3.13 Public Services, Utilities, and Energy

This section describes the regulatory and environmental setting for public services, utilities, and energy. It also describes impacts on public services, utilities and service systems, and energy that would result from implementation of the *Climate Action 2020: Community Climate Action Plan* (CAP) and includes mitigation for significant impacts, where feasible and appropriate.

3.13.1 Environmental Setting

This section describes the public services and utilities and service systems present in Sonoma County. This information has primarily been drawn and modified from the *Sonoma County General Plan 2020, Draft Environmental Impact Report* (Sonoma County 2006).

3.13.1.1 Public Services

Fire Protection Services

Fire protection in Sonoma County is provided by approximately 29 different agencies. There are 15 volunteer fire companies that comprise Community Service Area 40 (CSA 40), which is funded primarily through donations, with equipment and administrative support provided by the County Department of Emergency Services.[1] There are 17 Fire Protection Districts (FPDs) funded through County taxes and operated by the Fire Division of the Department of Emergency Services. In addition, the cities of Cloverdale, Healdsburg, Petaluma, Santa Rosa, Sebastopol, and Sonoma operate independent fire departments funded through local property taxes. The Occidental and Cazadero County Service Districts fund fire protection services. Four other agencies provide fire protection through other means: the Sonoma Developmental Center's 1,600-acre campus provides its own fire protection; the Two Rock Coast Guard provides its own fire protection; the Rohnert Park Department of Public Safety provides fire protection to Rohnert Park; and the California Department of Forestry and Fire Protection provides additional fire protection services in the unincorporated parts of the County.

Police Protection Services

Police protection in the unincorporated portion of Sonoma County is primarily provided by the County Sheriff's Department. Since 1993, the County Sheriff's Department has also provided law enforcement services to the Town of Windsor under a contract most recently renewed in 2008 for a 10-year period. In addition, the City of Sonoma contracted with the Sonoma County Sheriff's Office to provide law enforcement services in 2004. The County Sheriff's Department maintains a 24-hour patrol force operating from five substations and the main office located in Santa Rosa. As of 2015, the County Sheriff's Department has 189 peace officers—including deputies who work in patrol, administration, the helicopter unit, the boating unit, and the civil bureau—and 35 detectives working in investigations, for a total of 224 officers (Sonoma County Sheriff's Office 2015). With a service population of nearly 500,000, the County Sheriff's Department maintains a service ratio of approximately 0.45 officers per 1,000 residents, which is less than the 2.0 officers per 1,000 residents set by the Federal Bureau of Investigation.

[1] CSA 40 covers approximately 640 square miles of unincorporated land throughout Sonoma County.

There are a number of other agencies that also provide law enforcement in Sonoma County. These agencies include the college and university police, city police departments, state agencies, and federal law enforcement agencies.

Schools and Other Community Facilities

Sonoma County has 40 school districts (31 elementary districts, 3 high school districts, and 6 unified districts) whose attendance areas are wholly contained within the County, and 5 districts that provide facilities outside of the County. These districts vary significantly in size, ranging in enrollment from 7 students in the smallest district to just below 5,000 in the largest. There are 181 public schools in Sonoma County, including 108 elementary schools, 23 middle and junior high schools, 19 high schools, 24 alternative schools, and 7 independent study schools. In addition, there are approximately 50 private schools in the County (California Department of Education 2015).

Enrollment in public elementary, middle and junior, and high schools has generally decreased over the past decade, from 72,295 in 2004/2005 to 70,932 in 2014/2015 (Sonoma County Office of Education 2015). However, the latter shows an increase from 2012/2013's enrollment of 70,637.

3.13.1.2 Utilities and Service Systems

Water Services

The Sonoma County Water Agency (SCWA) is a special district that was created by the California Legislature in 1949 and operates under the direction of a Board of Directors, who are also members of the Sonoma County Board of Supervisors. The SCWA provides potable water to approximately 600,000 people in Sonoma and Marin Counties. Water is delivered to the SCWA's primary water customers through the SCWA's transmission system. The primary water customers are the cities of Santa Rosa, Rohnert Park, Petaluma, Cotati, and Sonoma, and the North Marin, Valley of the Moon, and Forestville water districts.

