4.17 Utilities and Service Systems

The utilities and service systems discussed in this section include the following: 1) potable water supply, treatment and distribution; 2) wastewater collection, transmission, treatment and disposal; 3) stormwater drainage; 4) solid waste regulation and disposal; and 5) energy. This section analyzes the potential for the proposed project to have a significant impact to these utilities and service systems. Information contained in this section has been incorporated from written correspondence from the City of Escondido Water and Wastewater Division (EWWD), Vallecitos Water District (VWD), Rincon Del Diablo Water District (RDD), San Diego Gas and Electric (SDG&E) and additional sources as cited throughout the document. Written correspondences from these water and wastewater agencies are included in Appendix G, Utility Providers Correspondence, of this EIR.

A summary of the impacts to utilities and service systems identified in Section 4.17.3, Analysis of Project Impacts and Determination of Significance, is provided below.

Utilities and Service Systems Summary of Impacts

Issue Number	Issue Topic	Project Direct Impact	Project Cumulative Impact	Impact After Mitigation
1	Wastewater Treatment Requirements	Less than Significant	Less than Significant	Less than Significant
2	New Water or Wastewater Treatment Facilities	Less than Significant	Less than Significant	Less than Significant
3	Sufficient Stormwater Drainage Facilities	Less than Significant	Less than Significant	Less than Significant
4	Adequate Water Supplies	Potentially Significant	Potentially Significant	Significant and Unavoidable
5	Adequate Wastewater Facilities	Potentially Significant	Less than Significant	Less than Significant
6	Sufficient Landfill Capacity	Potentially Significant	Potentially Significant	Significant and Unavoidable
7	Solid Waste Regulations	Less than Significant	Less than Significant	Less than Significant
8	Energy	Less than Significant	Less than Significant	Less than Significant

4.17.1 Existing Conditions

4.17.1.1 Water Supply and Distribution

EWWD, VWD, Valley Center Municipal Water District (VCMWD), Vista Irrigation District (VID), and RDD provide potable water supply and distribution to the proposed project area. These agencies are all members of the San Diego County Water Authority (SDCWA), the region's wholesale water provider, which in turn is a member of the Metropolitan Water District (MWD) of Southern California. MWD supplies water to approximately 18 million people in a 5,200-square mile service area that includes portions of Ventura, Los Angeles, Orange, San Bernardino, Riverside, and San Diego counties. The service boundary for water districts serving the proposed project area are shown in Figure 4.17-1, Water

Service Boundaries. Each of these agencies is discussed below, in addition to a discussion on water supply planning for the region.

City of Escondido Water and Wastewater Division

EWWD supplies potable water to approximately 26,000 residential, commercial, industrial and agricultural meters serving 146,000 customers over a 20,000-acre service area within the City. EWWD operates and maintains approximately 440 miles of pipe, 10 water reservoirs, four pump stations, two dams and associated lakes and the Escondido-Vista Water Treatment Plant (EVWTP). Principal water storage and conveyance facilities include the Warner Basin aquifer, Lake Henshaw, Warner Ranch Well Field, Escondido Canal, Lake Wohlford, Lake Dixon ~~Lake~~, Bear Valley Pipeline, and EVWTP. A portion of the San Luis Rey River is also used for conveyance by EWWD.

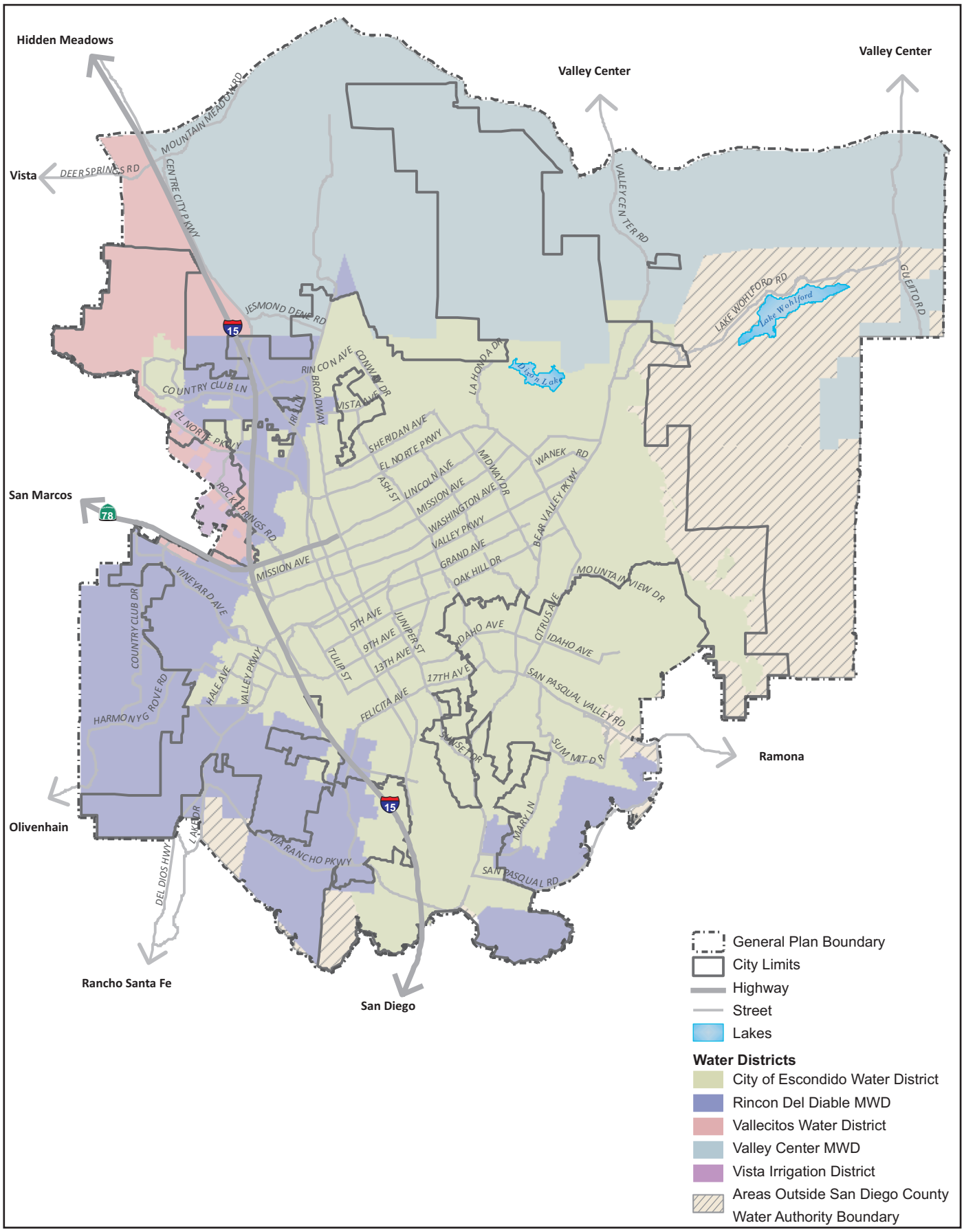
EWWD's water supply originates from two sources, local water and imported water from SDCWA. From the San Luis Rey River watershed, local water is stored on a seasonal basis in the Lake Henshaw and Lake Wohlford reservoirs. Local water is delivered by EWWD to the City via the Escondido Canal and associated pipelines. Local water is shared with VID and provides approximately 18 percent of EWWD's average water demand. Some groundwater wells are located throughout the EWWD's service area; however, these wells are privately owned and maintained. EWWD does not participate in any groundwater storage or replenishment programs. The remaining 82 percent of water demand within EWWD's service area is provided by imported water from SDCWA. EWWD has two connections to the SDCWA aqueduct system.

