

4.14 | PUBLIC UTILITIES

INTRODUCTION

The utilities section of this EIR will analyze potential environmental impacts from natural gas, electricity, telecommunications, and solid waste infrastructure. Determination of significant environmental effects will be analyzed in the thresholds as defined by CEQA checklist provided in CEQA Guidelines Appendix G.

EXISTING CONDITIONS

NATURAL GAS, ELECTRICITY, + TELECOMMUNICATIONS ENVIRONMENTAL BASELINE SETTING

The Southern California Gas Company (SCGC) provides natural gas to the Planning Area. SCGC is the nation's largest natural gas distribution utility, serving approximately 20.9 million consumers through 5.8 million gas meters in more than 500 communities. Headquartered in Los Angeles, SCGC is a subsidiary of Sempra Energy, a Fortune 500 company based in San Diego.

SCGC's service area encompasses 20,000 square miles of diverse terrain throughout most of Central and Southern California, from Visalia to the Mexican border. SCGC fuels approximately one-half of all the energy use in its service area (non-transportation-related). In total, SCGC delivers nearly one trillion cubic feet of gas annually, or about five percent of all the natural gas delivered in the United States.¹ SCGC buys natural gas on the open market for residential, small commercial, and industrial customers (referred to as "core customers"). This natural gas originates in one of several major gas producing areas in North America, including New Mexico, Texas, and Wyoming.

While SCGC brings natural gas supplies into its system at a fairly steady rate, the amount of gas used by customers fluctuates greatly, depending on the season, day, and even hour. To balance natural gas supplies with customer demands, some of the gas flowing through the SCGC's extensive 48,000-mile pipeline network is diverted into four underground natural gas storage fields.

SCGC's total storage capacity is approximately 122.1 billion cubic feet (Bcf) of gas. That is enough to meet the needs of its core residential and business customers for about 20 weeks during the non-winter months, or 13 weeks during the winter, before being depleted. These storage fields have been in operation since 1942 and are made of porous rock formations located up to two miles beneath the earth's surface, which once were natural reservoirs of oil and gas and are now used to store gas. These subterranean rock formations, which are natural underground traps, can be repeatedly refilled and drawn from to meet the changing needs of customers. For example, when suppliers cannot deliver enough natural gas to meet heavy demand (usually during the winter) SCGC withdraws gas from its underground storage fields to supplement supplies. When gas usage drops (typically during the summer) SCGC injects the surplus gas into underground reservoirs. Of SCGC's total storage capacity

of approximately 122.1 Bcf, 70 Bcf is used by SCGC core residential, small industrial, and commercial customers, and about 5 Bcf are used for system balancing. The remaining capacity is available for use by SCGC large industrial customers to help balance and meet their gas supply requirements.ⁱⁱ

NATURAL GAS INFRASTRUCTURE AND USAGE

Natural gas usage for 2010 for commercial, public and residential was 3,823,723 therms, and is expected to increase to 17,009,166 therms by 2035. Existing natural gas supply comes from regional natural gas lines that traverse the Planning Area, including two 30-inch lines and a 36-inch line located along the powerline corridor within the Mecca Hills. The distribution network in the City of Coachella connects to these regional lines through an 8-inch, 6-inch, and 4-inch high-pressure lines.

The City also contains two major petroleum transmission lines adjacent to the Southern Pacific Railroad tracks. These high-pressure lines are 20-inches and 12-inches in diameter and traverse from Texas to San Pedro, California.

The demand for natural gas is dependent upon the growth rate, and average temperature within a geographic area. Natural gas distribution systems are typically flexible and can be modified to meet future growth and demand. The availability of natural gas is based upon present conditions of gas supply and regulatory policies. As a public utility company, SCGC is under the jurisdiction of the California Public Utilities Commission, but can also be affected by actions of federal regulatory agencies. The conditions and availability of gas supply and services are, therefore, dependent on the regulatory actions of these agencies.

ELECTRICITY

The Imperial Irrigation District (IID) provides electricity to the Planning Area, where 2010 usage demanded 220, 782,340 kWh. 2035 electricity usage of the Planning Area is expected to increase to 1,099,608,548 kWh.

The community's sole electricity supplier, IID Energy, has become the sixth largest electrical utility in California and supplies energy to a dynamic community of over 145,000 customers. The IID is a community-owned utility organization that provides customers both electricity and water irrigation. However, the City of Coachella residents do not receive irrigation water from IID. Public ownership of electric utilities is a service, and the purpose of that service is to provide electricity, at the least cost for the customers of that utility.

Public utilities are non-profit organizations whose facilities are owned by and operated for their customers. They are governed by locally elected Boards of Directors.

In 1936, IID entered the electric power business in conjunction with the construction of the All-American Canal. IID utilizes low cost hydroelectric energy from five falling water hydroelectric drops along the Coachella Canal. Additionally, the IID purchases power from the Western Area Power Administration and the El Paseo Electric Company. The Imperial Dam, Gila Headworks, All-American Canal Works and the All-American Canal are operated and maintained by the IID with costs shared by the Bureau of Reclamation, Coachella Valley Water District, Yuma County Water Users, and other water users. According to the terms of a 1934 agreement between Imperial Irrigation District and City of Coachella, IID was given first rights to water delivered through the All-American Canal and a 99-year lease on any power rights Coachella had on the canal. Non-fossil-fuel-based electricity, such as hydroelectricity, is likely to become an increasingly valuable in the time horizon of the General Plan. Because the IID

lease on power rights to the canal will expire within this time, the General Plan process may be a good time for the City to develop future plans for utilization of this resource.