Water Sources

The main water sources for the unincorporated portions of the County are either groundwater or SWCA's high capacity surface wells along the Russian River. Nearly all of the urban water providers have one or more wells, which provide the primary source for most small providers and offer a supplemental backup source for the large providers primarily using Russian River water. Groundwater is the primary water source for all rural areas of the County, including many water systems for small communities, subdivisions, and institutions. Because the amount of urban and rural development depending on groundwater, Sonoma County reportedly has the second largest number of public and private wells of any county in California. Approximately 42% of the population's water supply comes from groundwater sources.

Water for the incorporated portions of the County is provided by each local jurisdiction. In addition, water is provided for other incorporated areas in the County by the Valley of the Moon, Forestville, Sweetwater Springs, and Russian River County water districts; Cal-American, Penngrove/Kenwood, Occidental, and Sea Ranch water companies; Camp Meeker Parks and Recreation Department; Geyserville Water Works; and Graton.

Transmission System

The SCWA's existing water transmission system includes diversion facilities at the Russian River and an aqueduct system comprising pipelines, pumps, and storage tanks. Diversion facilities are located near Wohler Bridge and Mirabel Park adjacent to the Russian River and include Ranney-type collector wells, conventional wells, an inflatable dam and associated fish ladders, infiltration ponds, and treatment facilities. The aqueduct system distributes the water produced from the diversion facilities to customers in SCWA's service area. The transmission system includes approximately 85 miles of 16- to 48-inch-diameter pipelines, 17 water storage tanks with a total capacity of 118.8 million gallons, and 8 booster pump stations. The total capacity of the transmission system is 92 million gallons per day (mgd), with 20 mgd of standby capacity.

Wastewater Management Services

Incorporated cities and special districts own and operate numerous centralized wastewater collection and treatment systems throughout the County. The discharge of treated effluent and disposal of bio-solids is permitted by the corresponding Regional Water Quality Control Board (RWQCB) (either the North Coast or the San Francisco Bay). Rural areas not served by centralized systems use onsite septic systems subject to regulation by the Sonoma County Permit and Resource Management Department (PRMD), with larger systems subject to the approval of the RWQCBs.

Wastewater Treatment Plants

Conventional wastewater treatment plants typically receive and treat wastewater either from multiple parcels and land uses or agricultural processing facilities on a single parcel and produce secondary or tertiary-treated effluent. In the first case, the facility is typically owned and operated by a public agency, usually a sanitation district, and is built to service large to very large wastewater flows. Wastewater management for the incorporated portions of the County is provided by each local jurisdiction. In addition, there are 12 wastewater treatment plants in unincorporated Sonoma County: Sea Ranch Central, Sea Ranch North, Bodega Bay, Occidental, Geyserville, Forestville, Russian River, Airport-Larkfield-Wikiup, Graton, Sonoma Valley, South Santa Rosa, and Penngrove. The North Coast or San Francisco Bay RWQCB, depending on the location of the plant, regulates discharge from each treatment plant.

With the exception of South Santa Rosa and Penngrove, all districts serving Urban Service Areas in the unincorporated County maintain independent facilities to collect, treat, and/or dispose of wastewater. South Santa Rosa receives sewer service from the South Park County Sanitation District, which contracts with the City of Santa Rosa for wastewater treatment and disposal. The Penngrove Sanitation Zone contracts with the City of Petaluma for sewer service. The Sonoma Valley County Sanitation District treatment facility is within the jurisdiction of the San Francisco Bay RWQCB. The remaining facilities are under the jurisdiction of the North Coast RWQCB.

Septic Systems

Most residences and some small educational, public, commercial, and industrial facilities in unincorporated areas of the County rely upon individual septic systems to treat and dispose of wastewater. Although the total number of septic systems in use in Sonoma County is not known, it is estimated by PRMD to be approximately 35,000. Assuming that each of the estimated 35,000 residential septic systems serves a household averaging 2.8 people, some 95,000 residents of Sonoma County utilize onsite systems for wastewater disposal. This represents approximately 75%

of the residents in the unincorporated areas of the County and about 20% of the total County population.

