

3.15

WET AND DRY UTILITIES AND ENERGY

This section of the Draft EIR addresses existing utility and infrastructure systems within San Benito County and the City of Hollister that would serve the proposed project. The analysis discusses the ability of existing and planned systems to accommodate the project in terms of distribution and supply, and identifies potential environmental impacts that could result from the construction of required new or expanded systems. This analysis is based on information from *San Benito County General Plan (1994)*, the *City of Hollister General Plan (2005)*, the *Hollister Water and Wastewater Master Plan and Coordinated Water Supply and Treatment Plan (2008)*, the *Hollister Urban Area Water and Wastewater Master Plan (HDR Consultants 2008)* (Hollister Water/Wastewater Master Plan), the *Hollister Area 2008 Urban Water Management Plan (Kennedy/Jenks Consultants 2006)* (Hollister UWMP), the *City of Hollister Sanitary Collection System Master Plan (Wallace Group 2010)*, the *Water Supply Assessment for Gavilan College & Fairview Corners Residential Development (Sunnyslope County Water District 2008)* (WSA), the *City of Hollister's Long-Term Wastewater Management Program for the DWTP and the IWTP (2005)*, *Summary Plan of the San Benito County Regional Agency Integrated Waste Management Plan (1996)* (RAIWMP), information provided by County service providers, and project application materials.

This section also includes a discussion of projected energy usage of the project, with an emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy, pursuant to Appendix F in the State CEQA Guidelines.

3.15.1 ENVIRONMENTAL SETTING

Water Service

Project Site

The project site is currently undeveloped, and does not receive any potable water service, although the site is within the Sunnyslope County Water District's (Sunnyslope) existing water service area. On-site water infrastructure consists of an agricultural water pump station operated by Sunnyslope, which is located in the northwestern corner of the site along Fairview Road. The pump is connected to an agricultural water line that serves the project site's existing agricultural uses. In terms of potable water distribution systems, there is an existing 12-inch water main that runs along the west side of Fairview Road, with which Sunnyslope would require the project to connect, and there is another existing water main in Harbern Way to which the project could connect.

Project Vicinity: Water Supply and Distribution

The Hollister Urban Area (as discussed further below) is served by three water purveyors: the San Benito County Water District (County Water District), Sunnyslope, and the City of Hollister. The County Water District supplies wholesale water received from the San Felipe Unit of the U.S. Bureau of Reclamation's Central Valley Project (CVP) via a pipeline from the San Luis Reservoir to the City of Hollister and Sunnyslope. According to the City of Hollister UWMP, the municipal and industrial water supply in the Hollister Urban Area is provided by a combination of imported surface water from the federal CVP and local groundwater. Both water sources are discussed further below.

Imported Surface Water. The CVP is operated by the U.S. Bureau of Reclamation (Bureau) for the benefit of its contractors and includes over 500 miles of major canals, as well as conduits, tunnels, and related facilities from the Cascade Mountains in the north to the Tehachapi Mountains in the south. The CVP annually delivers approximately seven million acre feet of water per year system-wide for agricultural, urban, and wildlife uses (UWMP, page 2-22), and provides a portion of this supply to serve San Benito County residents. In water year 2010, allocations were decreased to 45 percent of the contracted amount for agriculture and to 75 percent of historic use for M&I. .

The City of Hollister and Sunnyslope both provide potable water service to County residents. Sunnyslope provides service to much of the eastern and southern portions of the Hollister Urban Area. The City of Hollister supplies the northern and western portions of the City with potable

water. Sunnyslope obtains its surface water supply from the CVP, through a contract with the County Water District. The County Water District is party to a contract with the Bureau, which requires the Bureau to provide up to 35,500 acre feet per year (AFY) to meet municipal and industrial (M&I) demands within designated areas of the County Water District service area, including the Sunnyslope service area (and therefore, the project site). Sunnyslope must apply for water annually from the County Water District and is required to treat water received before distribution to Sunnyslope customers.

The LESSALT treatment plant was built in 2002, as a joint venture between the City of Hollister and Sunnyslope to treat imported CVP water for distribution to the City of Hollister and Sunnyslope service areas. In so doing, the plant provides replacement water for groundwater and improves water quality.

According to the Hollister Water/Wastewater Master Plan, in terms of capacity, the LESSALT plant was originally designed to treat up to three million gallons per day (mgd) (pp. 5-7). Due to hydraulic constraints and treated water capacity issues, however, the LESSALT plant does not operate at full capacity (pp. 2-17). In order to resolve this issue, the City and Sunnyslope are moving forward with a “Disinfection Byproduct Project,” which will include the addition of a booster pumping station and hydro-pneumatic tank. Once these improvements are completed, the plant will be able to operate at its rated 3.0 mgd. This project also includes the addition of potassium permanganate and coagulant for water quality improvements (pp. 2-17).

Currently, the plant’s available treatment capacity is approximately 1,000 gallons per minute (gpm), equivalent to approximately 1,600 AFY. Sunnyslope and the City of Hollister equally divide the available capacity for the LESSALT plant, and therefore each can receive up to 800 AFY under maximum production. However, while Sunnyslope could receive up to 800 AFY in any one year from the LESSALT plant, the average quantity of treated surface water that Sunnyslope received between the years 2004-2008 was approximately 600 AFY. Essentially, the LESSALT plant is operating at approximately 70 percent of capacity (UWMP, pp. 2-25) and is expected to maintain, at a minimum, this operational capacity through 2035.

Groundwater. Historically, San Benito County has relied heavily on groundwater from the Gilroy-Hollister Valley Groundwater Basin, deriving its groundwater supply from the Hollister Area Subbasin and the San Juan Bautista Subbasin. The Hollister Area Subbasin lies within the northeast portion of the Gilroy-Hollister Valley Groundwater Basin and is bounded on the north and east by the Diablo Range, with the Calaveras fault as its western boundary. The San Juan Bautista Subbasin lies within the southwestern portion of the Gilroy-Hollister Valley Groundwater Basin, is bounded on the north by the Sargeant fault and Sargeant Anticline and abuts the Bolsa Area Subbasin; the San Andreas fault and the Gabilan Range form its southwestern boundary and the Calaveras fault and the Hollister Area Subbasin form its eastern boundary. The Gilroy-Hollister Valley Groundwater Basin and its subbasin are further divided

into distinct relevant subbasins known as Hollister West, Hollister East, and Tres Pinos subbasins. These subbasins have remained stable over the past 30 years. The assumed sustainable yield of the groundwater basins is 16,000 AFY according to the Hollister UWMP (Kennedy Jenks 2006), The project site is located within the Southern Hollister East Sub-Basin (County Water District, Annual Groundwater Report, 2010).

Sunnyslope obtains groundwater from its own wells, as well as the City of Hollister's wells through a system intertie. Sunnyslope has three reservoirs for a total capacity of 2.5 million gallons. Sunnyslope pumps groundwater from five wells at various locations throughout its service area. Active wells are #2, #5, #7, #8, which provided approximately 3,450 gpm (Sunnyslope 2008), which equates to about 5,569 acre-feet per year (AFY), and more recently, well #11, which provides an additional 1,300 gpm (about 2,098 AFY). Currently, existing total capacity is approximately 4,750 gpm (about 7,667 AFY). Also, Sunnyslope is in the process of testing of an additional well (#12), and environmental review in connection with this well was completed in September 2010. The additional capacity of this new well will likely be about 2,100 gpm (about 3,390 AFY). Therefore, combined production capacity is anticipated to be approximately 6,850 gpm, or 11,057 AFY, once well #12 is completed and operational (Sunnyslope 2008). Operationally, this capacity provides Sunnyslope with the flexibility it needs to fill its storage tanks quickly and conveniently and distribute water as needed.