EVWTP treats raw water for EWWD's service area. EVWTP was constructed in 1976 and has a permitted capacity of 75 million gallons per day (mgd). Water enters EVWTP through a 54-inch diameter pipe and chemicals are then added to assist in the treatment process. After treatment, water is distributed from EVWTP by EWWD to its service area, VID and parts of the RDD service area (CEWD 2010).

EWWD also owns and operates its own recycled water treatment facility, the Escondido Hale Avenue Resource Recovery Facility (HARRF). Opened in 1959 and upgraded in 1973, 1980, 1998 and 1999, HARRF is located in the southwestern area of the City and has a treatment capacity of 18 mgd. HARRF treats influent from the City of Escondido and the Rancho Bernardo community in the City of San Diego. HARRF includes conventional treatment facilities in addition to providing full Title 22 recycled water capacity. HARRF produces approximately 4 mgd of tertiary treated recycled water for use as irrigation on local golf courses, parks, school grounds, green belts, roadway medians, open spaces and industrial use.

Rincon Del Diablo Municipal Water District

RDD is located in northern San Diego County and is comprised of a parent district, which is divided into five divisions. RDD is a special district providing water and fire protection service within specific boundaries. RDD's boundary lines cross into various city and county communities that receive services provided by RDD or neighboring agencies. RDD's customers are located within the cities of Escondido, San Marcos, and San Diego, and the unincorporated area of San Diego County. RDD covers 26,760 acres, has 129 miles of pipeline, four lift stations, 10 reservoirs and 7,400 connections. RDD imports 100 percent of its water from SDCWA and 100 percent of its recycled water from HARRF.



Source: City of Escondido 2011

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WATER SERVICE BOUNDARIES
FIGURE 4.17-1

Vallecitos Water District

VWD service territory is regionally located within northern San Diego County, and covers approximately 45 square miles including portions of the cities of San Marcos, Carlsbad, Escondido, and Vista as well as some unincorporated areas of San Diego County. VWD is a member of SDCWA and currently receives 100 percent of its potable water supply from this water wholesaler. VWD delivers water through approximately 323 miles of pipeline and operates nine pump stations and 20 storage reservoirs ranging in size from 100,000 gallons to 40 million gallons (mg) (VWD 2011).

Valley Center Municipal Water District

VCMWD provides water service to the residents of Valley Center and some surrounding areas, generally located east of I-15. VCMWD serves approximately 7,600 meters, has seven aqueduct connections and a service area of 62,100 acres. VCMWD operates 26 pump stations, 97 pumps, 15 pressure reducing stations, 270 miles of pipeline, and 79 reservoirs and storage facilities with a total capacity of 415 acre-feet (AF). 100 percent of VCMWD's water is imported from SDCWA. Average daily consumption for the VCMWD service area is approximately 34.7 mgd (County 2011).

Vista Irrigation District

VID provides water service to the City of Vista, portions of the Cities of Escondido, Oceanside, and San Marcos, and the unincorporated areas of San Diego County located on the periphery of the Cities of San Marcos and Vista, and portions of the unincorporated community of North County Metropolitan (NC Metro), including the Twin Oaks Valley area. VID serves approximately 27,317 connections over a service area of 21,316 acres. Approximately 70 percent of VID's water supply is imported from SDCWA and the remaining 30 percent comes from groundwater sources that include the Warner Basin aquifer and surface diversion sources such as Lake Henshaw. VID operates 462 miles of pipeline, eight lift stations and 14 reservoirs with a combined capacity of 48 mg (County 2011).

San Diego County Water Authority

The SDCWA service area covers approximately 922,381 acres, services a population of almost three million people, and encompasses the western third of San Diego County. SDCWA provides up to 90 percent of the water used in the San Diego region by way of imported water from MWD, a transfer agreement with Imperial Irrigation District (IID) and agreements for the lining of the All American and Coachella Canals, via the Quantification Settlement Agreement of October 2003. Most of this water is obtained from the Colorado River and the State Water Project (SWP) through a massive system of pipes and aqueducts.

Metropolitan Water District

MWD supplies water to approximately 19 million people in a 5,200-square mile service area that includes portions of Ventura, Los Angeles, Orange, San Bernardino, Riverside, and San Diego counties. The MWD service area covers a 70-mile-wide strip of the Southern California coastal plain, extending from the City of Oxnard on the north to the U.S./Mexico international border on the south. Close to half of the water used in this region is supplied by MWD, and about 90 percent of the regional population receives at least some of its water from MWD. MWD provides approximately 71 percent of the total water supply for San Diego County, including incorporated areas such as the City. SDCWA is one of MWD's 27 member agencies and is the largest MWD member agency in terms of deliveries. MWD

imports water from two primary sources for Southern California. One source is the Colorado River, which is connected to the District's six-county service area through a 242-mile aqueduct. Another source is water from Northern California, which supplies water through a series of dams and aqueducts known as the SWP.

