Additional Groundwater Resources	400-800
1. Additional Water Conservation	415-560
2. Desalination	not determined
2. Nacimiento Pipeline	3,380
3. Salinas Reservoir Expansion Project	1,650
Total	7,365-8,365

Source: City of San Luis Obispo 2002 Water Resources Status Report, June 2002.

Water Reuse Project. By the end of 2004, the City will implement a Water Reuse Project that provides non-potable water following treatment at the City Water Reclamation Facility (WRF). Initially, this project will replace approximately 120 AFY of potable water that is currently used for irrigation. At completion, the Water Reclamation Facility would produce approximately 1,200 AFY to meet irrigation demands. The additional water will be used to irrigate existing or new developments, to mitigate surface water impacts that may result from increased groundwater pumping, and to irrigate crops adjacent to the City in exchange for the groundwater previously used for irrigation. Reclaimed water will provide a reliable long-term source of irrigation water for the City. Since drought conditions have very little impact on this source of supply, a dependable water supply can be delivered to the parks, playgrounds and similar landscape areas served by the project even during drought periods. Use of Reclaimed water became feasible in 1994 after the City completed an upgrade of the WRF to comply with requirements for discharge to San Luis Obispo Creek. The tertiary treatment required for discharge to the creek, produces reclaimed water that is suitable to irrigate parks, playgrounds, agricultural crops, and landscaping, as well as many industrial processes, for construction, and many other non-potable uses.

Additional Groundwater Resources. The City has been evaluating the potential to increase groundwater production for several years. The current groundwater program utilizes three wells for domestic use, two wells for irrigation at the City golf course and one well at the Corporation Yard for construction water uses. The City's two largest producing wells, the Auto Parkway and Denny's wells, were shut down in 1992/93 due to elevated nitrate levels. The Pacific Beach #1 & #2 wells are not operated simultaneously due to the close proximity of the wells and the interference problem which occurs between the two sites. As of June 2002, the three active domestic wells were producing an average of 20 acre feet per month which represents about 4% of the total City water demand. The relatively small groundwater basin which supplies the majority of the City's groundwater production is recharged very quickly following normal rainfall years. The water levels in the basin also fall relatively quickly following the end of the rain season. The 2001 production from the available wells was 266 acre feet which was more than the previous year's amount of 159 acre feet. The current groundwater



strategy is to evaluate opportunities to reduce or eliminate groundwater use for agricultural purposes and substitute reclaimed water for this use. The historic groundwater use by agriculture could then be used by the City to meet domestic water demands.

Desalination Facility. The City has considered the option of constructing a new desalination facility, either alone or with another agency. As a coastal community, the option remains for the City of San Luis Obispo. However, desalination is currently still in the conceptual stages of consideration. The use of the desalination facility by the City of San Luis Obispo could take many different forms, from use as an emergency backup source to meeting a portion of the annual water use every year.

Nacimiento Pipeline Project. In 1959, the County of San Luis Obispo acquired the rights to 17,500 AFY of water from Nacimiento Reservoir. In 1995, the County began this most recent effort to bring the water to various cities, County Service Areas, and other water agencies in the northern part of the County. For the purposes of environmental review, the City has requested 3,380 AFY of water from the Nacimiento project (full build-out deficit plus the 2,000 acre foot reliability reserve).

Salinas Reservoir Expansion Project. The City has been pursuing the Salinas Reservoir Expansion Project for the past 10 to 15 years. The project includes the installation of a spillway gate in the dam that was originally intended as part of the structure. The installation of the spillway gate would raise the maximum water surface level by approximately 19 feet (City of San Luis Obispo, 2002 Water Resources Status Report). This would increase the storage capacity by almost 18,000 acre feet (currently 23,843 af) and would result in an estimated increase of safe annual yield of 1,650 acre feet.