According to the WSA (Sunnyslope 2008), in past single-year and multi-year droughts, the City's and Sunnyslope's groundwater supplies have proven reliable to meet both agricultural and municipal and industrial (M&I) demands. From 2000 – 2005, agricultural groundwater demand represented approximately 40 percent of overall groundwater withdrawals. Total groundwater withdrawals are considerably less than the assumed sustainable yield of 16,000 AFY. During times of drought, both agricultural and M&I demands are likely to increase due to reduced CVP deliveries. However, groundwater can be allocated to both agricultural and M&I uses at levels required to maintain a satisfactory supply reliability. The groundwater basin currently has a large volume of groundwater in storage that can serve as a reserve for future droughts. Water level declines in the past have not interfered with pumping efficiency and water levels have eventually recovered following the drought. It is anticipated that similar future droughts will not impact the reliability of the groundwater supply (p. 14).

The *Hollister Water and Wastewater Master Plan and Coordinated Water Supply and Treatment Plan* (2008) is a long-term vision and implementation plan to achieve improved water supply reliability through a combination of actions. Among other things, opportunities are identified that would increase long-term water supply reliability in the Hollister Urban Area through the development of a North County groundwater bank. Currently, there is a surplus of groundwater in the north area, which is creating high groundwater levels and artesian springs. Pumping would lower groundwater levels and could supplement existing surface water supplies. In

addition to the North County groundwater bank, another source is located between Pacheco Creek and Arroyo de las Viboras. During surplus surface water years, water could replenish the groundwater basin via percolation.

Recycled Water. The City of Hollister, the County Water District, and Sunnyslope do not currently supply recycled water to private parties. Recycled water use is in the planning stages and could supply some of the non-potable water demand in the region in the future. According to the WSA prepared for the project (Sunnyslope 2008), Sunnyslope's planned reclaimed water treatment plant would be constructed in the Ridgemark area and when the system becomes operational, recycled water could be available for the project site (p. 10). Potential applications for recycled water include landscape irrigation, agricultural irrigation, industrial uses, and environmental enhancement. Before recycled water service can be provided from the Sunnyslope facilities, upgrades to existing treatment facilities would need to be completed to meet California Title 22 standards.

According to the *Hollister Water and Wastewater Master Plan and Coordinated Water Supply and Treatment Plan* (2008), the City of Hollister has constructed a recycled water project that utilizes the new membrane bioreactor facility at the City's DWTP facility and meet Title 22 standards. This first phase of the recycled water facility reuses approximately 0.3 mgd, with the balance being disposed by percolation; the City currently uses this recycled water at its facilities. Reuse is expected to gradually increase to a peak of 0.74 mgd by 2013. Availability to private parties is expected by 2015. The second phase of the recycled water facility project is expected by 2023, and intends to expand distribution of recycled water to agricultural users (Hollister Water/Wastewater Master Plan, pp. 2-24).

Wastewater Service

Project Site

No public sanitary sewer system currently serves the project site. The nearest area served by a sanitary sewer system is the Cielo Vista residential subdivision on Fairview Road. As discussed more fully below, the City of Hollister operates a municipal wastewater treatment plant (DWTP). The existing wastewater infrastructure closest to the project site includes City of Hollister sanitary sewer mains located west of the project site on Airline Highway and Enterprise Road, which convey wastewater flows to the DWTP (Wallace Group 2010).

City of Hollister's Domestic Wastewater Treatment Plant

The City of Hollister collects and conveys all domestic wastewater to the DWTP, which is located south of the San Benito River on San Juan Road, approximately 5.5 miles northwest of

the project site. The DWTP was built in 1979 and became operational in 1980 to treat the City's domestic wastewater, consisting predominantly of residential and commercial customers within the DWTP's service area. At that time, the DWTP consisted of a primary and secondary pond system with percolation beds. In 2003, the City completed interim improvements at the DWTP to improve treatment and disposal quality and efficiency until the completion of the expansion. These improvements introduced significant changes to the treatment process by converting to a dual-powered multi-cellular process to improve efficiency. In addition to the treatment process changes, a new influent lift station was constructed to control odors and improve flow measurement.

In 2008, the DWTP was completed (now referred to as the Water Reclamation Facility). According to the City of Hollister Urban Area Water and Wastewater Management Plan (Hollister Water/Wastewater Master Plan), the facility's hydraulic capacity (pumps, tanks, blowers, etc.) is approximately 5.0 mgd. The treatment capacity (membrane) is currently permitted at approximately 4.0 mgd. Wastewater system improvements identified in the Hollister Water/Wastewater Master Plan have been planned to ensure that the DWTP is capable of treating 5.0 mgd by 2023, which has been identified as sufficient to serve all of the contemplated growth within the Hollister Urban Area, including the project site (pp. 4-15). Currently, treated water (at Title 22 standards) is reused at the Hollister Municipal Airport, a future park site, and via 11 on-site percolation/storage ponds (City of Hollister 2005).

In 2004, the City of Hollister, the County Water District, and San Benito County entered into a memorandum of understanding (MOU) for the development of the Hollister Water/Wastewater Master Plan. In 2008, this MOU was amended to, among other things, include Sunnyslope as a party. The Hollister Water/Wastewater Master Plan provides a long-term vision to guide water and wastewater improvements in the Hollister Urban Area, which includes the City of Hollister and adjacent unincorporated areas of San Benito County designated for urban development, including the project site (Hollister Water/Wastewater Master Plan, Fig. ES-1). The Hollister Water/Wastewater Master Plan addresses water quality, water supply reliability, as well as water and wastewater system improvements within the Hollister Urban Area. Among other things, the Hollister Water/Wastewater Master Plan also provides a comprehensive plan describing the capacity and estimated cost of physical facilities and an implementation program including institutional arrangements, engineering, CEQA compliance, permitting, financing, coordination with ongoing projects and programs, stakeholder outreach, and scheduling. The Hollister Water/Wastewater Master Plan designates the City's DWTP as the regional wastewater treatment provider. [Figure 8, Water and Wastewater Service Area Boundaries](#) (See Section 1.0) shows the project site relative to the Hollister Urban Area boundary and the Sunnyslope water service area boundary.

The City's *Long-Term Wastewater Management Program for the DWTP and the IWTP* (City of Hollister 2005) (long-term wastewater management program) includes requirements for reliably treating and disposing of the City's domestic and industrial wastewater through the year 2023, which is the planning horizon for the City's General Plan and the Hollister Water/Wastewater Master Plan. The long-term wastewater management program assumes that the City's DWTP could treat wastewater from the Sunnyslope service area as well as from the City of Hollister in the future, consistent with the Hollister Water/Wastewater Master Plan.

Energy

Pacific Gas & Electric (PG&E) provides San Benito County with electricity and natural gas.

Electricity

PG&E provides electricity to all or parts of 47 counties in California, including San Benito County, constituting most of the northern and central portions of the state. In 2009, PG&E obtained 38 percent of electricity from its own generation sources and the remaining 62 percent from outside sources. PG&E-owned generating facilities include nuclear, natural gas, and hydroelectric, with a net generating capacity of more than 6,800 megawatts. Outside suppliers to PG&E include the California Department of Water Resources, irrigation districts, renewable energy suppliers, and other fossil fuel-fired suppliers. PG&E operates approximately 159,000 circuit miles of transmission and distribution lines. PG&E is interconnected with electric power systems in the Western Electricity Coordinating Council, which includes 14 western states, Alberta and British Columbia, Canada, and parts of Mexico. In 2009, PG&E delivered 88,127 gigawatt hours of electricity to its customers (Pacific Gas & Electric Co. (2009) 10-K Annual Report).