Solid Waste Management Services

Solid waste is generated from a mix of residential, commercial, and industrial sources in the County. In 2014, a solid waste characterization study showed that for the unincorporated areas of the County, there were 262,500 tons of solid waste. Approximately 77% of the total tons of solid waste generated was divertible, compostable, or potentially divertible (Sonoma County Waste Management Agency 2014).

The existing solid waste management system in Sonoma County includes a mix of public and private sector haulers, facilities, and facility operators. Solid waste transfer and disposal facilities are owned by the County and serve the cities and unincorporated portions of the County. These include four transfer stations (Healdsburg, Annapolis, Guerneville, and Sonoma), and the Central Disposal Site. The County system is managed by the Sonoma County Integrated Waste Division of the Department of Transportation and Public Works.

The Central Landfill is the only operating landfill within Sonoma County. The landfill is owned by the County, and is operated by a private operator (Republic Services of Sonoma Co.). It is permitted to accept up to 2,500 tons per day of non-hazardous municipal solid waste. Approximately 75% of the waste disposed at the landfill is generated by the nine incorporated cities in the County. In 2010, the average daily tonnage was 1,250 tons per day (Sonoma County Waste Management Agency 2010).

Energy Use and Providers

Residential, commercial, industrial, and agricultural uses in unincorporated and incorporated areas of the County consume approximately 2,960 mega kilowatt-hour per year (MkWh/y) of electricity.

The majority of the County's electricity is provided by Sonoma Clean Power, a year-old public agency. In the past, Pacific Gas and Electric Company (PG&E) was the major supplier for the County. Sonoma Clean Power now provides electricity for about 90%, or 204,000, of the residential and commercial customers. PG&E draws on a variety of energy sources to feed its regional power grids. Sonoma Clean Power has secured long-term contracts with Geysers Geothermal Power Plants. Energy under Sonoma Clean Power would also be provided by two large solar panel arrays under development in Sonoma County and the Central Valley. Sonoma Clean Power supplies 33% of its energy from renewable sources, predominantly from these solar and geothermal projects.

3.13.2 Regulatory Setting

3.13.2.1 Federal

Federal regulations relevant to water quality are described in Section 3.10, *Hydrology and Water Quality*. There are no additional federal regulations for public services, utilities, and energy applicable to the implementation of the CAP.

3.13.2.2 State

State of California regulations relevant to water quality are described in Section 3.10, *Hydrology and Water Quality*. The following are state relegations relevant to public services, utilities, and energy.

California Government Code Section 65996

California Government Code Section 65996 describes the exclusive methods of considering and mitigating impacts on school facilities that result or could result from any state or local agency action, including development of real property. One of these methods is through Education Code Section 17620, described below.

Education Code Section 17620

Education Code Section 17620 authorizes school districts to levy a fee, charge, dedication, or other form of requirement against any development project for the construction or reconstruction of school facilities provided the district can show justification for levying of fees.

Senate Bill 610

Senate Bill (SB) 610 requires local water providers to conduct a water supply assessment (WSA) for projects proposing over 500 housing units, 250,000 square feet of commercial office space (or more than 1,000 employees), a shopping center or business establishment with over 500,000 square feet (or more than 1,000 employees), or equivalent usage. A WSA is not required for the CAP because it does not include any site-specific designs or proposals, or grant any entitlements for development.

Assembly Bill 939 and SB 1016

The California Integrated Waste Management Act of 1989, or Assembly Bill (AB) 939, established the Integrated Waste Management Board, required the implementation of integrated waste management plans, and mandated that local jurisdictions divert at least 50% of all solid waste generated (from 1990 levels) from going to landfills, beginning January 1, 2000, and to divert at least 75% by 2010.