4.17.1.2 Water Supply Planning

The California Urban Water Management Planning Act requires that each urban water supplier providing water for municipal purposes to more than 3,000 customers, or supplying more than 3,000 AF of water annually, prepare, update and adopt an Urban Water Management Plan (UWMP) at least once every five years. This applies to MWD, SDCWA, EWWD, RDD, VCMWD, VID and VWD. The intent of an UWMP is to present important information on water supply, water usage, recycled water and water use efficiency programs in a respective water district's service area. An UWMP also serves as a valuable resource for planners and policy makers over a 25-year timeframe. The most current UWMPs are from 2010, although the 2010 UWMPs were provided a six month extension to allow additional time for water suppliers to address Senate Bill X7-7. Senate Bill X7-7 is the water conservation component to the Sacramento-San Joaquin Delta legislation package which seeks to achieve a 20 percent statewide reduction in urban per capita water use in California by December 21, 2020.

The UWMP process ensures that water supplies are being planned to meet future growth. UWMPs are developed to manage the uncertainties and variability of multiple supply sources and demands over the long term through preferred water resources strategy adoption and resource development target approvals for implementation. Water districts update their demand forecasts and supply needs based on the most recent San Diego Association of Governments (SANDAG) forecast approximately every five years to coincide with preparation of their UWMPs. EWWD, VWD, VID, VCMWD and RDD rely heavily on the UWMPs and Integrated Resources Plans (IRPs) of MWD and the UWMP and Regional Water Facilities Master Plan of SDCWA for documentation of supplies available to meet projected demands. MWD's IRP and SDCWA's Regional Water Facilities Master Plan are discussed further below.

Each 2010 UWMP includes single year, normal year and multiple dry water year supply and demand assessments. These projections are intended to describe the reliability of the water supply and vulnerability to seasonal or climatic shortages, to the extent practical. Normal water years are considered to be years that experience average rainfall for the respective district. Single dry water years are considered one year events of less than average rainfall, surrounded by average rainfall years. Multiple dry water years refer to a series of below average rainfall for particular areas. Projections for multiple dry years are made in five year increments.

In the 2010 UWMPs, MWD determined that adequate water supplies would be available to serve existing service areas under normal water year, single dry water year and multiple dry water year conditions through the year 2035. SDCWA's 2010 UWMP determined that adequate water supplies would be available to serve existing service areas under normal water years and single dry water years; however, under multiple dry water years, some level of water supply shortages could occur. The 2010 UWMPs for RDD and VWD are consistent with SDCWA's 2010 UWMP projections, indicating adequate supply during normal water years and single dry water years, with potential shortages during multiple-dry water years. Water shortages would be addressed through various management actions by each individual water agency, such as the implementation of extensive conservation measures. The 2010 UWMPs for VID, VCMWD and EWWD are consistent with MWD's 2010 UWMP projections and

determine that adequate water supplies would be available to serve existing service areas under normal water year, single dry water year and multiple dry water year conditions through the year 2035.

Escondido Water Division

In addition to its 2010 UWMP, EWWD plans for future water supplies through active participation with the SDCWA. As a member agency, the City, through staff interaction, coordinates the projections and ability of the SDCWA to provide an adequate water supply. EWWD also maintains a Water Distribution Master Plan (2000), which provides historic and projected water demands, evaluates water supply sources, establishes design criteria for fire flow, pipelines, storage reservoirs and pumping facilities and makes recommendations for system improvements. The Water Distribution Master Plan considers existing and proposed land use as well as growth projections to evaluate elemental and system adequacy to provide service. Unit demand rates are also established to provide a guideline for planning and design purposes to properly size infrastructure. Where deficiencies are determined, projects are recommended and priorities are established. EWWD's Water Distribution Master Plan is updated approximately every 10 years, which includes updating and calibrating the system model. EWWD is currently in the process of updating the Water Distribution Master Plan. EWWD's long term goal is to find ways to offset and or supplement water supply which includes maximizing use of local water, increasing the distribution and use of recycled water and ultimately implementing indirect and direct potable reuse. Indirect potable reuse includes recharging groundwater aquifers and augmenting surface water reservoirs with recycled water. Recycled water is planned to serve as a reliable water source for EWWD due to its consistent availability.

In addition to maintaining its required UWMP and Water Distribution Master Plan, the EWWD also maintains a Strategic Business Plan, which identifies strategies to deliver excellent utilities services to the City's residents. The most recent Strategic Business Plan is for Fiscal Years 2010/11 through 2014/15. Considerations for water supply improvement projects that are identified in the Strategic Business Plan include replacing or increasing the height of Wohlford Dam and constructing a new water storage reservoir. Further, the City of Escondido maintains a Five-Year Capital Improvement Program (CIP Program) that summarizes anticipated resources and their estimated uses for major infrastructure and other capital construction, improvement, and maintenance projects. The most recent CIP Program is for the 2010/11 through 2014/15 fiscal years. The City's Water Utilities Capital Project Fund designates new construction and maintenance of existing facilities. This fund was created to account for capital projects associated with the construction and maintenance of the City's water distribution system. The water utilities system is financed and operated in a manner similar to a private enterprise with construction and maintenance costs financed or recovered primarily through charges for services. These revenues are recorded in the Water Utilities Operating Fund and then transferred to the Water Capital Projects Fund when projects are budgeted.

Additional improvements currently planned for EWWD's system include EVWTP seeking an upgrade of its treatment capacity from 75 mgd to 90 mgd. HARRF is also planned to be expanded incrementally to increase production as customer demand for recycled water increases in the future.