Natural Gas

PG&E provides natural gas to all or parts of 39 counties in California, including San Benito County, comprising most of the northern and central portions of the state. PG&E obtains more than 70 percent of its natural gas suppliers from western Canada and the balance from U.S. sources. PG&E operates approximately 48,000 miles of transmission and distribution pipelines. In 2009, PG&E delivered 845 billion cubic feet of natural gas to its customers (Pacific Gas & Electric Co. (2009) 10-K Annual Report).

3.15.2 REGULATORY SETTING

State

California Urban Water Management Planning Act

The Urban Water Management Planning Act (Cal. Water Code §§ 10610-10656) requires that all urban water suppliers with at least 3,000 customers prepare urban water management plans and update them every five years. The Act requires that urban water management plans include a description of water management tools and options used by that entity that will maximize resources and minimize the need to import water from other regions. Specifically, urban water management plans must:

- Provide current and projected population, climate, land, and other demographic factors affecting the supplier's water management planning;
- Identify and quantify, to the extent practicable, the existing and planned sources of water available to the supplier;
- Describe the reliability of the water supply and vulnerability to seasonal or climatic shortage;
- Describe plans to supplement or replace that source with alternative sources of water demand management measures;
- Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis (associated with systems that use surface water);
- Quantify past and current water use;
- Provide a description of the supplier's water demand management measures, including a schedule of implementation, a program to evaluate the effectiveness of measures, and anticipated water demand reductions associated with the measures; and
- Assessment of the water supply reliability.

Model Water Efficient Landscape Ordinance

The Model Water Efficient Landscape Ordinance prepared by the state Department of Water Resources was adopted by the Office of Administrative Law in September 2009 and requires local agencies to implement water efficiency measures as part of its review of landscaping plans. Local agencies can either adopt the Model Water Efficient Landscape Ordinance or incorporate

provisions of the ordinance into code requirements for landscaping. For new landscaping projects of 2,500 square feet or more that require a discretionary or ministerial approval, the applicant is required to submit a detailed “Landscape Documentation Package” that discusses water efficiency, soil management, and landscape design elements.

SB 610 Water Supply Assessment

Senate Bill 610 added Section 21151.9 to the Public Resources Code requiring that certain “projects,” as that term is defined in Section 10912 of the Water Code, comply with Water Code Section 10910 *et seq.* Commonly referred to as a “SB 610 Water Supply Assessment,” Water Code Section 10910 outlines the necessary information and analysis that must be included in an environmental document prepared under CEQA in connection with developments meeting certain specified criteria to evaluate the sufficiency of water supplies to serve the “project” as well as other existing and planned water demands over a 20-year projection. The WSA is required to be included in the administrative record that serves as the evidentiary basis for an approval action by the County. The Fairview Corners project does not meet the definition of a “project” for purposes of triggering the need to prepare a WSA. However, a WSA was prepared and approved in connection with the Fairview Corners/Gavilan College San Benito Campus project, which also evaluated water supply and demand in connection with the Fairview Corners’ project. To the extent relevant, this Draft EIR relies on technical information from that approved WSA. The WSA is included in [Appendix L](#) of this EIR.

California Energy Action Plan II

The California Energy Action Plan II is the state’s principal energy planning and policy document, and serves as an “implementation roadmap for energy policies.” It identifies state-wide energy goals, describes a coordinated implementation plan for state energy policies, and identifies specific action areas to ensure that the state’s energy is adequate, affordable, technologically advanced and environmentally sound. This Plan is designed to guide the State so that it may achieve the identified goals by taking specific and measurable actions throughout California’s energy sector. The Specific Action Areas identified in the Plan are as follows: Energy Efficiency; Demand Response; Reasonable Energy Resources; Electricity Adequacy; Reliability and Infrastructure; Electricity Market Structure; Natural Gas Supply, Demand and Infrastructure; Transportation Fuels Supply, Demand and Infrastructure; Research, Development and Demonstration; and Climate Change (California Energy Commission, 2005).

California Building Standards Code

Title 24 of the California Code of Regulations, also known as the California Building Standards Code, is a compilation of three types of building standards from three different origins:

- Building standards that have been adopted by state agencies without change from building standards contained in national and international model codes.
- Building standards that have been adopted and adapted from the national and international model code standards to meet California conditions.
- Building standards, authorized by the California legislature, which constitute extensive additions not covered by the model codes that have been adopted to address particular California concerns.

The California Fire Code is a component of the California Building Standards Code and contains fire-safety-related building standards.

Title 24, Part 6, establishes California's Energy Efficiency Standards for residential and nonresidential buildings. These standards were established in 1978 in response to a legislative mandate to reduce energy consumption in California, and are updated periodically to allow for consideration and incorporation of new energy efficiency technologies and methods.

California Green Building Standards Code

The California Green Building Standards Code was adopted on January 12, 2009. The purpose of this code is to improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices in the following categories:

- Planning and design;
- Energy efficiency;
- Water efficiency and conservation;
- Material conservation and resource efficiency; and
- Environmental air quality.

The aim of this Code is to reduce energy usage and help meet reductions contemplated in Assembly Bill (AB) 32.

San Benito County General Plan

The following San Benito County General Plan policies associated with utilities and energy are applicable to the proposed project:

Land Use Element

Policy 10. Septic systems may be allowed on parcels one acre or greater if percolation tests demonstrate to the County Health Department Division of Environmental Health that soil is suitable for septic use. Sewage disposal on parcels less than one acre shall not be by the use of septic systems, but shall be through a public utility service district.

Policy 11. Septic systems shall be properly designed, constructed, and maintained to avoid degradation of ground and surface water quality.

Policy 32. Specific development sites shall be free from the hazards identified within the Open Space and Conservation Element Maps (e.g., faults, landslides, hillsides over 30% slope, flood plains). The site shall also be on soil suitable for building and maintaining well and septic systems (i.e., avoid impervious soils, high percolation or high groundwater areas, set back from creeks). Absent adequate mitigation, development shall not be located on environmentally sensitive lands (wetlands, erodable soil, archaeological resources, important plant and animal communities).

Policy 35. The County shall encourage energy and water conservation techniques and energy efficiency in all new building design, orientation and construction.

Open Space and Conservation Element

Policy 29: Energy conservation. It will be the County's policy to encourage the use of energy-efficient design in new construction.

Policy 30: Water quality from development. It is the policy of the County to require development projects that could contribute to the contamination and/or degradation of groundwater quality to be redesigned to avoid significant impacts.

Policy 31: Wastewater treatment. Wastewater treatment systems shall be designed to ensure the long term protection of groundwater resources in San Benito County. Septic systems shall be limited to areas where sewer services are not available and where it can be demonstrated that septic systems will not contaminate groundwater. Every effort should be made in developing and existing developed areas to reduce the use of

septic systems in favor of domestic wastewater treatment. Domestic wastewater treatment systems shall be required to use tertiary wastewater treatment as defined by Title 22.

Policy 32: Groundwater studies for new development. To prevent overdrafting in San Benito County, a groundwater development plan shall be required for appropriate new development proposals.