Water Sources on the Dalidio Property. The project site is currently outside of corporate limits of the City, but within the City's designated Urban Reserve Area. As such, the project site is currently not served by the City water supply. This has not been an issue in the past since an aquifer underlies the Dalidio property, for which the Dalidio property owners possess water rights. However, the City has used this aquifer in the past to supplement its water supply, including during the latter portion of the drought of 1986-1992. The water in this aquifer is currently used for on-site agricultural operations and by the current residents, through pumping by on-site wells. The water supply potential within this aquifer is estimated at 2,000 acre-feet per year. It should be noted that this is not considered to be a sustainable yield.

b. Wastewater. The City of San Luis Obispo manages and provides public wastewater treatment in the City. The City collects, treats, and disposes of wastewater from about 13,500 public customers within City limits. The City of San Luis Obispo's wastewater collection system consists of one hundred and fifty miles of sewer pipes, ranging in size from 6 to 30 inches in diameter, which convey wastewater to the City's Water Reclamation Facility (WRF), located on Prado Road near U.S. Highway 101. The WRF removes larger material, treats the waste stream to reduce the amount of nutrients and bacteria, separates sludge, and discharges the treated effluent into San Luis Obispo Creek near Los Osos Valley Road. The sludge is separated from the wastewater, dried in open ponds at the WRF, and hauled away for disposal. The WRF treats about 4.5 million gallons per day (mgd) during dry weather conditions. The current treatment capacity of the WRF during dry weather conditions is 5.1 mgd. Average dry weather treatment flows have been stable over the past several years due to a balance between increased



population and improved water conservation (David Hix, Wastewater Division Manager, City of San Luis Obispo, Telephone Communication, February 18, 2003).

To receive wastewater service, areas must be annexed to the City, as stated in Policy 12.1 of the 1996 Water and Wastewater Management Element. In order to be consistent with the Land Use Element of the City's General Plan, the City will not annex an area unless it can meet the wastewater treatment needs of the area to be annexed, in addition to the wastewater treatment requirements for all other development within the City.

c. Solid Waste. Solid waste pick-up service for the project area is currently provided by the San Luis Garbage Company on a weekly basis. Waste from the project area is ultimately disposed at Cold Canyon Landfill, an approximate 88-acre landfill located at 2268 Carpenter Canyon Road (Highway 227), south of the City of San Luis Obispo. Cold Canyon Landfill is a Class III landfill, and does not accept hazardous waste. The landfill has a total permitted capacity of approximately 8,800,000 cubic yards, with a remaining capacity of 2,800,000 cubic yards. Cold Canyon Landfill permitted peak throughput of 750 tons per day and has an average acceptance of approximately 399 tons per day. The landfill has been permitted to accept up to 296,000 tons of waste per year. During 2001, Cold Canyon Landfill accepted approximately 177,276 tons of solid waste. It is estimated to have available capacity until 2017 (California Integrated Waste Management Board, SWIS Database, 2003). Existing development within the County generated an estimated 225,918 tons of solid waste in 2000, of which an estimated 121,996 tons (54%) was generated by nonresidential uses and 103,992 tons (46%) was generated by residential uses (California Integrated Waste Management Board, 2003). Nonresidential waste in the County is primarily composed of organic materials (e.g., food, landscape waste), metals, glass, and plastic.

4.8.2 Impact Analysis

a. Methodology and Significance Thresholds. This section is based on the City of San Luis Obispo's 1996 Water and Wastewater Management Element, 2002 Water Resources Status Report, and discussions with City of San Luis Obispo Utilities Department staff. Water demand for the project has been estimated using water demand factors from the County of Santa Barbara Environmental Thresholds and Guidelines Manual, 1995. Impacts to water supplies have been considered significant if project generated demand exceeds capacity of existing or future supplies, facilities, or service lines. Impacts to wastewater infrastructure have been determined to be significant if the proposed project would result in sewer line or treatment plant system deficiencies.

Pursuant to the State CEQA Guidelines, impacts related to the proposed project are considered significant if the project would:

- *Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted);*
- *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;
- Fail to have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed; or
- Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

b. Project Impacts and Mitigation Measures.

Impact PU-1 Although the project would reduce demand on the groundwater basin by approximately 240 AFY, due to the conversion of agriculture to urban use, the project would increase demand on City of San Luis Obispo potable water supplies by an estimated 103.6 AFY. Impacts to the City's water supply are considered Class III, less than significant, with payment of Water Impact Fees, since water is available for allocation.

The potable water supply for the proposed development would be delivered by the City water system as required by City Ordinance. A 12-inch diameter public water main would be placed in the Prado Road extension and would connect the existing 12-inch main in Madonna Road with the existing on-site 12-inch water main adjacent to U.S. Highway 101 (on the west side). Water for landscaping could be provided from on-site wells, for those properties that have wells, and/or from the City's Water Reuse System once it is available. Water for irrigation would not draw from the City's potable water supply. The development would incorporate water conservation features such as low-flow faucets, drought-tolerant landscaping, and drip irrigation systems.