In 2006, SB 1016 updated the requirements. The new per capita disposal and goal measurement system shifted the emphasis from an estimated diversion measurement number to an actual disposal measurement number as a factor, along with evaluating program implementation efforts. These two factors will help determine each jurisdiction's progress toward achieving AB 939 diversion goals. The 50% diversion requirement is now measured in terms of per capita disposal expressed as pounds per person per day.

Assembly Bill 75

AB 75, passed in 1999, took effect on January 1, 2000, and mandated state agencies to develop and implement an integrated waste management plan (IWMP). The changes brought about by AB 75 required each state agency or large state facility—e.g., state universities, community colleges, prisons within the Department of Corrections, facilities of the Department of Transportation, and any other agencies identified by the California Integrated Waste Management Board (CIWMB)—to develop an IWMP by July 1, 2000; to divert at least 25% of its solid waste from landfills or transformation facilities by January 1, 2002; and to divert 50% by January 1, 2004. In addition to the waste diversion goals, all state agencies are required to buy recycled materials from 12 different categories, ranging from paper and plastic to paint, solvents, and lubricating oils.

3.13.2.3 Local

Appendix C, *Local General Plan Goals, Objectives, and Policies*, provides a list of the goals, objectives, and policies in the local general plans of the participating jurisdictions including those related to public services, utilities, and energy. These goals, objectives, and policies were reviewed to assess whether the project is consistent with the general plans of participating jurisdictions. Disclosure of this consistency analysis is for informational purposes. An additional purpose of providing a list of relative local policies is, where appropriate, to provide the context within which the CAP will be locally implemented. As described in the CAP, most of the CAP measures represent implementation of many of the priorities outlined in existing local policies.

Inconsistencies with general plan policies are not necessarily considered significant impacts under CEQA unless they are related to physical impacts on the environment that are significant in their own right.

Implementation of the CAP is consistent with the applicable general plan goals, objectives, and policies of the participating jurisdictions in relation to public services, utilities, and energy.

3.13.3 Impacts Analysis

3.13.3.1 Methodology

This analysis is based on a review of the public services, utilities and service systems, and energy information available for the County. Impacts related to public services, utilities and service systems, and energy are analyzed qualitatively and are focused on the CAP's potential to increase the demand for public services, utilities and service systems, and energy significantly beyond the existing resources in the County.

3.13.3.2 Significance Criteria

The California Environmental Quality Act (CEQA) Guidelines Appendix G and Appendix F (California Code of Regulations [CCR], Title 14, Section 15000 et seq.) has identified significance criteria to be considered for determining whether a project could have significant impacts on existing public services, utilities and service systems, and energy.

An impact would be considered significant if construction or operation of the project would have any of the following consequences.

Public Services

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

- Parks
- Other public facilities

Utilities and Service Systems

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.
- Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
- Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
- Have insufficient water supplies available to serve the project from existing entitlements and resources, or new or expanded entitlements are needed.
- 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 providers existing commitments.
- Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs.
- Not comply with federal, state, and local statutes and regulations related to solid waste.

Energy

- Result in land use locations and patterns causing wasteful, inefficient, and unnecessary consumption of energy.
- Result in the construction of new or retrofitted buildings that would have excessive energy requirements for daily operation.
- Result in increased energy demand and the need for additional energy resources.

3.13.3.3 Impacts and Mitigation Measures

Impact PSU-1: Implementation of the CAP could reduce service ratios or response times for fire protection or police protection services or require new or physically altered governmental facilities to maintain acceptable service ratios and response times (less than significant).

The CAP is a policy and program-level document that does not include any site-specific designs or proposals, or grant any entitlements for development that would have the potential to generate a new residential or employment population that would require new fire protection or police protection services. As a policy document, the CAP would have no direct impact on fire protection and police protection services, but future implementation activities could increase the demand for such services.