Policy 33: Water conservation. To ensure more efficient use of groundwater resources it will be the policy of the County to require conservation of water resources in the County and encourage inter-agency conservation to develop policies and programs for the protection and enhancement of habitat for fish on major tributaries to the Pajaro River (San Benito River, Pacheco Creek).

Policy 34: Evidence water quality and quantity for development. Approval of new developments shall not be allowed without evidence of adequate water quality and quantity.

San Benito County Code

Following are specific San Benito County Code sections that are relevant to the project:

Chapter 15.07 (Ord. 188): Sewage and Sewage Disposal. Ordinance 188 contains minimum design standards and performance thresholds for the construction of sewer systems under the jurisdiction of the County and includes criteria for the use of individual septic systems. Septic system design and installation is subject to the review and approval of the San Benito County Director of Public Health.

Chapter 19.31 (Ord. 748): Development Lighting Regulations. Ordinance 748 encourages lighting practices and systems that will conserve energy and resources while maintaining night-time safety, utility, security and productivity.

Chapter 21.07 (Ord. 848): Growth Management System Regulations. The County has adopted a Growth Management Systems Ordinance, which, among other goals, is designed “to encourage a rate of growth which will not exceed the County’s ability to satisfy future demands for essential services [such] as police and fire protection, roads, schools, water [services], sewers and the like...” (San Benito County Code, tit. 21,

ch. 21.07, art. I, § 21.07.002(C)). To achieve its stated goals, this Ordinance restricts the County's population growth to an annual population increase based on the State of California's growth rate for the previous year or a 1 percent growth rate per year, whichever is greater, plus the population growth attributed to exempt projects. (County Code § 21.07.005.) This ordinance applies to all new residential projects within the unincorporated area of the County, except for those projects specifically listed as exempt. (County Code § 21.07.003.) In December 2009, the County Board of Supervisors amended this ordinance to exempt from the growth restrictions those dwelling units within projects "that are subject to a Housing or Development Agreement that has been approved by the San Benito County Board of Supervisors...." (County Code § 21.07.004(K).)

Title 23 (Ord. 617): Subdivision Ordinance. Chapter 23.17 identifies minimum design and construction standards and performance thresholds for required water, sewer, storm drainage and utility improvements. Required improvements are subject to the review and approval of the County Engineer. Chapter 23.31 sets forth specific improvement design specifications, as follows: 1) Article I - General Design Standards; 2) Article III - Storm Drainage Design Standards; 3) Article IV - Water System Design Standards; and 4) Article V - Sewer System Design Standards. Design Standards for the use of sewer disposal includes requirements for the preparation of a soils report to support the use of septic systems.

San Benito County Local Agency Formation Commission

The San Benito County Local Agency Formation Commission (LAFCO) oversees public agency boundary changes, as well as the establishment, update and amendment of spheres of influence (Gov't Code §§ 56001, 56375, 56425). The overarching goal of LAFCO is to encourage the orderly formation and extension of governmental agencies. The primary purposes of LAFCO are as follows: (1) to facilitate orderly growth and development by determining logical local boundary changes; (2) to preserve prime agricultural lands by building development away from presently undeveloped prime agricultural preserves; and (3) to discourage urban sprawl and encourage the preservation of open space by promoting development of vacant land within cities before annexation of vacant land adjacent to cities. It is anticipated that San Benito LAFCO's approval may be required in connection with the proposed recycled water and wastewater treatment service to the project.

3.15.3 STANDARDS OF SIGNIFICANCE

The following thresholds for evaluating the project's environmental impacts are based on CEQA Guidelines, Appendix G, and applicable local CEQA standards. For purposes of this EIR, impacts are considered significant if the following could result from implementation of the project:

- Violate any water quality standards or waste discharge requirements (see Section 3.9 for analysis regarding impacts related to surface water quality standards);
- 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);
- 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 in order to maintain acceptable service ratios, response times or other performance objectives;
- Would not have sufficient water supplies available to serve the project from existing entitlements and resources, and would require new or expanded entitlements;
- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;
- Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments; or
- It would cause wasteful, inefficient or unnecessary consumption of energy.

3.15.4 PROJECT IMPACTS AND MITIGATION MEASURES

Water Demand and Delivery

Impact UTIL-1: The proposed project would increase the demand for potable water. However, the existing public water system serving the project site can adequately supply the proposed project, including existing and planned future uses over a 20-year period, and

would not require the construction of new water facilities to serve the project or in order to maintain acceptable service ratios or other performance objectives, nor would it require new or expanded entitlements. It would require the installation of new distribution lines, but these facilities would not cause significant, adverse environmental effects. This is considered a **less than significant individual and cumulative impact**.

The project site is within Sunnyslope's existing water service area. The Fairview Corners project does not meet the definition of a "project" for purposes of triggering the need to prepare a water supply assessment (WSA), pursuant to the requirements of SB 610 (summarized previously). However, a WSA was prepared and approved by Sunnyslope in connection with the Fairview Corners/Gavilan College San Benito Campus project. To the extent relevant to the proposed project, this Draft EIR relies on technical information from that approved WSA. The WSA is included in [Appendix L](#) of this Draft EIR.

Water Supply/Demand

The WSA (Sunnyslope 2008) analyzed the sufficiency of water supplies to meet projected water demands of the project and other existing and planned uses through 2030. As noted above, the WSA provides existing and projected water demands, details water supplies, and includes a water supply sufficiency analysis based on the demand and water supply analysis.

Sunnyslope obtains groundwater from its own wells, as well as the City of Hollister's wells through system interties. Sunnyslope has three reservoirs for a total capacity of 2.5 million gallons. Sunnyslope pumps groundwater from five wells at various locations throughout its service area. Active wells are #2, #5, #7, and #8, and #11, which combined provide approximately 4,750 gpm (about 7,667 AFY) of total capacity (Sunnyslope 2008). Also, Sunnyslope is in the process of testing an additional well (#12), and environmental review in connection with this well was completed in September 2010. The additional capacity of this new well will likely be about 2,100 gpm. Therefore, combined production capacity is anticipated to be approximately 6,850 gpm, or 11,57 AFY, once well #12 is completed and operational (Sunnyslope 2008). Operationally, this capacity provides Sunnyslope with the flexibility it needs to fill its storage tanks quickly and conveniently and distribute water as needed.

In the 2008 WSA, Sunnyslope estimated the current annual water demand at 3,409 AFY (Sunnyslope 2008). The WSA determined that a supply of 4,550 AFY would be required to meet existing demand, anticipated demand for the Santana Ranch project, the Gavilan San Benito Campus project, and the proposed project demand without affecting existing and planned service connections within the Sunnyslope service area (p. 13). Existing groundwater production capacity is 4,750 gpm (about 7,667 AFY).

Water demand for the project was estimated on the basis of unit water demand factors for residential and non-residential uses. Water demand for the proposed project is presented in [Table 43, Project Water Demand](#). As shown in [Table 43](#), the proposed project would require approximately 73.9 AFY to serve the residential development (220 SFU) that could be constructed under the maximum buildout scenario. An additional 6.3 AFY would be needed to irrigate parks and landscape buffer areas. Therefore, the total anticipated water demand for the proposed project would be 80.2 AFY (p. 8).