The IID's electrical division "is widely regarded as an economic catalyst in the Imperial and Coachella Valley." iii IID Energy controls more than 1,100 megawatts of energy derived from a diverse resource portfolio that includes its own generation, and long- and short-term power purchases. As of February 2012, IID maintained 1,300 employees. For low-income residents, IID offers Income Qualified Programs to help customers meet their energy needs at a reduced cost.

The IID joined with the Southern California Public Power Authority in purchasing interests in the Palo Verde Nuclear Generating Plant and San Juan Generating Station Unit 3. IID participates, through the Western System Power Pool, in sales and purchases of both firm and non-firm energy. IID has also purchased an interest in the Palo Verde/San Diego 500-kilowatt (kW) transmission line.

ELECTRICITY INFRASTRUCTURE

The IID's operating headquarters is located at 333 East Barioni Boulevard in Imperial, California. The IID has a distribution system that contains 112 substations, 3,402 miles of overhead distribution lines, 675 miles of underground distribution lines, and 125,616 active meters. Electricity is delivered to the City of Coachella via a 230-kilovolt (KV) transmission line located in Indio Hills, which is north of the City of Coachella. Electricity is transferred from this transmission line to one of the four substations in the Planning Area maintained by IID. These four substations which include the Coachella Valley Substation, Coachella City Substation, 52nd Avenue Substation, and Thermal Substation. These four facilities are brief discussed below.

- Coachella Valley Substation - This facility is located at 52nd Avenue and Pierce Street. The facility is one of the major injection points of power into the Coachella Valley's 92 KV sub-transmission network. Two transformers, each rated 150 million volt amperes (MVA), convert the voltage from 230 KV to 92 KV lines. A third transformer, rated 125 MVA, converts voltage from 161 KV to 92 KV.
- Coachella City Substation - This facility is located on Highway 111 north of 52nd Avenue and is a major sub-transmission station. Power is received on two 92 KV lines from the Coachella Valley Substation and rerouted over six other 92 KV lines. There are also four gas turbine generators located at this site. Each generator is rated at 20 megawatts (MW).
- 52nd Avenue Substation - This facility is located on 52nd Avenue, east of Tyler Street. The facility is a distribution substation with one 28 MVA transformer which converts the voltage from 92 KV to 12.47 KV.
- Thermal Substation - This facility is located on Highway 111 at 50th Avenue. The facility is a distribution substation with one 12.5 MVA transformer, which converts the voltage from 92 KV to 12.47 KV, and electrical distribution lines that transmit power between from 92 KV and 230 KV. IID is presently engaged in a project to extend a 230 KV transmission line to the 42nd Avenue substation, located on 42nd Avenue, west of Madison Street. The purpose of the project is to prevent potential overloads at the Coachella Valley Substation. Southern California Edison has a major transmission corridor in Indio Hills, which contains three regional transmission lines. One 230 KV line is owned by IID and Southern California Edison owns a 220 KV line and a 500 KV line operating along this corridor.

Electrical distribution lines transmit power from the substations to individual users. As noted above, these transmission lines transmit power from 92 KV to 230 KV. The Coachella Valley Substation functions as a key link between IID and Southern California Edison, and has allowed IID to strengthen

its access to the rest of the power grid. In the event that the power flow from the Imperial Valley is disrupted, IID could use this route to service its customers in the Coachella Valley.^{iv}

TELECOMMUNICATIONS

The Planning Area businesses have a multitude of telecommunications choices, including high-speed broadband, fiber-optics, digital phone service and wireless, from nationally known carriers. The primary carriers for Coachella Valley are Verizon and Time Warner. Coachella Valley Economic Partnership (CVEP) is the backbone hub connecting the universities in the Coachella Valley with statewide educational systems, provides educational Internet service.^v

Telecommunications services are provided on a demand basis. Verizon is the Incumbent Local Exchange Provider (default local telephone company) and Time Warner Cable is the sole cable provider for Coachella Valley. The extent of Verizon's coverage area is detailed in their service map.^{vi} Verizon is not currently at capacity and has room for expansion in the project area. Verizon continually evaluates projected growth to ensure that their network can accommodate future demands for communications services.

Additionally, there are no expansion fees that a developer would have to pay in order to contract service to a proposed project site. Existing telephone facilities provide service to all developed areas of Coachella through a combination of underground and overhead lines.

SOLID WASTE ENVIRONMENTAL SETTING

The City of Coachella currently contracts with Western Waste Industries (WWI) to provide solid waste collection and disposal management services. Municipal solid waste generated in the City of Coachella is taken to the Coachella Valley Transfer Station, located on Landfill Road east of Dillon Road and north of Interstate 10. A Joint Power Authority between the City of Coachella and the City of Indio acts as the permitted operator of the transfer station, while the County of Riverside is the permitted owner of the facility. Burrtec Waste Industries is the practical owner and operator of the site. The Coachella Valley Transfer Station currently receives an average of 328 tons of waste per day and has a capacity of 1,100 tons of waste per day.^{vii}

The City has a curbside recycling program for single-family residences that serves to reduce waste sent to landfills. In 2006, the curbside recycling efforts translated into an approximate diversion rate of 44 percent citywide.^{viii} Waste is sorted to remove recyclables and hazardous waste. Refuse is redirected to either the Lamb Canyon Landfill in Beaumont or the Badlands Landfill in Moreno Valley, and recyclables are redirected to their respective markets.