Vallecitos Water District

In addition to its 2010 UWMP, VWD also maintains a Water, Wastewater and Recycled Water Master Plan which addresses planned growth within its service area. The most current Water, Wastewater and Recycled Water Master Plan is from 2008, with the purpose to provide a reasonable planning tool to

meet the demands of planned development and future growth-based development within the VWD service boundary up to year 2030. The 2008 Water, Wastewater and Recycled Water Master Plan enables VWD to plan for growth and analyze approved land use and density change data to determine future water, wastewater, and reclaimed water demands. The Plan addresses many local and regional issues, including imported water supply cutbacks, requirements for water conservation, local water supply development, service territory growth, and wastewater collection, treatment and disposal capacity. The 2008 Water, Wastewater and Recycled Water Master Plan includes a comprehensive CIP that provides VWD with the strategy and capability for meeting projected water supply, wastewater, and recycled water customer service demands in a timely and reliable manner up to the year 2030.

Vista Irrigation District

In addition to its 2010 UWMP, VID maintains a Potable Water Master Plan that evaluates the existing water distribution system for the District's water service area and proposes improvements based on forecasted growth within the service area and optimized use of the District's water facilities. The Potable Water Master Plan identifies water demands, water supply, design criteria, existing distribution system features, hydraulic model development, existing system analysis and recommendations and ultimate system analysis and recommendations. The most recent VID Potable Water Master Plan is from December 2000.

Rincon Del Diablo Municipal Water District

In addition to its 2010 UWMP, RDD implements Ordinance 08-120, Drought Response Plan. The Response Plan was developed to provide a drought response strategy, as required by the California Water Code, which establishes methods and procedures to ensure that, in a time of shortage, available water resources are put to maximum beneficial use, and that the unreasonable method of use is prevented. The Response Plan contains four water shortage contingency rationing levels which identify the levels of reduction that are required in the event of a drought and the resulting penalties if compliance is not achieved.

Valley Center Municipal Water District

In addition to its 2010 UWMP, water management tools used by VCMWD include participation in the California Urban Water Conservation Council (CUWCC); the Agricultural Water Audit Program; and the University of California – Davis Extension Program (UCD). The CUWCC program increases efficient water use statewide through partnerships among urban water agencies, public interest organizations, and private entities. CUWCC's goal is to integrate urban water conservation Best Management Practices (BMPs) into the planning and management of California's water resources. The Agricultural Water Audit Program mobilizes staff to add pressure regulators to balance pressure throughout the system and conduct grove irrigation system inspections. The UCD program involves the use of pulse sensors to determine water needs based on soil moisture content. Implementation of these programs maximizes VCMWD's available local water resources.

San Diego County Water Authority

In addition to its 2010 UWMP, SDCWA maintains a Regional Water Facilities Master Plan that serves as the roadmap for identifying a diverse mix of water supply sources and implementing the associated facilities and projects needed through year 2030 to ensure a safe and reliable supply. The 2002 Regional

Water Facilities Master Plan, with an updated planned for adoption in 2012, analyzes future water demands and different ways to meet those demands. It describes three different water supply alternatives: 1) Northern Alternative, 2) Western Alternative, and 3) Eastern Alternative. The Northern Alternative would construct a new, sixth pipeline in the northern half of San Diego County to convey additional water from MWD. The Western Alternative would result in the development of additional water supplies from the west through construction of seawater desalination facilities. The Eastern Alternative would result in the construction of a new pipeline from the east to deliver water from the Colorado River. The SDCWA Board of Directors selected the Western Alternative, seawater desalination, as the preferred alternative for providing a new, safe and reliable water supply for the region. Seawater desalination removes salts and other impurities to produce safe, high-quality water for drinking and other potable water uses (SDCWA 2002). As part of the SDCWA's diversification of supply, a desalination plant in the City of Carlsbad is expected to become operational.

In addition to the 2002 Regional Water Facilities Master Plan, the SDCWA, County of San Diego and City of San Diego collaboratively maintain an Integrated Regional Water Management Plan (IRWMP) for the San Diego region. The Final San Diego IRWMP, adopted in 2007, reflects a comprehensive approach to water resources planning that integrates ongoing local planning efforts in order to maximize regional water management benefits and resolve any existing or potential conflicts. The San Diego IRWMP identifies programs and projects that best achieve the region's goals to optimize water supply reliability, and protect and enhance water quality, while providing stewardship of natural resources. The 2007 San Diego IRWMP includes a description of the region and participants, regional objectives and priorities, water management strategies, implementation, impacts and benefits, data management, financing, stakeholder involvement, relationship to local planning, and state and federal coordination. IRWM planning was derived from California Proposition 50, approved by the voters in 2002, which set aside $380 million for IRWMP-related grants.

SDCWA also has a Drought Management Plan (May 2006) which provides its member agencies with a series of potential actions to engage when faced with a shortage of imported water supplies due to prolonged drought conditions. Such actions help avoid or minimize impacts of shortages and ensure an equitable allocation of supplies throughout the San Diego region. SDCWA implemented its Drought Management Plan in 2009 to enhance and manage available water supplies and deactivated the plan in April 2011, due to the end of drought conditions in the state and water supply storage reservoirs achieving pre-drought levels.

To prepare the San Diego region for potential water shortages, in March 2008 the SDCWA released a Model Drought Response Ordinance to its member agencies. The Model Drought Response Ordinance identifies four drought response levels that contain water-use restrictions that would help achieve demand reductions during water shortages. Member agencies, including EWWD, used the SDCWA's model to update their own ordinances to help provide consistency throughout the region on response levels and water use restrictions that may be undertaken to reduce water demand.

Metropolitan Water District

In addition to its 2010 UWMP, MWD's long term strategy for a sustainable water supply is outlined in its 2010 IRP. This plan requires agencies having responsibilities for water management to develop water management plans for incorporation in a regional process that integrates the plans of various agencies. The MWD IRP, updated every five years, was first adopted in 1996 and last updated in 2010. The 2010

IRP seeks to stabilize MWD's traditional imported water supplies and establish water reserves to withstand California's inevitable dry cycles and growth in water demand.