Table 43 Project Water Demand

Land Use	Units	Acreage	Gpd/sf	Water Use Coefficient ¹	Water Use Estimate ²
Single-family units (SFU)	220		300	0.33604	73.9
Open Space Areas/Parks		4.20	0.0195	0.095147	4.0
Landscape Buffers		2.42	0.0195	0.095147	2.3
Total			-		80.2

Source: Sunnyslope County Water District 2008

Notes: 1. AFY per Unit
2. AFY

The proposed project would increase the demand for Sunnyslope water from 3,409 AFY (2010) to approximately 3,490 AFY. Since preparation of the WSA, water pumping restrictions have been implemented that limit the timing and volume of water provided by the CVP. According to Kenneth Girouard, the Sunnyslope County Water District engineer, despite the new restrictions, the water supply remains sufficient to serve the proposed project. Sunnyslope is improving their drought contingency plan, which includes water banking in San Benito County. In addition, there are several joint projects planned by San Benito County and the City of Hollister that would offset current or further water restrictions implemented by the state or federal governments (see Hollister Water/Wastewater Master Plan and related EIR certified by the San Benito County Water District). Therefore, Sunnyslope is expected to have adequate water to serve its existing customers and the planned growth within its service area boundary, including the proposed project (K. Girouard, September 2, 2010).

Supply Reliability

As noted in the WSA, water supplies are sufficient during an average/normal water year to satisfy both agricultural and M&I demands through 2030. Groundwater withdrawals between 2000 and 2004 (normal to wet years) averaged 12,000 AFY, with approximately 40 percent withdrawn for agricultural uses and 60 percent for M&I. This is significantly less than the assumed 16,000 AFY sustainable yield of the underlying aquifers, resulting in a net recharge of the underlying aquifers. As noted above, in past single-year and multi-year droughts, the City's and Sunnyslope's groundwater supplies have proven reliable to meet both agricultural and M&I demands. From 2000 – 2005, agricultural groundwater demand represented approximately 40 percent of overall groundwater withdrawals. During times of drought, reliance on groundwater to serve agricultural and M&I demands is likely to increase due to reduced CVP deliveries.

In 1976, the basin was receiving no imported water and was considered to be in overdraft. The groundwater levels in the Hollister East sub basin were at their lowest elevation in the period of record, approximately 50 feet below mean sea level. Modeling of historic groundwater recharge rates conducted by the San Benito County Water District found that the simulated water levels indicate that the WY 1976 drought would result in a decline in water levels in the HSA of only 25 feet (to about 215 feet mean sea level) with subsequent rapid recovery. Ground water pumping was assumed to equal the 16,000 AF/yr sustainable yield of the underlying aquifers.

Additionally, groundwater can be allocated to both agricultural and M&I uses at levels required to maintain a satisfactory supply reliability. The groundwater basin currently has a large volume of groundwater in storage that can serve as a reserve for times of droughts. Water level declines in the past have not interfered with pumping efficiency and water levels have eventually recovered following the drought. It is anticipated that similar future droughts will not impact the reliability of the groundwater supply (Sunnyslope, p. 14).

[Table 44, Supply Reliability during Average/Normal Water Year For Entire Region](#), provides a summary of the average water year reliability for the three sub-basins. Both agricultural and M&I CVP water deliveries were assumed to be the average proportion of full U.S. Bureau of Reclamation contract entitlements that are delivered to the relevant three sub-basins. These values represent the average volume of water allocated to the three sub basins between 2000 and 2004. Groundwater pumping is assumed to equal the 16,000 AFY sustainable yields of the underlying Tres Pinos, Hollister East, and Hollister West aquifers (Sunnyslope 2008).

The WSA analysis of supply reliability shown in Table 44 reveals that water supplies are sufficient during an average/normal water year to satisfy both agricultural and M&I demands through 2030. Groundwater withdrawals between 2000 and 2004 (normal to wet years) averaged 12,000 AFY, with approximately 40 percent withdrawn for agricultural uses and 60 percent for

Table 44 Supply Reliability During Average/Normal Water Year for Entire Region

	% of Normal	2005	2010	2015	2020	2025	2030
Water Demands							
M&I for City ^(a)	100	6,174	6,880	7,752	8,624	9,445	10,265
M&I for Sunnyslope's unincorporated areas ^(a)	100	1,261	1,330	1,399	1,472	1,544	1,621
M&I for County's unincorporated areas ^(b)	100	1,632	1,715	1,799	1,886	1,973	2,065
M&I Demand Sub-total		9,067	9,925	10,950	11,982	12,962	13,951
Agricultural ^(c)	100	12,761	11,812	10,011	7,096	6,559	5,583
Demand Total		21,828	21,737	20,961	19,078	19,521	19,534
Available Water Supplies							
CVP Ag Deliveries ^(d)	100	10,913	10,913	10,913	10,913	10,913	10,913
CVP M&I Deliveries ^(d)	100	3,124	3,124	3,124	3,124	3,124	3,124
Groundwater ^(e)	100	16,000	16,000	16,000	16,000	16,000	16,000
Recycled Water ^(f)	100	0	0	0	0	0	0
Supply Total		30,037	30,037	30,037	30,037	30,037	30,037
Difference (Supply minus Demand)		8,209	8,300	9,076	10,959	10,516	10,503
Difference as % of Supply		27.33%	26.63%	30.22%	36.48%	35.01%	34.97%
Difference as % of Demand		37.61%	38.18%	43.30%	57.44%	53.87%	53.77%

Source: Sunnyslope County Water District. *Water Supply Assessment Report For Gavilan College & Fairview Corners Residential Development*. July 2008

Note: (a) M&I water demand for City and Sunnyslope were estimated using the service connection method as described in Section 4.4.
(b) M&I water demand for unincorporated County areas were estimated using annual groundwater reports and increased at 1% per year as described in Section 4-6.
(c) Agricultural demand data was extracted from Annual Groundwater Reports and reduced for conversion to M&I within the HSA as described in Appendix F.
(d) The values shown for CVP agricultural and M&I deliveries are the average proportion of full USBR contract entitlements (35,500 and 8,250 AFY, respectively) for the entire Zone 6 that are delivered to the three relevant sub-basins. These values represent the average volume of water allocated to the three sub-basins between 2000 and 2004(e) See Section 3.4 for discussion of groundwater allocation to M&I and agricultural purposes.
(f) All recycled water is proposed for reuse in the San Juan Groundwater Basin and is therefore not used in the Hollister Service Area.

M&I. These withdrawals are significantly less than the sustainable yield of the underlying aquifers, resulting in a net recharge of the underlying aquifers. Sufficient groundwater is available to satisfy both agricultural and M&I demands above and beyond those demands satisfied by imported CVP water (pp. 15-16).

Water Distribution Infrastructure

Potable Water Infrastructure

The project site is currently undeveloped. On-site water infrastructure consists of a Sunnyslope water pump station that is located in the northwestern corner of the site along Fairview Road. The pump is connected to an agricultural water line that serves the project site. There is an existing 12-inch water main that runs along the west side of Fairview Road (Sunnyslope, p. 10).

The proposed project includes construction of a “backbone” domestic water line that would be installed in the Cielo Vista Drive extension and would connect to Sunnyslope’s existing 12-inch water main on Fairview Road. A series of distribution lines would connect to the new line in the Cielo Vista Drive extension to serve the project. The pipes would be sized to accommodate the project in accordance with the applicable requirements of the County and Sunnyslope. The proposed project would also connect to the existing six-inch water main in Harbern Way to provide an alternative source of water for the project per County requirements.

Recycled Water Infrastructure

Based on available information, it is anticipated that recycled water will be available in the future to serve the project. In anticipation of planned recycled water distribution, the proposed project includes policy provisions for the installation of “purple pipe” infrastructure to enable recycled water distribution throughout the project site once it becomes available. At such time as recycled water becomes available, it could be used within the project site to irrigate parks, open space areas and landscaped areas. Nevertheless, since the timing for provision of recycled water service to the project site is not currently known, this EIR’s analysis does not assume the provision of recycled water to meet the project’s demand. Instead, the analysis relies on existing water supplies to meet the project demand. As noted above, there are sufficient existing water supplies to serve the project.