In addition, the Riverside County Integrated Waste Management Plan has instituted a means of managing long-term solid waste issues. The plan includes source reduction, recycling and composting programs, household hazardous waste management programs, and public education awareness programs as a means to reduce, reuse, and recycle solid wastes.

LANDFILL CAPACITY

Riverside County has many landfills. As stated earlier, the two which service the Planning Area include the Lamb Canyon Landfill and Badlands Landfill. See Table 4.14-1 for details on capacity of these landfills. The Lamb Canyon Landfill is currently permitted to receive 3,000 tons of trash per day. The total permitted capacity of the landfill is 34,292,000 cubic yards. As of July 2005, the remaining capacity of this landfill was 20,908,171 cubic yards.^{ix}

Table 4.14-1: Existing County Landfills (2012)

Landfill Sites	Estimated Closure Year	Permitted Capacity (Tons/Day)	Permitted Capacity (Yards ³)	Remaining Capacity As of February 1, 2012 (Yards ³)
Badlands	2024	4,000	33,560,993	14,730,025
Blythe	2047	400	6,034,148	4,159,388
El Sobrante	2045	16,054	184,930,000	145,530,000
Lamb Canyon	2021	3,000	34,292,000	18,955,000
Oasis (open 2 days/year)	2186	400	494,822	149,597
Total			92,874,963	52,547,010

SOURCE: www.calrecycle.ca.gov/SWFacilities/Directory accessed February 2, 2012.

The Badlands Landfill is currently permitted to receive 4,000 tons of trash per day. The total permitted capacity of the landfill is 33,560,993 cubic yards. As of February 2012, the remaining capacity of this landfill was 14,730,025 cubic yards.^x

Based on permitted daily disposal capacity, the 2012 estimated closure dates for the Lamb Canyon Landfill and the Badlands Landfill are 2021 and 2024, respectively.^{xi} Table 4.14-2 quantifies the generation of solid waste for future solid waste disposal.

WASTE STREAM COMPOSITION

The bulk of the waste stream for the Planning Area is comprised of household refuse and green waste. The City of Coachella does not contain industries that produce or handle toxic or hazardous materials as a product or by-product of manufacturing processing, except for certain businesses

Table 4.14-2: Generation Rate for Future Solid Waste

Land Use	Solid Waste Generation Rate
Residential	0.41 tons/unit/year
Commercial	0.0024 tons/sf/year
Industrial	0.0108 tons/sf/year
Public/Quasi-Public	0.0108 tons/sf/year

SOURCE: Riverside County Final General Plan EIR Volume 1, based on the Integrated Waste Management Board, at www.ciwmb.ca.gov.

such as dry cleaners, automotive service and repair shops, agricultural operations, and business and households which use commercially available cleaning products that utilize industrial chemicals and light hazardous materials on a regular basis.

Household Hazardous Waste

Hazardous waste materials are prohibited from being sent to any of the County's landfills or facilities. All of the active landfills currently located in Riverside County are classified as Class III landfills, as per Title 27 of the California Code of Regulations (CCR), which accept only nonhazardous, municipal solid wastes.^{xii} In order to prevent inadvertent disposal of hazardous waste at these facilities, a load inspection regimen is in place at each landfill. As an added service, the Riverside County Department of Environmental Health operates a mobile pick up collection program aimed at minimizing hazardous waste materials from entering the landfill system. This service is provided through contract vendors licensed in collection, recycling and disposal of hazardous waste materials. Each hazardous waste generator is responsible for contracting for services specific to their particular circumstances and service requirements. These waste streams are either transported out of the County or treated and recycled on site.

Construction-Related Waste

Construction-related waste is largely readable as recyclable and can be easily diverted from construction site to appropriate market facilities. This diversion is necessary in order to ensure that solid waste disposal capacities are not jeopardized.

REGULATORY SETTING

California Integrated Waste Management Act

In response to capacity and siting problems for landfills, the need for source reduction, recycling, and composting became apparent. In response to this solid waste disposal issue, three pieces of legislation regarding solid waste have been passed at the state level. AB 939 emphasized conservation of natural resources through reduction, recycling, and reuse of solid waste. AB 939 requires that all cities and counties divert 25 percent of solid waste stream from landfills by 1995 and 50 percent by 2000. It also requires that all cities conduct a Solid Waste Generation Study and prepare a SRRE. In accordance with AB 939, local agencies must submit an annual report to the California Integrated Waste Management Board (CIWMB) summarizing its progress in diverting solid waste disposal.

The term “integrated waste management” refers to the use of a variety of waste management practices to safely and effectively handle the municipal solid waste stream with the least adverse impact on human health and the environment. AB 939 established waste management prioritization as follows:

- Source Reduction
- Recycling
- Composting
- Energy Recovery
- Landfilling
- Household Hazardous Waste Management

SB 1374, passed in 2002, requires that the annual report submitted to CIWMB also include a summary of the progress made in diversion of construction and demolition waste materials. In addition, SB 1374 requires CIWMB to adopt a model ordinance suitable for adoption by a local agency to require 50 to 75 percent diversion of construction and demolition waste materials to landfills. Local agencies are required to adopt construction and demolition diversion ordinances with diversion rates in accordance with SB 1374. In August 2005, an extension to AB 939 compliance was granted to the City.