There are several CAP measures that promote and could include the construction of new facilities aimed at improving energy efficiency, increasing renewable energy use increasing solid waste diversion, reducing water use, expanding recycled water and greywater use, and increasing

capture/use of methane from landfills and dairies. These facilities would not be within the jurisdiction of the Regional Climate Protection Authority. Most of these new facilities would be constructed within or on existing buildings (e.g., rooftops, wastewater treatment plants, and dairies). Their installation within or on existing buildings would likely not result in new employees and associated increases in population that would require additional fire protection and police protection services. New recycled water, solid waste, or other facilities promoted by the CAP may generate a limited number of new employees but would only minimally change the demand for public services. However all future development projects would be subject to applicable local regulations, requirements, and development impact fees, as well as state and federal laws.

New waste-to-energy facilities at landfills, new methane gas digesters, and new cogeneration facilities could entail new potential fire risks. However, all new facilities would be required to comply with all applicable fire codes, and the addition of such facilities is not expected to substantially change the demand for fire protection services.

Further, the CAP also promotes mixed-use and transit-oriented development in city centers consistent with existing land use plans. These new structures could generate a new employee and residential population that may increase the demand for fire protection and police protection services; however, the CAP would not change existing land use plans, and thus these service demands would not result in an additional impact from CAP adoption and implementation.

With compliance with local regulations and requirements, and state and federal laws, impacts on fire protection and police protection services would be less than significant.

Impact PSU-2: Implementation of the CAP could increase student enrollment at schools or increase level of service required at other public facilities resulting in an adverse physical impact to these facilities (less than significant).

As noted above, the CAP would promote the development of a limited number of new commercial or industrial facilities. These new structures could generate a new employee (and related residential) population that may slightly increase the demand for schools or other public facilities. However, the amount of new employment would be limited, and thus is not likely to substantially change the demand for schools or other public facilities that would demand new facilities.

The CAP does call for certain public facilities, such as traffic calming, transit access improvements, pedestrian and bicycle facilities, and public EV charging facilities; and the secondary physical impacts of such facilities is analyzed throughout the rest of this draft EIR.

New mixed-use and transit-oriented development could generate a residential population that may increase the localized demand for schools or other public facilities in city centers due to a denser population. As noted previously, the CAP is only promoting existing land use policy and thus such development, consistent with existing land use plans, would not present an additional impact from implementation of the CAP. All future development projects would be subject to applicable local and state regulations, requirements, and development impact fees for schools or other public facilities. With compliance with local and state regulations and requirements, impacts on schools or other public facilities in city centers would be less than significant.

Impact PSU-3: Implementation of the CAP could decrease the demand for water supply and thus would reduce the demand for additional water supplies but would increase demand for water facilities infrastructure related to water efficiency, renewable energy, recycled water and greywater use (less than significant).

There are several CAP measures that promote and could include the construction of new facilities aimed at increasing recycled water and greywater use, increasing the efficiency of the existing water infrastructures, and increasing the use of renewable energy in water systems. CAP measures that support the expansion of water treatment facilities and distribution lines and expanded greywater use would require plumbing and fixture alterations within or on existing buildings. Water efficiency improvements would require modifications of existing water treatment facilities. CAP measures that promote renewable energy in water systems may result in the expansion of renewable energy installations at water treatment facilities. These improvements are expected to be minor and would be constructed within the existing water facilities and are not likely to cause significant secondary environmental effects.

Specifically, to reduce greenhouse gas (GHG) emissions associated with water supply and conveyance, the CAP includes measures that would reduce water consumption within existing and new developments and increase recycled water and greywater (reducing potable water use). Thus, implementation of the CAP would reduce potable water consumption in the County through water efficiency measures, and impacts would be beneficial.

As discussed throughout this draft EIR, the CAP would increase demand for water efficiency improvements at water treatment facilities and in existing and new development as well as providing additional facilities for recycled water and greywater. The secondary physical effects of such infrastructure are discussed throughout this draft EIR.

Impact PSU-4: Implementation of the CAP could decrease wastewater generation and thus would not exceed wastewater treatment requirements, but would require the expansion or modification of existing wastewater facilities (less than significant).