Replacing some of the agricultural uses with commercial/retail and office/business park uses would be expected to result in a net decrease in the demand on the groundwater basin in this area. This may allow additional groundwater to be available for municipal use. However, issues relative to the quantity available, reliability, and water quality render the groundwater supply questionable for municipal purposes. Table 4.8-5 shows the property's current demand on the groundwater basin. Table 4.8-6 estimates the project's total water demand for both potable (City) and non-potable (groundwater) sources. Table 4.8-7 illustrates that the proposed project reduces the current demand for groundwater resources by about 236 AFY and it will increase the demand for potable City water supplies by 103.6 AFY.

Table 4.8-5 Current Water Demand at the Project Site

Land Use	Amount	Use Factor	Total (AFY)
Single Family Residence	1 unit	1.44 AFY/unit	1.44
Row Crop Agriculture	109 acres	1.4 AF/acre/season	457.8*
Total			~459**

Sources: County of Santa Barbara Environmental Threshold Guidelines, 1995.
 UCSB Cooperative Extension, Irrigation Water Use for Major Crops Grown in Santa Barbara County.

*Assumes three growing seasons per year

**Historic use data indicates that use at the site can be as great as 498 AFY

AF = acre-feet; AFY = acre-feet/year



To determine project impact on the groundwater supply, the current water use at the site was calculated and subtracted from the projected future demand. The current water use at the site is estimated at approximately 459 AFY. It should be noted that historical water use on the site has been recorded at higher volumes than that estimated. During the early 1990's 498-acre feet of water produced from wells on the project site were used for on-site irrigation (Cleath, 1999). The estimated project groundwater demand is about 222.8 AFY, as shown in Table 4.8-6.

Though development of the proposed project would result in a net reduction in groundwater demand, it would result in a net increase in demand on City water supplies. It is assumed that the agricultural operations would continue at the site and the project landscaping would utilize water from on-site wells or recycled water. Overall, the increased demand for City potable water is estimated at 103.6 AFY. Water for continued agricultural uses and landscaping would come from existing wells and/or recycled water from the City's Water Reuse System. By using recycled water for agricultural irrigation, more groundwater would be available for potable uses, once the groundwater receives proper treatment. The City's existing potable water supplies are adequate to serve the project's projected demand of 103.6 AFY. The project would be required to comply with the City's policies and pay the required Water Impact Fees.

Table 4.8-6 Estimated Annual Water Demand of the Proposed Project

Land Use	Amount	Use Factor*	Potable (AFY)	Non-Potable (AFY)
<i>San Luis Marketplace</i>				
• landscape area	4.04 acres	0.90 AFY/acre	--	3.6
• restaurant	31,700 sf	1.07 AFY/1000 sf	33.9	--
• retail	591,892 sf	0.063 AFY/1000 sf	37.3	--
• garden centers	37,899 sf	0.06/1000 sf	2.3	
<i>Row Crop Agriculture**</i>				
• Permanent O.S.	51.67 acres	1.4 AF/acre/season	--	217.0
<i>Hotel</i>				
• landscape area	1.4 acres	0.90 AFY/acre	--	1.3
• hotel	150 rooms	0.14 AFY/room	21.0	--
<i>Office/Business Park</i>				
• landscape area	1.0 acre	0.90 AFY/acre	--	0.9
• offices	198,000 sf	0.46 AFY/1000 sf	9.1	--
Total Water Used			103.6	222.8

AF = acre-feet; AFY = acre-feet/year; sf = square feet

* Use factors based on historical water usage rates for similar land uses in the City of San Luis Obispo

**Assumes three growing seasons per year; Water demand factor based on UCSB Cooperative Extension, Irrigation Water Use for Major Crops Grown in Santa Barbara County.

Note that the water demand for the existing residence is not included as it is not known whether it would remain after construction of the office/business park portion of the project.

Table 4.8-7 Change in Overall Water Demand On-site

	Demand on City Supplies	Demand on On-site Wells
Proposed Project	103.6 AFY	222.8 AFY
Current Demand	--	459.0 AFY
Total	+103.6 AFY	-236.2 AFY



Based on 2001 water use, the City currently has about 304-afy of water available to allocate to new development (2002 Water Resources Status Report, June 2002). Per General Plan Water Management Element Policy 8.3, half of this amount is available to serve post July 1994 annexation areas, while the other half is designated for infill and intensification projects within 1994 City limits and in accordance with current City policies. Therefore, 152 acre-feet are available to serve new annexation areas outside the July 1994 City limits.