California Integrated Waste Management Board Model Ordinance

Subsequent to the enactment of AB 939, additional legislation was passed to assist local jurisdictions in accomplishing the goals of AB 939. The California Solid Waste Reuse and Recycling Access Act of 1991 (Sections 42900-42911 of the Public Resources Code) directs the California Integrated Waste Management Board (CIWMB) to draft a “model ordinance” relating to adequate areas for collecting and loading recyclable materials in development projects. If by September 1, 1994, a local agency did not adopt its own ordinance based on the CIWMB model, the CIWMB model took effect for that local agency. The County of Riverside did not adopt its own ordinance, and the CIWMB model ordinance has been in effect in the County since September 1, 1994. Although the City of Coachella has also not adopted its own ordinance, it has been complying with the State’s provisions.

The model ordinance is used by the County as the basis for imposing recycling conditions on new development projects, and on existing projects that add 30 percent or more to their existing floor area. The model ordinance requires that any new development project for which an application is submitted on or after September 1, 1994 include “adequate, accessible, and convenient areas for collecting and loading recyclable materials.” For subdivisions of single-family detached homes, recycling areas are required to serve only the needs of the home within that subdivision. The model ordinance also requires recycling areas to be:

- compatible with nearby structures;
- secured and protected against adverse environmental conditions;
- clearly marked, and adequate in capacity, number and distribution;
- in conformance with local building code requirements for garbage collection access and clearance;
- designed, placed and maintained to protect adjacent developments and transportation corridors from adverse impacts, such as noise, odors, vectors, or glare;
- in compliance with federal, state, or local laws relating to fire, building, access, transportation, circulation, or safety; and
- convenient for persons who deposit, collect, and load the materials.

Riverside County Integrated Waste Management Plan

The Riverside County Integrated Waste Management Plan (CIWMP) is the County's latest effort in developing plans for the long-term management of solid waste management. The Riverside County Board of Supervisors approved the CIWMP in 1997. Prepared by the Riverside County Waste Resources Management District, this plan includes such approaches as source reduction, recycling and composting programs, household hazardous waste management programs, and public education awareness programs.

NATURAL GAS, ELECTRICITY, + TELECOMMUNICATIONS ENVIRONMENTAL IMPACTS AND MITIGATION

SIGNIFICANCE CRITERIA

In accordance with Appendix G of the CEQA Guidelines, an environmental impact on the provision public utilities is determined based on the following:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered facilities, need for new or physically altered facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service or to meet performance objectives for Natural Gas, Electricity or Telecommunications.
- Be served by a landfill with insufficient permitted capacity to accommodate the solid waste disposal needs; or
- Comply with federal, state, and local statutes and regulations related to solid waste.

NATURAL GAS, ELECTRICITY, AND TELECOMMUNICATION INFRASTRUCTURE

Impact 4.14-1: Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered facilities, need for new or physically altered facilities, the construction of which could cause significant environmental impacts, in order to maintain

acceptable service or to meet performance objectives for Natural Gas, Electricity, or Telecommunication?

Significance: Less than significant.

Natural gas, electricity, and telecommunication systems allow for various residential, business, and civic, activities and make the Planning Area much more inhabitable due to benefits including; heating and cooling of buildings, providing water supply, communication to places within and outside the Planning Area, and other amenities dependent upon these services. Level of service capacities can determine the growth of an area, and determine the quality or reliability of service an individual or business will receive. In the event of reaching or exceeding capacity, a service area can experience decreased level of service, limited population growth, or increase of infrastructure to meet the demands and provide the equal level of services to all users. In the case of increasing infrastructure to meet capacity, a number of potential environmental impacts could occur. These impacts could include; disruption to wildlife migration patterns and birds flight path, aesthetic views of visual resources, potential halted level of service from disasters, and leaks or damages in infrastructure from earthquakes or other natural disasters.

Table 4.14-3 Electricity and Natural Gas Use Projections^{xiii}

	Activity Data			
	2005	2010	2020	2035
Electricity (kWh)	212,268,624	220,782,340	629,145,435	1,099,608,548
Residential	79,444,150	99,130,740	205,513,305	348,918,091
Commercial / Industrial / Public	128,047,574	116,786,121	417,680,792	743,076,981
Agricultural	3,873,260	3,525,930	2,921,916	2,421,374
Outdoor/Street Lighting	903,640	1,339,549	3,029,422	5,192,102
Natural Gas (Therms)	3,151,916	3,823,723	9,767,723	17,009,166
Residential	1,577,036	2,135,733	3,932,963	6,628,808
Single Family	1,458,222	2,035,943	3,399,231	5,444,162
Multifamily	118,814	99,790	533,732	1,184,645
Commercial & Industrial	1,574,880	1,631,435	5,834,761	10,380,358

The current natural gas supply for the Planning Area comes from the South Coast Gas Company and travels through 8-inch, 6-inch, and 4-inch gas lines within the Planning Area. The Planning Area also contains two major petroleum transmission lines adjacent to the Southern Pacific Railroad tracks. These high-pressure lines are 20-inches and 12-inches in diameter and traverse from Texas to San Pedro, California. The supply of natural gas is heavily dependent on the demand and can vary from season to season. There are storage units operated by SCGC that can serve the Planning Area when demand exceeds average. It is also important to note that natural gas supply can adapt with demand, and can meet growing demand for natural gas by easily increasing supply to the Planning Area. The

infrastructure necessary to move natural gas is built into the Planning Area to service homes, businesses, or any other use requiring natural gas on property. The increase of natural gas lines also increases exposure or risk to accidents, such as earthquakes, creating leaks or spills that would cause permanent negative environmental impacts. The construction of such infrastructure could also divide natural habitats depending on location of new pipelines, stations, or pumps.