As discussed above, the CAP does not directly involve the construction of any structures that would require wastewater services. Any structures that could be constructed consistent with the CAP would be subject to further CEQA analysis of project-specific impacts on wastewater generation and facilities.

There are several CAP measures that promote, and could include, the construction of new facilities aimed at increasing the efficiency of the existing wastewater infrastructures and increasing the use of renewable energy in wastewater systems. Wastewater efficiency improvements would require modifications of existing wastewater treatment facilities. CAP measures that promote renewable energy in wastewater systems may result in the expansion of renewable energy installations at wastewater treatment facilities. CAP measures that promote capture and use of methane from wastewater treatment plants would require modification of existing wastewater treatment plants to capture and burn methane for energy production. These improvements are expected to be minor and would be constructed within the existing water facilities and are not likely to cause significant environmental effects.

The CAP would also promote the reduction of GHG emissions associated with water use and wastewater generation that would reduce the wastewater generated from water consumption within existing and new developments. Thus, implementation of the CAP would reduce wastewater generation in the County through efficiency measures, and impacts would be beneficial.

The secondary physical effects of wastewater treatment efficiency upgrades and recycled water treatment facilities are discussed throughout this draft EIR.

Impact PSU-5: Implementation of the CAP could require the construction of new storm water drainage facilities or expansion of existing facilities (less than significant).

There are several CAP measures that promote and could include the construction of new facilities, most of which would be constructed within or on existing buildings (e.g., rooftops, wastewater treatment plants, dairies), and would not require the construction of new storm water drainages to serve these facilities. The CAP also promotes mixed-use and transit-oriented development in city centers; however, such development is already called for in local land use plans and would not be a new impact of the CAP. These new structures could require the construction of new storm water drainage facilities or the expansion of existing facilities if there is no existing infrastructure or if the capacity of the storm water drainage is exceeded.

Any structures that could be constructed consistent with the CAP would be subject to further CEQA analysis of project-specific impacts on the storm water system. New solid waste or other facilities promoted by the CAP may require new or expanded storm water drainage facilities depending on the siting of the building and new structures. All future development projects would be subject to applicable federal, state, and local regulations, requirements, and development impact fees for storm water drainage facilities. With compliance with local regulations and requirements, impacts on storm water drainage facilities would be less than significant.

Impact PSU-6: Implementation of the CAP would reduce solid waste generation and would not conflict with federal, state, and local statutes and regulations related to solid waste diversion (beneficial impact).

One of the intentions of the CAP is to reduce GHG emissions associated with solid waste generation, and the CAP includes measures that would increase solid waste diversion, reducing the amount of solid waste that would be in landfills. Implementation of the CAP would reduce solid waste generation in the County, and impacts would be beneficial. Any new facilities needed to support increased waste diversion (such as transfer facilities or composting facilities) would be required to comply with existing regulations for the handling of solid waste, including the applicable permitting requirements of CalRecycle.

Impact PSU-7: Implementation of the CAP would not result in land use locations and patterns causing wasteful, inefficient, and unnecessary consumption of energy (beneficial impact).

As discussed above, the CAP does not directly involve the construction of any structures that would directly result in land use locations and patterns that cause wasteful, inefficient, and unnecessary consumption of energy. Any structures that could be constructed consistent with the CAP would be subject to further CEQA analysis of project-specific impacts on energy.

Further, the intention of the CAP is to reduce GHG emissions within the County through targeted reductions in sectors of building energy, transportation and land use, solid waste generation, water conveyance and wastewater treatment, agriculture, and new development.

The CAP includes numerous measures to improve the efficiency of energy use, including energy efficient improvements for new and existing buildings and water and wastewater infrastructure. The CAP promotes expanded transit and alternatives to passenger vehicle use, which would help reduce the consumption of transportation fuels.

The CAP supports existing land use plans that promote mixed-use development, transit accessibility, and transit-oriented development in city centers where development already exists and where the provisions of public services, utility systems, and transportation would be most efficient.

Thus, implementation of the CAP would promote the efficient use of land use locations and patterns, and impacts would be beneficial.