To stabilize MWD's water supplies, the 2010 IRP identifies a core resources strategy, an uncertainty buffer, and foundational actions. The core resources strategy represents baseline efforts to manage water supply and demand conditions. Under the core resources strategy, MWD and its member agencies will advance water use efficiency through conservation and recycled water, along with the development of local supplies such as groundwater recovery and seawater desalination. The uncertainty buffer sets goals for a range of potential "buffer" supplies to protect the region from possible shortages in a cost-effective manner and enable the region to adapt to future circumstances and foreseeable challenges. Foundational actions guide the region in determining alternative supply options for long range planning. Foundational actions, such feasibility studies, technological research, and regulatory review, lay the foundation for potential alternative resource development.

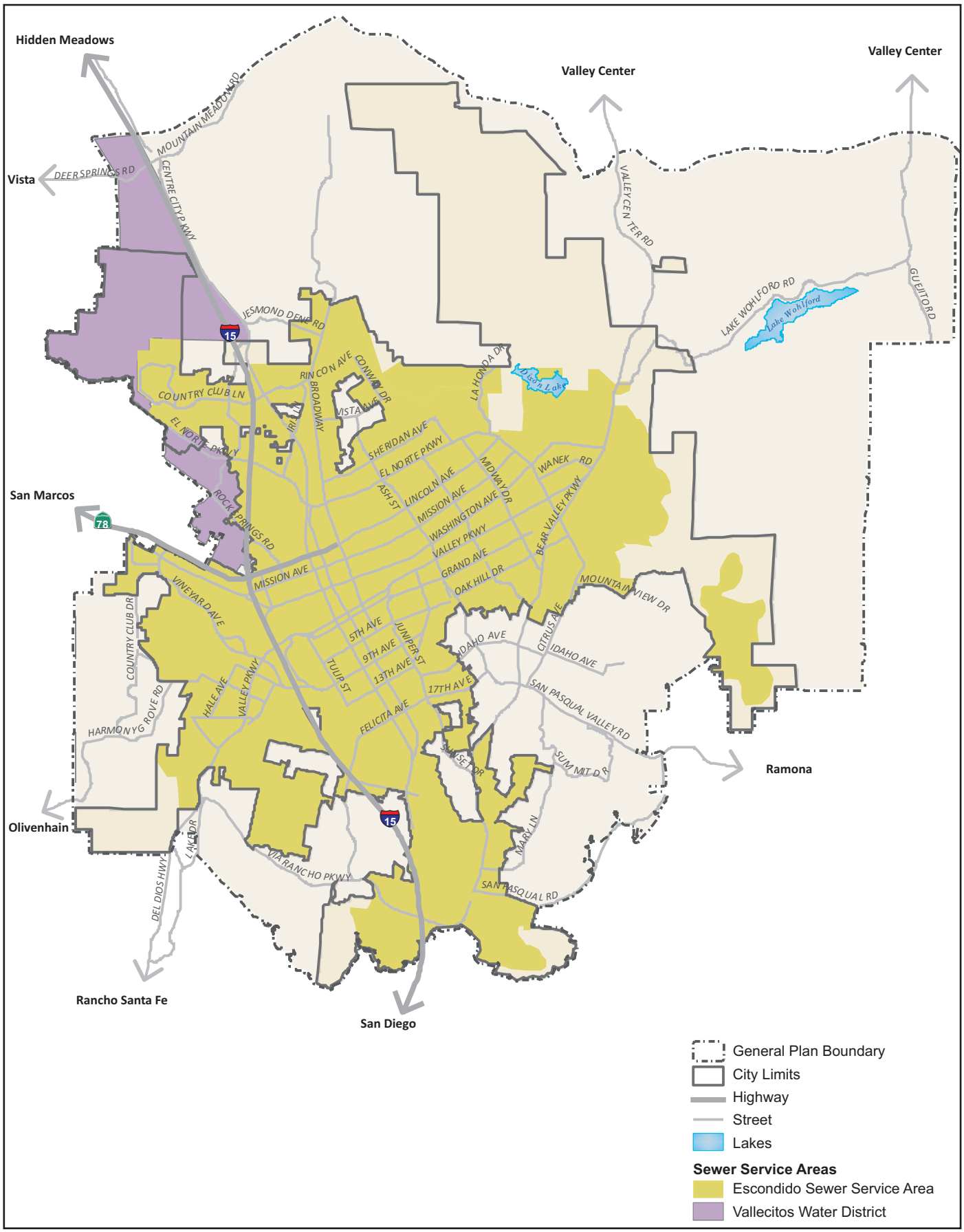
4.17.1.3 Wastewater Collection, Transmission and Disposal

EWWD and VWD provide wastewater service to the proposed project area. The service area of these agencies in relation to the proposed project area is shown in Figure 4.17-2, Wastewater Service Area. These wastewater agencies are discussed below.

Escondido Wastewater Division

EWWD is the primary agency responsible for safely collecting, treating, and disposing of wastewater and producing recycled water in the City of Escondido. EWWD has over 300 miles of pipeline within the wastewater collection system. EWWD maintains more than 6,000 sewer manholes, 14 miles of sewer outfall line and 14 pumping stations. These facilities serve as the sanitary collection system backbone and direct the City's domestic and industrial wastewater to the HARRF. The majority of the system is gravity fed, although some pump stations exist in larger subdivisions and feed the system via force mains. Existing sewer pipelines range in age from new to over 80 years old.

All wastewater produced in the EWWD service area is treated at the HARRF. The HARRF has a treatment capacity of 18 mgd with a land outfall maximum flow of 20.1 mgd. The HARRF is an activated sludge, secondary treatment facility and consists of physical, biological, and chemical treatment methods, which include screening, sedimentation, chemical precipitation, and biological processes. The HARRF serves the City of Escondido and the Rancho Bernardo area in the City of San Diego. HARRF operates 24 hours a day with an average daily flow of 15.6 mgd. The City of Escondido's wastewater flow to HARRF averages 11.8 mgd and Rancho Bernardo's flow to HAARF averages 3.8 mgd. After complex treatment, all wastewater that is not recycled is discharged from the HARRF to the Pacific Ocean via a 14-mile -land outfall pipeline that connects to an ocean outfall pipeline near San Elijo Lagoon. The effluent exits the outfall pipeline approximately 1.5 miles offshore through diffuser ports 110-feet deep in the Pacific Ocean. EWWD sends remaining biosolids to Yuma, Arizona for beneficial reuse as a soil amendment. The HARRF treatment and disposal capacity has reached 75 percent of its rated total capacity and the Strategic Business Plan prepared by the City Utilities Department anticipates that flow to the HARRF will reach 18 mgd in 2014.