The Planning Area currently operates four substations that convert electricity from Imperial Irrigation District (IID), to 92 KiloVolts (KV), to electricity users of the Planning Area. Current plans are proposed to extend on substation (Thermal Substation) to the 42nd street substation to reduce potential overloading the Coachella Valley Substation. As electricity demand increasing under the growth of the CGPU, there would be a need to increase capacity of electricity infrastructure in expanding or adding new substations to the Planning Area, also with the lines necessary to reach individual properties with power lines. Based on Notice of Preparation comments from the CGPU, released on March 14, 2013, The IID has concluded that the population projects under the CGPU would ‘necessitate the construction of multiple electrical substations and possible an electrical switching station within the City of Coachella’ (Appendix 11.2). Though the exact number of substations cannot be determined, the IID has addressed that the new infrastructure would be at the cost of the developer, and would work to meet demands through development fees and right-of-ways (Appendix 11.2).

The potential impacts of additional infrastructure expose the environment to risks associated with electricity lines that include; disruption to migratory bird patterns, disturbance of aesthetic views, or increase risk of accidents from weather events. Some of these issues can be mitigated by placing power lines underground, however site-by-site development has yet to be determined at this time. There are currently no plans for new infrastructure to increase capacity of electricity supply, leaving design details and site location undetermined at this time.

Telecommunications. The various modes of telecommunications come from high-speed broadband, fiber-optics, digital phone services, and wireless services. As demand for telecommunication service increases, there would be a need for additional infrastructure to provide equal level of service to all users within the Planning Area. The wireless communications company Verizon has proactively ensured level of service capacity beyond existing population, and will continue to monitor population’s projections and plan infrastructure to meet future needs. As for all other telecommunications services, no planned infrastructure is designed specifically to meet the project demands, however the CGPU plans to meet demands as development continues through 2035. Policies, outline below, propose expanding services, and working with utilities companies to maintain level of service for new populations. The infrastructure needed to supply such a service can have negative environmental impacts in the way of natural habitat disruption, aesthetics, or breaks in level of service from natural or man-made disasters. Though there is potential for these impacts to occur, there are possible planning strategies to reduce impacts from telecommunication infrastructure.

Though natural gas, electricity, and telecommunication infrastructure has potential to cause negative environmental impacts on the Planning Area, planning strategies and policies can help reduce impacts and prevent potential impacts from occurring. The following policies of the Infrastructure + Public Services Element outline mitigation measures to reduce impacts from natural gas, electricity, and telecommunications infrastructure.

Infrastructure + Public Services

- 6.1 **Private utilities.** Work with private and quasi-public utilities to ensure the adequate provision of energy and telecommunications service that meets the needs of the community.
- 6.2 **Range of access.** Work with service providers to ensure access to and availability of a wide range of state-of-the-art telecommunication systems and services for households, businesses, institutions and public agencies throughout the city.
- 6.3 **Expanding service.** Work with utility companies to retrofit areas that are not served by current telecommunication technologies and shall provide strategic long-range planning of telecommunication facilities for newly developing areas, as feasible.
- 6.4 **Innovation.** Encourage local industries, higher educational institutions and other entities to support innovation in the design and implementation of state-of-the-art telecommunication technologies and facilities.
- 6.5 **Co-location of facilities.** Encourage compatible co-location of telecommunication facilities and work with utility companies to provide opportunities for siting telecommunications facilities on City-owned property and public right-of-ways.
- 6.6 **Smart communities.** Establish requirements for the installation of state-of-the-art internal telecommunications technologies in new large-scale planned communities, office and commercial developments (e.g., wiring of all new housing and businesses).
- 6.7 **High-voltage lines.** Coordinate with the electrical utilities on the location of future high voltage corridors and the effects produced by high voltage electrical facilities in power corridors and electrical substations.
- 6.8 **Utility line undergrounding.** Require undergrounding of all new publicly owned utility lines, encourage undergrounding of all privately owned utility lines in new developments and work with electricity and telecommunications providers to underground existing overhead lines.
- 6.9 **Utility siting standards.** Coordinate with the appropriate utility purveyors to develop local standards for the location and design of natural gas, electrical and telecommunications facilities where such improvements are visible along street frontages.
- 6.10 **Transmission corridors.** Encourage the shared use of major transmission corridors and other appropriate measures as a means of preserving the aesthetic resources of the City and to lessen the visual impact of such development. The City shall work with the appropriate agencies in developing these corridors for recreational use.