Impact PSU-8: Implementation of the CAP would not result in the construction of new or retrofitted buildings that would have excessive energy requirements for daily operation (beneficial impact).

As discussed above, the CAP does not directly involve the construction of any structures that would directly result in the construction of new or retrofitted buildings that would have excessive energy requirements for daily operation. Any structures that could be constructed consistent with the CAP would be subject to further CEQA analysis of project-specific impacts on energy.

The CAP promotes efficient use of energy in new and existing buildings through retrofit requirements and programs. Also, there are several CAP measures that promote and could include the construction of new facilities aimed at increasing renewable energy use, increasing solid waste diversion, increasing capture/use of methane from landfills, and reducing emission from livestock operations. Most of these new facilities would be constructed within or on existing buildings, and these minor improvements would not have excessive energy requirements for daily operations. The CAP also promotes infill development in city centers, which would result in more compact growth that would foster energy efficiency.

Thus, implementation of the CAP would promote energy efficiency in existing and new buildings, and impacts would be beneficial.

Impact PSU-9: Implementation of the CAP would not result in increased energy demand and the need for additional energy resources overall (beneficial impact).

As discussed above, the CAP does not directly involve the construction of any structures that would directly result in increased energy demand and the need for additional energy resources. Any structures that could be constructed consistent with the CAP would be subject to further CEQA analysis of project-specific impacts on energy.

Specifically, to reduce GHG emissions from energy use, the CAP includes measures that would increase the energy efficiency of buildings and water and wastewater infrastructure, and reduce transportation and equipment fossil fuel use through increased vehicle efficiency, alternative fuel use (such as electricity), and vehicle-miles-traveled reduction strategies. The CAP also promotes increased capture and use of methane from landfills and dairies to offset fossil fuel use to generate electricity. The overall effect of the CAP is to decrease demand for energy derived from fossil fuels, which would otherwise result in GHG emissions.

The CAP would result in both a decrease in energy demands overall (through improvements in efficiency in buildings, vehicles, and infrastructure) and an increase in renewable energy production (through promotion of solar for new and existing development, use of renewable energy for water and wastewater treatment plants, and increase of methane capture and use for energy generation). Overall energy demand is expected to go down relative to what would occur without the CAP-supported investments in energy efficiency.

Thus, implementation of the CAP would not result in increased energy demand and the need for additional energy resources, and impacts would be beneficial.

3.13.3.4 Cumulative Impacts

Impact C-PSU-1: Implementation of the CAP, in combination with other foreseeable development in the surrounding area, could have a significant cumulative impact on public services, utilities, and energy (less than considerable contribution and usually beneficial).

The geographic context for the evaluation of cumulative impacts on public services, utilities and service systems, and energy is the service area of the service in question. The evaluation addresses the effects of the CAP in combination with other development in Sonoma County.

Implementation of the CAP would not result in a population increase greater than projected for the buildout of local land use plans because the CAP would not change local land use plans, and the additional facilities supported by the CAP would result in only minor employment increases and associated population growth. Rather, the CAP supports existing land use plans and policies that seek to concentrate the expected population growth in city centers and along transit corridors. Densifying the population in city centers could result in a localized incremental increase demand for fire protection, police protection, schools, and other public facilities within the area; however, this would be the result of existing land use plans and policies and not an incremental change brought about by the CAP.

In terms of utilities and service systems and energy, the intention of the CAP is to reduce GHG emissions within the County in part through reducing energy and utility demands. The CAP seeks to reduce electricity and natural gas demand through improving building energy efficiency. The CAP includes measures that would reduce water consumption and the wastewater generated from this consumption as well as energy used within existing and new developments. In addition, the CAP also includes measure to increase diversion of solid waste from landfills. Overall, implementation of the CAP would promote water conservation, energy efficiency, and the diversion of solid waste. Thus, although cumulative impacts on utilities and service systems and energy may be significant due to increasing consumption of these resources from cumulative development in the County, the CAP's contribution would be beneficial as it would reduce consumption of water and energy and generation of wastewater and solid waste.