New development was previously required to retrofit existing facilities in the City with low-flow fixtures in order to reduce the demand on the City's current water supplies by an amount equal to twice the projected demand of the proposed development. The mandatory retrofit requirement was eliminated as of January 1, 2002, based on the fact that the majority of existing toilets in the City have been retrofitted. According to the 2002 Water Resources Status Report, maintaining per capita use rates in the 130 gpcd range may likely be achievable over the long term. Voluntary water facility retrofits are still encouraged by the City (Dan Gilmore, Utilities Engineer, City of San Luis Obispo Utilities Department, Telephone Communication, February 14, 2003).

The proposed uses on the Dalidio project site would tie into the City supplied public water system. Existing infrastructure located along Madonna Road, as well as the existing on-site 12-inch water main adjacent to U.S. Highway 101 (on the west side) would supply water to the potential development.

The City has a long-standing policy that new developments must pay their fair share of the cost for new supplies of water. The City's Water Impact Fee is designed to accomplish this. The City also has a long-standing policy that new developments pay their fair share of transmission facilities or infrastructure required to serve a project. For the proposed project, those facilities are mostly already in place. However, additional modifications or improvements to the existing system may be required. On-site water distribution facilities and connection to existing water mains would be constructed as part of the overall project.

Under the proposed development plan, the agricultural operations will eventually cease and the open space land will be placed in an easement. A portion of the property may be deeded to the City in fee title, in which case the City would also acquire ownership of any water wells on the property and additional access to the underlying aquifer. Though all property owners enjoy a legal right to use the water underlying their property, in San Luis Obispo the City can be the only purveyor of water. Thus, groundwater obtained from the remaining Dalidio wells can only be used only on the remaining Dalidio property for non-potable uses such as landscape irrigation with appropriate approvals. Use of any groundwater as a municipal source, for distribution to any or all properties in the City, constitutes an appropriation by the City, and becomes an "appropriative right" to use that water. Future increased use of groundwater by the City is speculative. Also, the groundwater in this area is contaminated with nitrates and PCE, which would require treatment to allow the use of this water source for potable purposes. Therefore, because of the issue of contamination, and the legal issues associated with the use of the water for municipal purposes by the City, the potential of this as a new water source to the City has not been included in this analysis.



Therefore, assuming the Dalidio Property Annexation Project complies with applicable City policies regarding the provision of water service, impacts related to water consumption would be considered less than significant.

Mitigation Measures. No mitigation would be required with the payment of Water Impact Fees or other methods by which the applicant pays their fair share of the cost for new supplies of water. However the following mitigation measure is recommended to reduce the cumulative impacts of increased water demand from the proposed project and other future development.

- PU-1(a)** The applicant shall prepare plans to use reclaimed wastewater for on-site landscaping, when such supplies become available. By establishing an irrigation system which uses reclaimed wastewater, water supply impacts from the proposed project, and other cumulative development, would be reduced.

Significance After Mitigation. Impacts would be less than significant.

- Impact PU-2** Buildout of the proposed project would generate an estimated 83,000 gallons (0.083 mgd) of wastewater per day, which would be treated by the City’s Water Reclamation Facility. Because this facility has sufficient capacity to accommodate the proposed project, this impact is considered Class III, less than significant, with payment of Wastewater Impact Fees.

Table 4.8-7 estimates the anticipated increases in wastewater generation associated with the proposed project.

Table 4.8-8 Projected Wastewater Generation

Land Use	Wastewater Generation gallons/day (mgd)
San Luis Marketplace*	59,000 (0.059)
Hotel	17,000 (0.017)
Office/Business Park	7,000 (0.07)
Total	83,000 (0.083)

Wastewater calculations are based on an assumption that 90% of water demand becomes wastewater

**Landscape area would not generate wastewater*

The proposed project would generate about 83,000 gallons per day of wastewater, which is equivalent to 0.083 mgd. The wastewater generated on the project site represents about 14% of the current unused 600,000 gallons per day (0.6 mgd) of capacity at the Water Reclamation Facility. Although the Water Reclamation Facility has adequate capacity to serve the proposed project, the developer will be required to pay standard City Wastewater Impact Fees for impacts to the Water Reclamation Facility (Gilmore, 1999) in order to mitigate the cumulative effects on the City’s wastewater treatment system.