Development under the CGPU would result in incremental development with concurrent infrastructure that includes roads, water lines, and sewer lines. Based on the growth projections of the Planning Area, capacity for natural gas, electricity, and telecommunications infrastructure would need to increase and meet projected demands. New electricity, natural gas, and telecommunications infrastructure would be able to expand service areas, as the base supply of utilities exists through regional lines or pipes. At time of planning, prior to construction, these infrastructure projects would need specific environmental analysis in accordance with CEQA guidelines. Additionally, the potential site specific impacts of infrastructure development within the Planning Area are explored by topic throughout this document as infrastructure would be an intrinsic component of all future development and the wide-scale development of the City. In the build out of the CGPU, natural gas, electricity, and telecommunication

lines would have minor impacts to the Planning Area in relation to the entire build-out strategy. Based on the CGPU policies proposing maintenance of utility standards, and development infrastructure projects for implementation, the Project would have less than significant impact.

Mitigation Measures

No mitigation measures are necessary.

ENERGY EFFICIENCY

Impact 4.14-2: Would the project result in wasteful energy consumption?

Significance: Less than significant.

As outlined by CEQA Guidelines Appendix F, projects are to consider energy efficiency and discuss potential energy impacts with a particular emphasis on avoiding or reducing inefficient, wasteful and unnecessary consumption of energy^{xiv}. Appendix F states that the goal of conserving energy implies the wise and efficient use of energy, which can be achieved by:

- Decrease overall per capita energy consumption,
- Decrease reliance on natural gas and oil, and
- Increase reliance on renewable energy sources.

The CGPU would increase the need for energy consumption, as the Planning Area population triples from 40,000 to 135,000 residents. To address energy efficiency, the Project proposes multiple policies and planning strategies that are in-line with CEQA's analysis requirements..

Along with the CGPU the proposed project will include the City of Coachella's Climate Action Plan (CAP), which provides energy and GHG inventories and reduction strategies for the Planning Area and sets a GHG reduction target for the City. Along with the CAP, multiple policies in the CGPU address energy efficiency.

Land Use Element

- 5.10 **Street layout.** Design streets and lot layouts to provide a majority of lots within 20 degrees of a north-south orientation for increased energy conservation.

Sustainability + Natural Environment

- 1.6 **Climate-appropriate building types.** Seek out and promote alternative building types that are more sensitive to the arid environment found in the Coachella Valley. Courtyard housing and commercial buildings can be designed to provide microclimates that are usable year round, reducing the need for mechanically cooled spaces and reducing energy consumption.
- 1.7 **GHG reduction incentives.** Periodically review fee structures for potential opportunities to provide financial and administrative incentives to support installation of renewable energy generators, energy efficiency measures, land use patterns, and other measures that reduce greenhouse gas emissions

Goal 2. Energy. An energy efficient community that relies primarily on renewable and non-polluting energy sources.

- 2.1 **Community development-subdivisions.** When reviewing applications for new subdivisions, require all residences be oriented along an east-west access, minimizing western sun exposure, to maximize energy efficiency.
- 2.2 **Passive solar design.** Require new buildings to incorporate energy efficient building and site design strategies for the desert environment that include appropriate solar orientation, thermal mass, use of natural daylight and ventilation, and shading.
- 2.3 **Alternative energy.** Promote the incorporation of alternative energy generation (e.g., solar, wind, biomass) in public and private development.
- 2.4 **Community Choice Aggregation.** Work with nearby local and regional agencies to develop a community choice aggregation system in order to secure alternative energy supply contracts for the community.
- 2.5 **Construction standards.** Consider and evaluate new construction practices and standards that increase building energy efficiency.
- 2.6 **Energy performance targets - new construction.** Require new construction to exceed Title 24 energy efficiency standards by 15 percent and incorporate solar photovoltaics.
- 2.7 **Energy performance targets - existing buildings.** When existing buildings undergo major retrofits, require the buildings to exceed Title 24 energy efficiency standards by 15 percent and encourage solar photovoltaics.
- 2.8 **Renewable energy-open space areas.** Allow the installation of renewable energy systems in areas zoned for open space.
- 2.9 **Energy-efficient street lighting.** Implement a program to install the latest energy efficient technologies for street and parking lot lights to meet City and state standards.
- 2.10 **New industries.** Actively promote the City as a place for renewable energy generation, and a place for energy conservation businesses to locate.
- 2.11 **Publicly funded buildings.** Require energy conservation as the primary strategy to reduce energy demand in new and renovation projects using public funds.
- 2.12 **Solar access.** Prohibit new development and renovations that impair adjacent buildings solar access, unless it can be demonstrated that the shading benefits substantially offset the impacts of solar energy generation potential.
- 2.13 **Use of passive open space.** Allow renewable energy projects in areas zoned for open space, where consistent with other uses and values.
- 2.14 **Public buildings.** Require that any new building constructed in whole or in part with City funds incorporate passive solar design features, such as daylighting and passive solar heating, where feasible.

- 11.2 **Land use patterns.** Promote compact, mixed-use, energy efficient and transitoriented development to reduce air pollutants associated energy and vehicular use.
- 11.14 **Alternative energy sources.** Promote the development of energy sources, such as solar, wind, and geothermal, that do not emit pollution which has an adverse impact on local air quality.

The CGPU proposes many policies that require energy efficient buildings, site plans, and transportation patterns. From proposing new development use alternative energy sources, increasing efficiency in municipal electricity uses and incorporating new energy sources in open space. The policies also require the listed policies, in addition to the CAP, would steer Coachella towards becoming more energy efficient, and reduce dependence on non-renewable energy sources.