Source: City of Escondido 2011

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WASTEWATER SERVICE AREA
FIGURE 4.17-2

Vallecitos Water District

The western and northwestern areas of the proposed project overlap with VWD's existing wastewater collection system. VWD provides wastewater service to the City of San Marcos, portions of the City of Vista, Escondido, and Carlsbad, and the unincorporated areas/communities of Twin Oaks, portions of San Dieguito, and NC Metro. VWD serves approximately 19,500 connections over a 28,800-acre service area. Wastewater generated from the VWD service area is treated at both the Encina Wastewater Authority (EWA) and the Meadowlark Water Reclamation Facility (MWRF). At this time, the VWD's capacity at EWA is 10.5 mgd solids and 7.5 mgd liquids (VWD 2010b). MWRF has a maximum capacity of 5 mgd.

Harmony Grove Sewer Maintenance District

The Harmony Grove Sewer Maintenance District was established in 2007 in response to the proposed development of the approved 468-acre Harmony Grove Village project, partially located within the General Plan Update boundary near the intersection of Harmony Grove Road and Country Club Drive.

The Harmony Grove Sewer Maintenance District is coterminous with the development project. However, Harmony Grove Village has not been developed and there are currently no wastewater facilities within the district. It is anticipated that sewage flows from the future development will be conveyed to an on-site wastewater treatment facility; however, the facility has not been built (County of San Diego 2010, 2011).

4.17.1.4 Wastewater Planning

Escondido Wastewater Division

To manage the wastewater system, the EWWD maintains a Wastewater Collections Master Plan. The most current Master Plan is from 2005 and is currently being updating and expected to be adopted in 2012. The Wastewater Collections Master Plan considers existing and proposed land uses as well as growth projections to evaluate elemental and system adequacy to provide service. Unit generation rates are also established to provide a guideline for planning and design purposes to properly size infrastructure. Where deficiencies are determined, projects are recommended and priorities are established. The long term goals of the Wastewater Collections Master Plan are to free up outfall capacity, increase the distribution and use of recycled water, and implement indirect potable reuse.

The 2005 Wastewater Collection System Master Plan developed ultimate flow projections for the City's Sphere of Influence (SOI), a hydraulic model, an evaluation of the existing conveyance system, and a CIP. The Master Plan anticipated capacity deficiencies within the City's wastewater system in a number of trunk sewers and lift stations. Improvements identified in the 2005 Master Plan include the correction of pipeline deficiencies due to capacity, age, structural damage, maintenance issues or access issues, and various improvements to lift stations such as expansion, replacement, rehabilitation or new construction (BE 2005).

The City's CIP Program Fiscal Years 2010/11 through 2014/15 also identifies improvements that will be made to EWWD's wastewater collection system. Within the CIP, the Wastewater Utilities Capital Project Fund designates new construction and maintenance of existing facilities. This fund was created to account for capital projects associated with the construction and maintenance of the City's wastewater

and recycled-water distribution system. The wastewater utilities system is financed and operated in a manner similar to a private enterprise with construction and maintenance costs financed or recovered primarily through charges for services. These revenues are recorded in the Wastewater Utilities Operating Fund and then transferred to the Wastewater Capital Projects Fund when projects are budgeted.

Vallecitos Water District

To plan for wastewater service within its service area, VWD maintains its Water, Wastewater and Recycled Water Master Plan. The most recent Water, Wastewater and Recycled Water Master Plan is from 2008 and discussed above in Section 4.17.1.2, Water Supply Planning.

4.17.1.5 Solid Waste Disposal

Escondido Disposal, Inc. is responsible for the collection and disposal of solid waste and recyclables from homes, businesses and industries in the proposed project area. Residential collection of solid waste by Escondido Disposal is transferred to the Escondido Disposal Transfer Station where it is then taken to either the Sycamore or Otay Mesa Landfill. The Escondido Disposal Transfer Station is a 59,000-square-foot, covered, concrete floor space that is operated by Escondido Disposal and has an annual permitted throughput of 902,500 tons. There are no other solid waste disposal or handling facilities within the proposed project area. The Otay and Sycamore landfills, which serve the proposed project area, are located outside of the planning area boundary and are owned and operated by a private company, Allied Waste Industries. The Otay landfill is located in the City of Chula Vista, south of the proposed project area, while the Sycamore landfill is located in the City of Santee, also south of the proposed project area. Table 4.17-1, Sycamore and Otay Landfill Capacity, identifies the existing capacity of the Otay and Sycamore landfills. In addition to solid waste disposal services provided by Escondido Disposal, the City of Escondido Recycling & Waste Reduction Division operates a Recycling Hotline, promotes recycling through presentations in area schools, offers workshops on vermiculture, maintains the Household Hazardous Waste Program, contracts trash collection services with Escondido Disposal, and promotes citywide cleanup events.

Table 4.17-1 Otay and Sycamore Landfill Capacity

Landfill	Owner	Operator	Current Remaining Capacity (cubic yards)	Current Remaining Capacity (April 2007) (tons)
Otay	Allied Waste Industries, Inc.	Otay Landfill, Inc.	31,665,198	31,813,474
Sycamore	Allied Waste Industries, Inc.	Sycamore Landfill, Inc.	44,832,302[(1)]	44,114,985

Source: County 2011

4.17.1.6 Solid Waste Planning

The Countywide Siting Element (2005) of the San Diego County Integrated Waste Management Plan (IWMP) serves as a general guide and provides a description of landfill use and capacity for all incorporated and unincorporated areas within the San Diego County. It identifies a combination of strategies to provide 15 years of solid waste disposal capacity for all the jurisdictions within the county. The Countywide Siting Element identifies that the region may need to export approximately 7.6 percent

of its waste in 2020 to meet the region's disposal needs. Continued availability of out of county disposal sites is not known. The Countywide Siting Element determined that if the region would recycle at a rate of 75 percent, compared to the present 50 percent, there would be no need for additional landfills in the county (DPW 2005). Siting of a new solid waste disposal facility, or expansion of an existing solid waste facility, is often a controversial and lengthy process. All potential disposal facilities in the County of San Diego must be included in a Countywide Siting Element Amendment to the San Diego County IWMP. However, discussion of proposed sites in the Siting Element is only one step in the review and approval process. In addition, each proposed facility in the County is considered through the local jurisdictional land use permitting processes.