Relevant Specific Plan Policies

Article 5.0 (Resource Management) and Article 6.0 (Public Facilities and Services) of the Fairview Corners’ Residential Specific Plan include the following policies and implementation measures to address water supply and water infrastructure:

Policy RM-5.1. Reduce potable water consumption.

1. The master developer shall prepare a detailed master recycled water distribution plan that identifies backbone collection infrastructure needed to serve front yards of residential lots, public parks, landscape strips, monument locations, and other open space/landscape areas within the Plan Area. [LEED ND GIB Credit 4; Homes SS-2; Homes WE-1]
2. The master developer and/or individual neighborhood developer(s) shall comply with the San Benito County Water Conservation Plan in the design of landscape material, irrigation systems, and calculating the allowable water budget for landscape irrigation in the Plan Area. Additional water conservation methods should also be considered for implementation within the Plan Area, such as cisterns to catch and store runoff water for landscape irrigation, the use of native vegetation in landscape materials, and the use of ultra low-flow or dual flush toilets, shower heads and faucets in all residential units. [LEED ND GIB Credit 4; Homes SS-2; Homes WE-1].

Policy RM-5.2. Facilitate water conservation.

1. In public spaces and residential front yards less than one acre, the master developer and individual developer(s) shall install drought-tolerant landscaping prior to delivery of residential dwelling units to buyers. On lots of one acre or larger, perimeter drought-tolerant planting shall be provided along the street frontage. Homeowners shall maintain yards in weed-free condition and assure that soil erosion is prevented.
2. Use drought-tolerant landscaping for at least 50 percent of planted yard area, and limit turf to areas of active use, and in no case more than 50 percent of planted yard area. [LEED ND GIB Credit 4; Homes SS-2; Homes WE-1; Homes WE-2].
3. Utilize only drought-tolerant landscaping along roads and in public landscaped areas. [LEED ND GIB Credit 4; Homes SS-2; Homes WE-1; Homes WE-2]
4. Design irrigation systems to minimize water use, including installation of ground moisture sensor controls, and temporary irrigation systems for drought tolerant plantings to be removed, where feasible, when plantings are established. [LEED ND GIB Credit 4]

5. Equip dwellings with low water use washing machines and dishwashers, and dual-flush toilets. [*LEED Homes EA-9*]
6. Pre-plumb dwellings to accommodate gray water and rainwater recovery and irrigation systems, if feasible legally and permissible. [*LEED Homes SS-4; Homes WE-2*]
7. Multi-family residential buildings shall include a roof rainwater recovery system for storing irrigation water.
8. Use recycled water for park, streetscape, single-family residential front yard and multi-family residential common area irrigation, if available adjacent to the Plan Area at time of construction and permitted under applicable law and regulations. Encourage pre-plumbing to facilitate conversion to recycled water if recycled water is not available at the time of development, but will become available in the future. [*LEED ND GIB Credit 4; Homes WE-1*].

Policy PF 1.1. Ensure sufficient water supply for the build-out of the Plan Area.

Policy PF 1.2. Construct a water supply system that expands on and is integrated with the existing system, meets the needs of future development, and, where appropriate, subject to proportional fair share and reimbursement.

1. The master developer and/or individual neighborhood developer(s) shall install water supply system improvements that tie into the backbone infrastructure system, which shall be installed by the master developer. Water supply improvement plans shall be subject to review and approval of the Sunnyslope County Water District (SSCWD) for consistency with the approved Potable Water Master Plan and Recycled Water Master Plan, as well as related SSCWD requirements, in accordance with Article 7.0.
3. As a condition of approval of each tentative or parcel map (as the case may be), the developer shall grant easements for the SSCWD to maintain water supply mains to be located in the Plan Area.

Article 7.0 (Implementation Plan) of the Specific Plan also includes numerous implementation steps for the financing, construction, and maintenance of water infrastructure to the project site.

Based on the above analysis and as set forth more fully in the WSA, upon Sunnyslope's planned infrastructure improvements, Sunnyslope would have sufficient water supply to meet the project's demands and its other service area demands for the next 20 years. Also, available groundwater is projected to be more than adequate to serve the study area, including the Fairview Corners project, for the next 20 years. Thus, there would be sufficient water supplies available to serve the project from existing entitlements and resources, and the project would not require new or expanded entitlements. The project's impacts in this regard would be **less than significant**.

No mitigation is required.

Groundwater

Impact UTIL-2: The proposed project would not 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. **This would be a less than significant impact.**

The proposed project does not include groundwater wells and, as noted above, would connect to the existing Sunnyslope water main located on Fairview Road. According to the WSA the proposed project would require 80.2 AFY per year. According to the Hollister UWMP, the underlying sustainable yield of the aquifers is 16,000 AFY. As determined by the WSA, the proposed project water demand would be served by Sunnyslope's existing and planned levels of groundwater extraction and would not cause groundwater levels to drop to the extent that a net deficit in the 16,000 AFY sustainable capacity of area groundwater aquifers would occur. The proposed project would increase the amount of impervious surfaces on the site. Groundwater below the project site is located at depths of approximately 120 feet below ground surface and on-site soils have a low infiltration rate. Due to the depth of groundwater and the low infiltration rates of soils on the site, the proposed project would not substantially interfere with groundwater recharge.

Therefore, the project's groundwater impacts would be **less than significant**.

No mitigation is required.

Wastewater Collection and Treatment

Impact UTIL-3: The proposed wastewater treatment provider that would serve the project has adequate capacity to serve the projected demand in addition to the provider's existing commitments in accordance with applicable Regional Water Quality Control Board

requirements, would not violate any waste discharge requirements, and would not require the construction of new wastewater treatment facilities to serve the project in order to maintain acceptable service ratios or other performance objectives. It will require the installation of new collection lines, but these facilities will not cause significant, adverse, environmental effects. Therefore, project impacts would be **less than significant**.

Wastewater Treatment Capacity

As discussed above, the DWTP has a planned total capacity of five mgd per day, which is sufficient to accommodate the wastewater needs of the Hollister Urban Area, including the project site, through 2023. The project would generate approximately 60,818 gallons of wastewater per day, assuming that 85 percent of domestic water would enter the wastewater conveyance system and would not be used for exterior consumption (Gavilan College District 2008). As set forth in the Hollister Water/Wastewater Master Plan, this wastewater generation, along with the other existing and future needs of the Hollister Urban Area, can be accommodated within the planned capacity of the DWTP. Therefore, the DWTP would have adequate capacity to serve the project as well as the provider's other existing commitments within the Hollister Urban Area, and the project would not result in the need for a new or upgraded wastewater treatment facility.

The proposed project includes infrastructure improvements to connect the project site to the City's sanitary sewer system, consistent with the Hollister Water/Wastewater Master Plan for wastewater conveyance and treatment. These improvements would involve extending sewer mains to the site, as described more fully below. The project would comply with the applicable requirements of this Master Plan as well as applicable County and Regional Water Quality Control Board standards, which would ensure there would be no violation of any requirements associated with waste discharge.