Potential energy use was studied and projected as part of the analysis for the CGPU and Climate Action Plan in order to better understand how these proposed policies would, in fact, lead to increased energy efficiency as the City grows. If the Planning Area would continue to develop under the current general plan, the City is expected to use 1,094,416,446 kWh of electricity per year by 2035. Similarly, the City is expected to use 17,009,166 therms of natural gas. The Climate Action Plan found that development occurring under the CGPU policies and the Climate Action Plan will reduce electricity use by 174,028,014 kWh in 2035, representing a per capita decrease of 1,289 kWh per year. Similarly, the CGPU policies and the Climate Action Plan will reduce natural gas use by 1,921,802 therms in 2035, representing a per capita decrease of 14 therms per year. This represents a per capita energy cost savings of \$112.55 dollars per year under today's electricity and natural gas rates. While total energy use will go up, the substantial per capita reductions indicate that the City will realize increased energy efficiency avoiding wasteful use of energy. Impacts would be less than significant.

Mitigation measures

No mitigation measures necessary.

LANDFILLS

Impact 4.14-3: Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Significance: Less than significant.

Solid waste capacity of landfills servicing the Planning Area are directly affected by waste outputs of local jurisdictions. The fixed capacity of landfills can be viewed as having finite space, and once filled, is considered lost capacity. An increase in development, population, and business activities within the Planning Area could greatly contribute to filling the capacity of surrounding landfills. If landfill locations meet capacity, it will require infrastructure improvements to increase capacity or create new landfills which could have negative environmental impacts.

The CGPU will increase the Planning Areas population from approximately 40,000 currently, to 135,000 by 2035. According to SB 1016 measurements, average population disposal weight is 4.5 pounds per resident per day. The new solid waste generating under the CGPU could reach 131,800 tons per year by 2035, equating to roughly 360 tons per day. The Lamb Canyon Landfill is currently permitted to receive 3,000 tons of trash per day. The total permitted capacity of the landfill is 34,292,000 cubic yards. The Badlands Landfill is currently permitted to receive 4,000 tons of trash per day. The Coachella Valley Transfer Station, which receives and transfer waste from City of Coachella

and City of Indio currently receives an average of 328 tons of waste per day and has a capacity of 1,100 tons of waste per day.^{xv} Based on these metrics, it can be determined that there is capacity for the additional waste generated under the CGPU.

As a state regulation SB 1374, passed in 2002, requires that the annual report submitted to California Integrated Waste Management Board (CIWMB) by local jurisdictions also include a summary of the progress made in diversion of construction and demolition waste materials. In addition, SB 1374 requires CIWMB to adopt a model ordinance suitable for adoption by a local agency to require 50 to 75 percent diversion of construction and demolition waste materials to landfills. Local agencies are required to adopt construction and demolition diversion ordinances with diversion rates in accordance with SB 1374. In August 2005, an extension to AB 939 compliance was granted to the City.

The potential growth under the CGPU would contribute to a significant increase in solid waste and recyclable waste and add to existing landfills. To support current state regulatory framework the CGPU addresses solid waste management with supporting policies to help reduce solid waste in landfills. The following policies are in the Infrastructure + Public Services element of the CGPU and address solid waste management strategies.

- 5.1 **Lead by example.** Serve as a role model to businesses and institutions regarding purchasing decisions that minimize the generation of solid waste in addition to encouraging all City staff to recycle at City facilities.
- 5.2 **Reduce use of toxics.** Reduce the use of disposable, toxic, or nonrenewable products in City operations.
- 5.3 **Solid Waste Diversion and Recycling.** Meet or exceed the state's solid waste diversion requirements under AB 939.
- 5.4 **Zero waste.** Strive for zero waste to landfills by 2040 through reusing, reducing and recycling solid waste and using conversion technology if appropriate.
- 5.5 **Disposal capacity.** Continue to coordinate with Riverside County in providing longterm landfill disposal capacity.
- 5.6 **Hazardous materials.** Prohibit the disposal of hazardous materials into the municipal waste stream.
- 5.7 **Collection service.** Provide trash collection services to commercial and residential developments.
- 5.8 **Neighborhood clean-up program.** Consider creation and sponsorship of a Neighborhood Clean-Up Program.
- 5.9 **Greener waste management practices.** Support on-going green waste recycling efforts and facilitate composting opportunities for Coachella residents and businesses in order to reduce surface ozone pollution and offset greenhouse gas emissions and provide soil nutrients.

- 5.10 **Electronic waste.** Coordinate with businesses that recycle electronic waste to provide convenient collection/drop off locations for city residents.
- 5.11 **Education.** Sponsor solid waste educational programs on backyard waste composting and grasscycling (i.e., mulching grass clippings back into the lawn).
- 5.12 **Construction materials.** Encourage use of recycled materials in new construction.
- 5.13 **Construction and demolition debris.** Require recycling and reuse of construction wastes, including recycling materials generated by the demolition and remodeling of buildings, with a minimum diversion of 75% by weight.
- 5.14 **Recyclable materials.** Encourage the use of recycled paper and other recycled materials in all City operations.
- 5.15 **On-site collection and storage of recyclables.** Require new public and private buildings to be designed with on-site storage facilities for recycled materials.
- 5.16 **Public education.** Expand public education programs about waste reduction and diversion strategies.