Sewer connections for the proposed project would be made to the existing 15-inch sewer main located at the southern boundary of the project site or Madonna Road. This main widens to 18 inches about 400 feet west of U.S. Highway 101 and then narrows to 16 inches as it passes under



the freeway. Project wastewater would travel east through this main to the Laguna Lift Station east of the freeway, and then would be conveyed through a force main to the Water Reclamation Facility. Approximately 1.5 to 1.8 mgd of wastewater currently flows through the sewer main south of the site to the Laguna Lift Station. The Laguna Lift Station was recently upgraded to accommodate additional average dry weather flows of 5.6 mgd. The 16-inch sewer main in the area would be able to accommodate wastewater flows from the project. Because project wastewater generation would not exceed the capacity of the existing sewer main or the expanded Laguna Lift Station impacts to these facilities would be less than significant. Therefore, upon payment of City wastewater treatment impact fees, project impacts to wastewater treatment infrastructure are considered less than significant.

Mitigation Measures. Other than the payment of the City's Wastewater Impact Fees and add on fees for the upgrade of the Laguna Lift Station, no further mitigation is required.

Significance After Mitigation. The WRF has sufficient capacity to serve the proposed project. Therefore, the Dalidio property annexation would result in less than significant impacts to wastewater treatment infrastructure.

Impact PU-3 Implementation of the proposed project would require the relocation and/or protection of existing utility lines located on the project site. Project construction could result in a disruption of service in order to accomplish relocations. This would be considered a Class II, significant but mitigable, impact.

Several existing utility lines are located within the portions of the project site proposed for roadway improvements, including the proposed Prado Road/U.S. Highway 101 interchange. Utility lines potentially located on the project site include water lines, sewer lines, telephone, cable, gas, and electric facilities. The relocation of any of these utility lines could result in a temporary disruption of service. This would be considered a potentially significant impact.

Mitigation Measures. The following mitigation measures address public utilities impacts related to disruption of utility services during project construction.

PU-3(a) A Utility Relocation Plan shall be prepared by the applicant and submitted with final construction drawings for the review and approval of the City Utilities Department. The Utility Relocation Plan shall identify all existing and proposed water lines, sewer lines, telephone, cable, gas, electric or other services located on the project site. The applicant shall coordinate with any affected agencies as part of the design process. The Utility Relocation Plan shall specify the phasing and scheduling of utility relocations to ensure minimal disruption between removal/relocation of existing utility lines and the installation of new lines.

PU-3(b) During construction, underground utility alert services shall be used to identify the location of all underground services and to avoid the unplanned disruption of pipes or service lines.



- PU-3(c)** A construction period public outreach and communications plan and program shall be developed by the applicant for all phases of the project. Weekly assessments of upcoming utility and service disruptions shall be undertaken by the applicant or authorized agents thereof. These assessments and an identification of the affected service areas shall be coordinated with the public outreach program. The public outreach program shall ensure that advance notice for any utility or service disruptions is extended to affected businesses and residents.

Significance After Mitigation. Implementation of the mitigation measures would reduce public utilities impacts related to disruption of utility services during project construction to less than significant levels.

4.8.3 Solid Waste

a. Methodology and Significance Thresholds. Solid waste generated by the project was estimated using rates from the California Integrated Waste Management Board (CIWMB) Solid Waste Characterization Database (2002). The California Integrated Waste Management Act of 1989 (AB 939, Chapter 1095) required that net solid waste disposal be reduced 50 percent by the year 2000. To achieve this, each county and city was required to develop a Source Reduction and Recycling Element (SRRE) that provides strategies for achieving the reductions required by the California Integrated Waste Management Act of 1989. The project would have a potentially significant impact if it is not served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs. In addition, the project would have a potentially significant impact if it did not comply with federal, state, and local statutes and regulations related to solid waste.

b. Project Impacts and Mitigation Measures

Impact PU-4 The proposed project would generate approximately 2,067 tons of solid waste per year (5.6 tons per day). The solid waste disposal services and landfill facilities that would serve the project site have adequate capacity to accommodate the proposed project. However, since the capacity of the landfill is limited, the project together with other pending development has the potential to adversely impact future landfill capacity. Therefore, solid waste generation is considered a Class II, *significant but mitigable impact*.