Proposed Conveyance to the DWTP

Wastewater generated by the project would be collected through a system of gravity fed sanitary sewer lines on the project site and a new sanitary sewer main extension to the City's existing infrastructure, which would be constructed as part of the project. The project proposes two wastewater service options for connecting to the City's sanitary sewer system, as illustrated in [Figure 20, Wastewater Conveyance Options](#) (Section 2.0). Both scenarios would be gravity-fed and would connect to the existing main on Enterprise Road.

Wastewater Service Option #1. Under this option, the existing sewer main that serves the existing residences in the Cielo Vista subdivision, which is located in Cielo Vista Drive across Fairview

Road, would be used to serve the project. The project would connect to the existing system at the intersection of Fairview Road and Cielo Vista Drive. This connection would discharge the project's sewage through the existing 8-inch main to the western end of the Cielo Vista subdivision. From here, a new pipe would be constructed to connect to the existing sewer system within Enterprise Road. The new pipe would be sized to accommodate the project in accordance with applicable standards of the County, the City of Hollister, and the Hollister Water/Wastewater Master Plan.

Wastewater Service Option #2. Under this option, new dedicated sewer mains within Fairview Road and Airline Highway would be installed to connect with the existing sewer main located on Enterprise Road. The new pipe would be sized to accommodate the project in accordance with applicable standards of the County, the City of Hollister, and the Hollister Water/Wastewater Master Plan.

Specific Plan Policies: Wastewater Collection and Treatment

Article 6.0 (Public Facilities) of the Specific Plan includes the following policies that address the provision of adequate wastewater service and treatment on the site.

Policy PF-2.1. Construct a wastewater collection system that expands on and is integrated with the existing system that connects to the City of Hollister's Domestic Wastewater Treatment Plant (DWTP), meets the needs of future development within the Plan Area, and, where appropriate, subject to proportional fair share and reimbursement.

Policy PF-2.2. The demand for wastewater collection and treatment may be provided for by septic systems on lots not less than one acre in size. Lots less than one acre in size, and where the number of lots within the Plan Area exceeds 45, shall not be served by the use of septic systems, but shall be served by the City of Hollister DWTP.

1. The master developer shall work with the City of Hollister to ensure a "will serve" commitment, and prepare a master wastewater collection plan that identifies backbone collection infrastructure needed to serve new development within the Plan Area. Backbone infrastructure improvement plans for development within the Plan Area must be reviewed and approved by the City of Hollister for consistency with City standards prior to or concurrent with the approval by the County Public Works Department. The timing of approval shall occur in accordance with Article 7.0.

2. Where wastewater infrastructure is built outside the Plan Area that benefits other future development projects, those improvements shall be subject to the proportional fair share and reimbursement in accordance with Article 7.0 and as set forth in the Development Agreement.
3. Individual project developer(s) shall install wastewater collection improvements within the boundaries of their individual projects that tie into the backbone wastewater collection system. Wastewater collection system improvement plans for individual projects shall be subject to review and approval of the City of Hollister for consistency with the master wastewater collection plan and related City standards prior to or concurrent with County staff approval. The timing of the required approval shall occur in accordance with Article 7.0 of any individual subdivision phase final map or commercial development within the Plan Area.
4. As a part of the final map and improvement plans, the developer shall grant easements to allow for maintenance of wastewater collection improvements to be located in the Plan Area.
5. Septic systems provided to serve the Plan Area shall meet County design, construction and maintenance standards. Designs shall be submitted prior to approval of tentative maps.

The project would increase demand for wastewater collection and treatment, but not beyond the planned capacity of the City of Hollister's DWTP. The project site is located within the City's Planning Area and within the Hollister Urban Area identified in the Hollister Water/Wastewater Master Plan for wastewater service from the DWTP.

In summary, the proposed project would not require an expansion of the City's DWTP beyond current planned improvements but would require the construction of a new sewer line to connect the project site to the nearest point of connection with adequate conveyance capacity. The environmental impacts from the construction of the two sewer line options discussed above are evaluated in other sections of this EIR, in particular in the sections that address impacts to biological resources, cultural resources, air quality, noise, and growth-inducing impacts. As the analysis in those sections shows, construction of the sewer main would not result in significant environmental impacts.

Therefore, the project's wastewater impacts would be **less than significant**.

No mitigation is required.

On-site Wastewater Treatment

Impact UTIL-4: The soils on the project site may not be capable of adequately supporting the use of septic tanks. This is a **potentially significant** impact.

As discussed more fully in Section 3.7, Geology and Soils, the Specific Plan contemplates the potential use of septic systems for residential development on one-acre lots, so long as doing so would be consistent with applicable County and Regional Water Quality Control Board regulations.

Groundwater below the project site is located at a depth of approximately 120 feet below ground surface, and on-site soils have a low infiltration rate. However, site-specific soil profile analysis and percolation testing will need to be performed at the tentative map or parcel map (as the case may be) stage to confirm soil suitability in the event the developer proposes to use septic systems rather than connect to the City of Hollister's DWTP. Implementation of Mitigation Measure MM GEO-8, which requires site-specific analysis, would reduce the impact to a **less than significant** level.

Energy Consumption

Impact UTIL-5: The proposed project would not result in the wasteful, inefficient or unnecessary consumption of electricity, natural gas or gasoline. This impact is considered **less than significant**.

The project would consume energy for multiple purposes including, without limitation, building heating and cooling, lighting, appliances and electronics. Energy would also be consumed during each vehicle trip associated with the proposed land development.

The project's estimated operational energy consumption at buildout is provided in Section 3.5, Climate Change. The estimates are summarized here in [Table 45, Project's Estimated Operational Electrical Demand](#).

As discussed in Section 3.5, residential development in San Benito County consumed a total of approximately 120 million kilowatt hours (kWh) of energy in 2008. U.S. Census data for 2008 indicate that there were approximately 17,827 housing units in the County. This data can be used to estimate that a single housing unit in the County consumed an average of approximately 6,732 kWh of energy in 2008. Using this factor, the project's proposed 220 residential units would create an average demand for approximately 1,481,040 kWh per year of electricity or approximately 1,481 megawatt hours (MWh) per year for on-site use. As reported in Section 3.5, the LGOP energy use factor for off-site water pumping is 1,450 kWh per 1,000,000 gallons of

Table 45 Project’s Estimated Operational Energy Demand

Use	Project Buildout	Estimated Average Annual Demand
Residential Electrical	220 SFU	1,481,040 kWh
Domestic Water Pumping	71,550 gpd	37,845 kWh
Wastewater Treatment	60,818 gpd	55,500 kWh
Total Electric		1,574,385 kWh
Natural Gas	37,748 ft ³ du/yr	8.3 million ft ³

Source: EMC Planning Group 2010

Notes: Units:
 ft³ = cubic feet
 gpd = gallons per day
 kWh = kilowatt hours

water consumed. Water demand for the project is estimated at 71,550 gallons per day (approx. 26,115,750 gallons per year). This equates to an energy use of 37,845 kWh per year (approx. 38 MWh per year). The proposed project is expected to generate approximately 60,818 gpd of wastewater (approx. 22,198,570 gallons per year). Based on the LGOP energy demand factor of 2,500 kWh per 1,000,000 gallons of wastewater treated, electricity demand from wastewater treatment would be approximately 55,500 kWh per year. Accordingly, the total annual electrical energy demand of the proposed project is estimated to be approximately 1,574,385 kWh per year.

The project’s estimated energy demand for natural gas use was derived using ECDMS results for natural gas consumption by County for the year 2008. Total natural gas consumption for San Benito County in 2008 was recorded as 6.729063 million therms (672.91 million ft³ (one therm = approximately 100 ft³). Assuming, approximately 17,827 housing units in the County, this equates to an average consumption rate of approximately 37,748 ft³ of natural gas per unit in the County. Using this factor, the project’s proposed 220 residential units would create an average demand for approximately 8.3 million ft³ per year of natural gas.