The current regulatory system under AB 939 and SB 1374 will help slow the filling of landfills and extend the timeline for reaching capacity. Existing regulations provide additional measures continue the monitoring, maintenance, and planning strategies to reduce or divert solid waste into landfills. As development occurs under the CGPU, projects would need to meet requirements of the proposed CGPU policies. However, based on the capacity metrics growth under the CGPU would result in less solid waste generation and impacts on such landfills will be less than significant.

Mitigation Measures

No mitigation measures are necessary.

SOLID WASTE REGULATIONS

Impact 4.14.-4: Would the project comply with federal, state, and local statutes and regulations related to solid waste?

Significance: Less than significant.

Federal, state, and local statutes and regulations for solid waste have been implemented to reduce waste in landfills and aid in responsible waste management practices. A project that does not comply with the existing regulatory system would counteract any regulatory progress made to protect the population from unhealthy, unsafe, or careless waste management practices, and could cause negative environmental impacts.

Development under the CGPU will generate an increased amount of solid waste that will require compliance with regulations for solid waste management practices. The CGPU addresses compliance with existing regulations that aim to reduce solid waste going to landfills, increase recycling, offer composting programs and education programs. The following policies from the Infrastructure + Public Services element comply with federal, state, and local regulations.

- 5.2 **Reduce use of toxics.** Reduce the use of disposable, toxic, or nonrenewable products in City operations.
- 5.3 **Solid Waste Diversion and Recycling.** Meet or exceed the state's solid waste diversion requirements under AB 939.
- 5.4 **Zero waste.** Strive for zero waste to landfills by 2040 through reusing, reducing and recycling solid waste and using conversion technology if appropriate.
- 5.8 **Neighborhood clean-up program.** Consider creation and sponsorship of a Neighborhood Clean-Up Program.
- 5.9 **Greener waste management practices.** Support on-going green waste recycling efforts and facilitate composting opportunities for Coachella residents and businesses in order to reduce surface ozone pollution and offset greenhouse gas emissions and provide soil nutrients.
- 5.10 **Electronic waste.** Coordinate with businesses that recycle electronic waste to provide convenient collection/drop off locations for city residents.
- 5.11 **Education.** Sponsor solid waste educational programs on backyard waste composting and grasscycling (i.e., mulching grass clippings back into the lawn).
- 5.12 **Construction materials.** Encourage use of recycled materials in new construction.
- 5.13 **Construction and demolition debris.** Require recycling and reuse of construction wastes, including recycling materials generated by the demolition and remodeling of buildings, with a minimum diversion of 75% by weight.
- 5.14 **Recyclable materials.** Encourage the use of recycled paper and other recycled materials in all City operations.
- 5.15 **On-site collection and storage of recyclables.** Require new public and private buildings to be designed with on-site storage facilities for recycled materials.
- 5.16 **Public education.** Expand public education programs about waste reduction and diversion strategies. After the policies are applied to waste management practices within the Planning Area, the solid waste generate under the CGPU will be responsibly managed, and will result in less than significant impact.

Though the CGPU does not proposed a specific structure or project that could potentially conflict with regulatory framework, or propose any projects that would directly conflict with regulations pertaining to solid waste, projects that request to develop in the Planning Area would need to comply with existing regulations related to solid waste. Additionally, the CGPU proposes many policies that ensure projects comply with regulatory framework, especially during the project review process prior to permitting, and generate low levels of solid waste. Compliance with both the existing regulatory framework and the proposed CGPU policies would reduce impacts from conflict with federal, state, and local regulations to a level of less than significant.

Mitigation Measures

No mitigation measures are necessary

CUMULATIVE IMPACTS

Cumulative impacts from the construction of new or expanded natural gas, electricity, or telecommunication facilities, are analyzed on direct or indirect impacts to the region located around the Planning Area. Because the proposed project is a General Plan Update, which takes into account existing and potential development over approximately the next twenty years, the analysis of utilities-related impacts contained within this chapter of the EIR is already cumulative in nature. The Planning Area, as well as the Coachella Valley, is expected to experience a significant amount of growth within the 2035 timeframe of the CGPU. Cumulative development in Coachella would add population, business, and traffic to the community. Regional agencies or corporations including the Imperial Irrigation District (IID), Southern California Edison, Verizon, and Time Warner Cable, are responsible for providing quality and reliable services to all users within the Planning Area. The infrastructure from increasing service capacity will need to meet a population three-times the existing population. This growth could create a substantial need for infrastructure that could affect level of service in the region. Increased population in the Planning Area may cause a transfer of services to meet growing demand, and leave others within the region with unreliable services.

To reduce potential impacts, the policies of the CGPU would proactively maintain and monitor level of service within the Planning Area, and reduction in environmental impacts within the Planning Area. Based on the policies of the CGPU cumulative impacts are considered less than significant.

Potential solid waste impacts under the CGPU, as defined by CEQA guidelines, address landfill capacity and responsible waste management practices. The additional solid waste from development under the CGPU will increase waste in landfills that are shared by adjacent jurisdictions. However, the CGPU policies proposing waste diversion along with the existing landfill capacity's ability to handle solid waste would result in no significant cumulative impact. Because the proposed CGPU would result in a very small demand relative to total available landfill capacity, compliance with federal, state, and local jurisdictions would also make the CGPU impacts on regulations cumulatively less than significant.

SIGNIFICANT AND UNAVOIDABLE IMPACTS

Based on the environmental analysis, there are no significant or unavoidable impacts.