The California Integrated Waste Management Board (CIWMB) estimates that nonresidential uses in the County generate an average of 6.8 pounds of waste per employee per day (CIWMB, Solid Waste Characterization Database, 2000). At buildout the proposed project is estimated to generate 1,666 employees and would generate approximately 2,067 tons of solid waste per year (5.6 tons per day). This amount of solid waste generated represents a small percentage (i.e., 0.7%) of the permitted daily waste acceptance (i.e., 750 tons per day) and remaining capacity (i.e., 2,800,000 cubic yards) at the landfill. Although the project would generate approximately 5.6 tons of waste per day, the project would be required to meet the current recycling goals of the community; therefore, only about half this total (or 2.8 tons per day) would be sent to the landfill.



In addition, the proposed use of drought-tolerant and native vegetation in common area landscaping would reduce the quantity of landscape waste generated by the proposed uses. The proposed project would not require the development of additional solid waste systems or services, as the current infrastructure is capable of handling the projected solid waste generation (Ron Munds, City of San Luis Obispo Public Works Department, Telephone Communication, September 4, 2003). In addition, the project site is located on an existing garbage collection route and would not result in the need for new collection facilities or equipment.

Project implementation would not result in any change to service in the area or any significant changes to the disposal operations. The proposed project would not create the need for any special solid waste disposal handling and would comply with all statutes and regulations related to solid waste. However, project construction and occupancy would accelerate use of the remaining Cold Canyon Landfill capacity, which would be considered a potentially significant cumulative impact.

Mitigation Measures. To ensure solid waste reduction and recycling, the following mitigation measures are required.

PU-4(a) Construction Solid Waste Minimization. During the construction phases of the project, the following mitigation measures will be implemented to reduce solid waste generation to the maximum extent feasible:

- Prior to construction, the contractor will arrange for construction recycling service with a waste collection provider. Roll-off bins for the collection of recoverable construction materials will be located onsite. The applicant, or authorized agent thereof, shall arrange for pick-up of recycled materials with a waste collection provider or shall transport recycled materials to the appropriate service center. Wood, concrete, drywall, metal, cardboard, asphalt, soil, and land clearing debris may all be recycled.
- The contractor will designate a person to monitor recycling efforts and collect receipts for roll-off bins and/or construction waste recycling. All subcontractors will be informed of the recycling plan, including which materials are to be source-separated and placed in proper bins.
- The contractor will use recycled materials in construction wherever feasible.
- The above construction waste recycling measures will be incorporated into the construction specifications for the contractor.

PU-4(b) Operational Solid Waste Minimization. The project applicant or authorized agent thereof shall provide commercial and office/business



park tenants with educational material on the City's waste management efforts upon occupancy and transfer of ownership. The design of the proposed buildings and facilities shall include provision of adequate space and capacity for recycling containers.

Residual Impacts. Implementation of the mitigation measures would reduce solid waste generation impacts to a less than significant level.

c. Cumulative Impacts.

Water. The cumulative water demands of the City's anticipated population could exceed current capacities. The proposed project is included in the future water demand estimates and would not substantially alter the estimates of the cumulative demand or substantially interfere with the planning and implementation of future water supply expansions. Like all current development projects the proposed project would be required to offset its water consumption by contributing to a reduction in consumption elsewhere in the City. The project would also be required to pay water impact fees aimed at developing new water supplies to serve the City. Therefore, cumulative impacts to water supply in the City would be considered less than significant.

Wastewater. The sewage treatment facility must be expanded to 6.5 mgd to accommodate the anticipated population of 56,000 under build-out of the City's General Plan. Expanding the City's existing treatment facility can provide this sewage treatment capacity. Recommendations for improving the sewer system and how the improvements will be paid for are included in the City's Wastewater Facilities Master Plan. The payment of the City's wastewater impact fees, which are directed at funding improvements to the Water Reclamation Facility, are sufficient to offset cumulative impacts to the wastewater treatment plant. Other impacts to the City's wastewater conveyance system would be mitigated on a project by project basis, as development occurs.

Solid Waste. Cumulative buildout of the area would increase solid waste generation, thereby reducing the lifespan of the Cold Canyon landfill that serves the area. The project would contribute incrementally to the cumulative impact to landfill capacity. However, cumulative development would not be sufficient to require an expansion of the existing facilities. Therefore, the contribution of the project to cumulative solid waste impacts would be less than significant.