The demand estimates are considered conservative since they do not reflect any energy conservation or other measures that might be employed as part of the project to reduce energy demand. It is important to note that actual energy usage could vary depending upon such factors such as miles driven by future residents and the degree to which energy conservation measures are incorporated into the various facilities.

Efforts have been underway at the state and federal level for a number of years to significantly reduce energy consumption within many areas of the economy, including building construction, household use, commercial and office use, and transportation. State goals and policies contained

within the California Energy Action Plan II are generally representative of these efforts, and address the broad areas of energy efficiency and increasing use of renewable resources.

Specific Plan Policies Regarding Energy Conservation

As noted in Table 15, GHG Measures of Section 3.5, Climate Change, the proposed project includes numerous policies related to resource conservation and sustainability. Policies in the Fairview Corners' Residential Specific Plan also incorporate Leadership in Energy Efficient Design (LEED) design features intended to encourage sustainable development, as well as compliance with Title 24 Energy Efficiency Standards. In addition, Article 5.0 (Resource Management) of the Specific Plan contains policies that specifically address energy conservation. Implementation of these measures would result in the more efficient use of energy supplies, including electricity, natural gas, and gasoline, consistent with state and federal goals and policies supporting energy efficiency, and are summarized below.

- Facilitate alternative energy sources. (Policy RM-8.1)
- Pre-plumb/pre-wire at least one-third of units for solar power and offer solar power as an option on all units. (Policy RM-8.1, Action #1)
- Consider connecting the project to the Gavilan San Benito College Campus community geothermal heat pump energy or heating system, in the event such a system is constructed. (Policy RM-8.1, Action #2)
- Facilitate energy conservation through design techniques. (Policy RM-8.2)
- Design houses to facilitate passive solar heating during the winter, and use cool roofs and thermal window coverings to reduce solar heat gain during the summer. (Policy RM-8.2, Action #1)
- Design lots and houses to maximize rooftop solar energy output potential. Where feasible, roof pitches and roof orientation should be designed to maximize solar exposure to rooftop energy panels (minimum 300 feet of unobstructed roof area facing within 30 degrees of south). (Policy RM-8.2, Action #2)
- Make photovoltaic electrical systems and solar hot water available for at least one-third of dwelling units. Photovoltaic pre-wiring/conduit shall be installed and photo-voltaic electrical systems and solar hot water shall be offered as an option on all dwelling units. (Policy RM-8.2, Action #3)
- Equip dwellings with energy efficient water heaters and heat recovery drain systems. (Policy RM-8.2, Action #4)

- Vegetation within 10 feet of a property line that is deemed to interfere with solar access at an adjoining lot shall be subject to height restrictions as necessary to protect such solar access. (Policy RM-8.2, Action #5)
- Porches shall be placed only on the east, south, or west side of houses to provide shading in the summer, and to maximize northern light exposure to the interior of houses. (Policy RM-8.2, Action #6)
- South and west-facing elevations shall be designed with roof overhangs that block summer sun from windows and allow penetration of winter sun. (Policy RM-8.2, Action #7)
- Design residences to minimize the need for artificial lighting. Provide ample windows; light towers; light wells; dormers; skylights; or other features to enhance natural lighting. (Policy RM-8.2, Action #8)
- To increase natural light to small residential lots, consideration should be given to the orientation of roof gables and the effect of the roof line on yard shading. (Policy RM-8.2, Action #9)
- Landscaping should include deciduous trees to shade south and west-facing walls in the summer and allow sunlight penetration in the winter. (Policy RM-8.2, Action #10)
- Provide communications wiring within all dwelling units to facilitate telecommuting. (Policy RM-8.2, Action #11)
- Provide programmable thermostats for all heating systems. (Policy RM-8.2, Action #12)
- Use heating systems with an Annual Fuel Use Efficiency (AFUE) of 95% or greater, seal all ducts, and insulate ducts in unconditioned spaces. (Policy RM-8.2, Action #13)
- Equip all garages/carports with a 240-volt 40-amp circuit suitable for electric vehicle charging. (Policy RM-8.2, Action #14)
- If multi-family uses are developed, the parking lot shall be shaded by either high albedo (reflective) roofs, roofs with solar panels, or trees that provide a minimum of 50 percent shade within 10 years of planting. (Policy RM-8.2, Action #15)

With the implementation of the above-referenced, design and building features, inefficient use of energy resources would not occur and the impacts would be considered **less than significant**.

No mitigation is required.

3.15.5 CUMULATIVE IMPACTS AND MITIGATION MEASURES

Demand for Wastewater Treatment

Impact UTIL-6: The proposed project, in addition to past, present and reasonably foreseeable, probable future projects in the vicinity, would generate demand for wastewater treatment services. As discussed under Impact UTIL-3, the project would require the installation of new collection lines, in order to maintain acceptable service ratios or other performance objectives, but these facilities would not cause significant, adverse, environmental effects, and it is not anticipated that new or expanded wastewater treatment facilities would be needed to serve this cumulative development. This would be a **less than significant cumulative impact**.

While the proposed project, combined with other cumulative development in the vicinity, would result in the increased demand for wastewater treatment services, it is anticipated that adequate treatment capacity would exist at the City of Hollister's DWTP as contemplated by the Hollister Water/Wastewater Master Plan to handle wastewater generated by existing and reasonably foreseeable future development within the Hollister Urban Area through 2023. The Hollister Water/Wastewater Master Plan identifies the DWTP as the regional provider for the City of Hollister and contiguous areas (Hollister Urban Area), including the project site. As noted above, a number of improvements are planned and/or have already been implemented to expand DWTP capacity to accommodate growth anticipated in the Hollister Urban Area. Because this capacity is already contemplated by the Hollister Water/Wastewater Master Plan and would be available for the project as well as other cumulative development, it is not anticipated that additional facilities beyond those already contemplated would be needed to serve the project and other cumulative development within the Hollister Urban Area. Therefore, the project would not result in a cumulatively considerable contribution to environmental impacts associated with increased demand for wastewater treatment capacity, and would not contribute to the need for new or expanded wastewater treatment facilities.

No mitigation is required.

Energy Consumption

Impact UTIL-7: The proposed project, in combination with other past, present and reasonably foreseeable, probable future development within the County could result in the wasteful, inefficient or unnecessary consumption of electricity, natural gas and gasoline. This potential cumulative impact is considered **less than significant**.

The project, combined with other cumulative development, would consume electricity, natural gas, and gasoline. However, Policy 29, Energy Conservation, in the San Benito County General Plan Open Space and Conservation Element, encourages the use of energy-efficient design in new construction. As discussed above, the project incorporates numerous design and building features that are intended to address the incorporation of energy efficient design and building materials, and passive solar energy, including, among other things, facilitating solar access. In addition, a network of bicycle and pedestrian paths would be provided to facilitate alternative modes of transportation. These and other features would result in the reduction of energy usage within the project. It is anticipated that other cumulative projects would also be required to incorporate similar energy-saving design features, in accordance with the requirements of San Benito County, as well as other applicable policies, laws and standards of the County and state, including, without limitation, Title 24 Energy Efficiency Standards. Cumulative impacts resulting from the wasteful or inefficient consumption of electricity, natural gas and gasoline are therefore anticipated to be **less than significant**.

No mitigation is required.

This side intentionally left blank.