4.17.1.7 Energy

Provision of adequate power and energy is a significant component of City services. The following section describes the current power and energy resources serving the proposed project area, which include electricity, natural gas, nuclear energy, and alternative energy sources. Because energy supply and demand does not differentiate between jurisdictional boundaries, it is difficult to discuss energy in terms of the City of Escondido alone. Therefore, unless specified, data presented in this section represents current energy conditions for the entire San Diego County region.

Electricity

SDG&E serves San Diego and southern Orange Counties. The proposed project is located within SDG&E's service territory and served primarily from the following electric substations within the City: Ash Substation, Escondido Substation, Felicita Substation, Esco Substation, Olivenhain Substation and the Palomar Energy Center. According to SDG&E, not all of these substations are operating near their capacity. SDG&E has plans to upgrade one existing substation in the proposed project area, based on existing capacity needs unrelated to the proposed project (SDG&E 2011).

The San Diego region has natural gas-fired and renewable energy capacity to generate over 3,000 megawatts (MW) of electricity, or about 70 percent of the region's summer peak demand. This capacity consists of gas-fired steam and combined cycle plants, small and medium-sized peaking plants, and onsite generators (excluding backup generation). The San Diego region also has distributed generation sites with a combined capacity of 156 MW, or about four percent of current peak demand. There are 3,153 grid-connected photovoltaic installations, which provide 18.5 MW in total.

The Palomar Energy Plant located in the Escondido Research and Technology Center (ERTC SPA #8) was completed in 2006 has a capacity of 550 MW. The system uses two single-shaft combustion gas turbines (CGT) with a hot exhaust of over 1,100°C. The turbines are made by GE Power Systems and have dry low NOx combustors and evaporative inlet air coolers. The plant also uses natural gas duct burners in the two heat recovery steam generators to capture waste heat energy. The waste heat energy then generates steam, which runs through the steam-fired turbine generator. The steam turbine generators are equipped with associated auxiliary systems and equipment, including a steam admission system, generator coolers and metal acoustical enclosures. The steam is evaporated through a 110-ft. plume-abated mechanical draft cooling tower. The system uses reclaimed water that comes from the HARRF through a 1.1-mile, 16-in. pipeline. The reclaimed water is used in the circulating systems, the heat generators, the coolers, potable water and in fire protection. The plant uses approximately 3.6 million

gal/day, and has a reserve storage tank of 730,000 gallons. Once the water has been used, the brine water from the cooling tower blowdown is returned through an 8-in. pipe to the HARFF land outfall.

The Encina Power Plant in Carlsbad has a capacity of 960 MW and is quickly nearing technological and economical obsolescence. Fossil fuel-fired steam units such as the Encina Power Plant are designed to operate for 40 to 50 years, while the design life of the combustion turbines in natural gas power plants is approximately 35 years. Although many units outlive their design life, forced outage occurrences increase with time, leading to a higher likelihood that they will not be available when needed. State law requires utilities providers like SDG&E to have 20 percent of the electricity they deliver come from renewable energy sources by 2010. SDG&E is currently meeting this goal and has voluntarily agreed to acquire 33 percent of its energy from renewable sources by 2020.

Electricity Transmission

One essential component of the San Diego region's energy supply is a high-voltage electric transmission connection to other energy markets. The current transmission system provides a number of functions including: 1) support for wholesale market transactions that help to stabilize electric prices; 2) improved system reliability and stability; 3) creation of opportunities to site new electric generation stations; and 4) provision of additional voltage support. Currently, there are only two points of interconnection between the SDG&E service area and the external electric grid. These include the San Onofre Nuclear Generating Station (SONGS) switchyard in the northwestern area of the County in the Pendleton/De Luz Community Planning Area and the Miguel Substation in the southern area of the County in the unincorporated community of Bonita. Historically, the San Diego region has relied upon imports of electric power to meet over half of its supply needs. Transmission upgrades made in 2000 and 2001 raised the SDG&E simultaneous import capacity to 2,850 MW and the non-simultaneous import capacity to 2,500 MW.

Electricity Demand

Historical electricity consumption has increased in every decade of the 20th century, although at a decelerating rate. In recent decades, average annual growth was five percent during the 1970s, 3.9 percent during the 1980s, and 2.5 percent in the 1990s. During the energy crisis years of 2001 and 2002, electricity usage fell below the pre-crisis level. However, demand rebounded since 2002 with growth averaging 2.7 percent per year between 2002 and 2005. In 2005, the San Diego region consumed 19,214 gigawatt-hours (GWh) of electricity, while peak utility-based demand was 4,058 MW. Both of these measures were down slightly from the previous year due to milder weather in 2005. Electricity demand is expected to increase by nearly 24 percent between 2005 and 2016 at an average growth rate of 1.9 percent per year.

Electricity Projections

During the short term, the region is looking to minimize energy demand by aggressively pursuing energy efficiency, conservation and demand response programs. From 2006 to 2010, SDG&E had a goal to reduce peak demand by a total of 268 MW. With respect to major power plants, South Bay Power Plant discontinued operation on January 1, 2011. In addition, the Otay Mesa Energy Project is a modern, high efficiency combined-cycle power plant currently under development near the U.S./Mexico international border. The plant is expected to have a summer capacity of 562 MW. Smaller power plants located within or near the proposed project area include the Palomar Combined Cycle Plan (542 MW), Escondido/Calpeak (45 MW), and MCC/Escondido (42 MW). Electricity peak demand in the long term is

expected to nearly double, increasing by more than 4,000 MW by 2030. This demand is expected to be met by a mix of energy technologies that include distributed generation and central plants.

Natural Gas

The San Diego region imports all of its natural gas from other parts of the U.S. and from outside the country. The San Diego region does not have facilities to store natural gas, which is primarily used in electrical generation and heating. However, SDG&E and other end-users have access to storage services from the Southern California Gas Company (SoCalGas), subject to tariffs approved by the California Public Utility Commission (CPUC). SDG&E, an investor-owned utility, is the local distribution company for natural gas in San Diego, with a gas customer base of over 800,000 natural gas meters. SDG&E and its customers obtain natural gas transportation service from SoCalGas on a wholesale customer basis. Although SDG&E is not the only purchaser of natural gas for smaller consumers, it provides natural gas transportation service to all gas customers, pursuant to CPUC-approved tariffs.

Capacity and Transmission

Natural gas supply capacity refers to the amount of gas that can be transported through existing pipelines. The current SDG&E gas system is capable of delivering an average of 635 million cubic feet/day (MMcfd) in the summer and 655 MMcfd in the winter. These two operating capacities include a reserve margin of 45 MMcfd to account for various potential scenarios that could affect delivery. Two main pipelines carry natural gas into the San Diego region from the San Diego/Riverside County line at the Rainbow meter station. The larger 30-inch diameter pipeline carries gas to the Tecolote Regulator Station in the Linda Vista area of the City of San Diego. The smaller 16-inch diameter line carries gas south to the Mission City gate station. An additional 12-inch diameter SoCalGas pipeline supplies natural gas to customers along the coast from San Clemente in Orange County to La Jolla in the City of San Diego.

Natural Gas Demand

Currently, California and the western U.S. are experiencing a significant increase in the demand for natural gas as a result of plans to build several thousand MW of new natural gas-fired electric generating capacity facilities. The Palomar Energy Center is located in Escondido and opened in 2006. This facility is a 550 MW generating plant that provides enough energy for approximately 350,000 homes. It is a combined-cycle, natural gas-fueled plant, which produces 45 percent more energy using the same amount of natural gas fuel as older plants. The long term demand for natural gas for electrical generation will depend on the construction and operation of the plants listed above, as well as the disposition of the existing electrical generation facilities in the area. Future estimated average annual growth for natural gas demand for the San Diego region is estimated to be about 1.5 percent per year. Demand of natural gas is expected to grow from 1,423 million therms (MMtherms) in 2002 to 1,642 MMtherms in 2030.

Natural Gas Projections

Currently, there is sufficient natural gas pipeline infrastructure to meet expected gas demand in the San Diego region. However, significant increases in gas demand would likely necessitate increases in pipeline system capacities. The long term outlook for natural gas-fired electrical generation is highly uncertain. A number of projects have been proposed that are still in the development stage, and the long term operation of some of the older generation facilities remains uncertain. In addition, a number

of liquefied natural gas (Lng) developers are proposing to develop projects that would entail delivering some of that supply into the SDG&E natural gas transportation system.

Nuclear Power

Nuclear power comes from the nucleus of an atom, which holds a large amount of potential energy. This energy, when let out slowly can be harnessed to generate electricity. A nuclear power plant uses uranium as a fuel to feed this process. Uranium is an element that is mined from many places around the world. It is then processed into tiny pellets that are loaded into very long rods that are put into the power plant's reactor to produce energy.

The only nuclear power plant located within San Diego County is the San Onofre Nuclear Power Plant, operated by the Southern California Edison Company. The three-unit power plant occupies an 84 acre site located approximately four miles north of the City of Oceanside, south of San Clemente in Orange County and approximately 40 miles northwest of the proposed project area. Unit 1 was shut down in 1992 after 25 years of operation because the costs to upgrade the unit made its continued operation economically infeasible. In 2011, Unit 2 generated approximately 1,070 MW of energy while Unit 3 generated 1,080 MW (CEC 2011). There are no nuclear power plants in the proposed project area.

Alternative Energy

Biomass/Bio-gas Energy

Biomass/bio-gas can be used as fuel and is often equated with garbage, and can include dead trees, tree branches, yard clippings, leftover crops, wood chips, bark, sawdust, tires, livestock manure, and gas produced by the decomposition of waste dumped at landfills. Burning biomass/bio-gas is a reasonable supplement to fossil fuels since California alone produces more than 60 million bone-dry tons each year. If all of it were utilized, California could generate close to 2,000 MW of electricity, which is enough energy for about two million homes. In the San Diego region, landfill gas currently produces approximately 13.8 MW. As discussed above, there are no landfills located within the proposed project area.

Hydroelectric Power

Hydroelectric power uses the kinetic energy of moving water to make electricity. The water from a river or reservoir can be sent through a hydroelectric power plant or powerhouse. This method is one of the largest producers of renewable energy in the world. In California, about 15 percent of all electricity comes from hydroelectric means. In the San Diego region, hydroelectric power currently produces approximately 6.5 MW. Currently, California law limits the types of hydroelectric power that can be considered renewable energy due to growing concerns about the effects on fish and other wildlife. Hydroelectric facilities must be smaller than 30 MW and typically consist of hydrogenerators placed in water aqueducts. Within the proposed project area, there is one operational hydroelectric plant, the Bear Valley Hydro Plant. This plant produces 1.5 MW (CEC 2011b).

Solar Cells

Sunlight can also be changed directly into electricity using solar cells, also known as photovoltaic cells. Photovoltaic cells can be found on many small appliances, such as calculators; however, they were first developed for use on space satellites. Electrical energy from solar cells can be used directly in a home or business for lights and appliances. In the San Diego region, photovoltaic cells currently produce

approximately 18.5 MW of electricity per day. The City is currently proposing a project that would install photovoltaic cells on multiple city-owned facilities to generate a combined total of 1 MW of electricity.

Wind Energy

The kinetic energy of the wind can be changed into other forms of energy, namely mechanical or electrical energy. Blowing wind spins the blades on a wind turbine, which in turn rotates the turning shaft, which turns the generator to make electricity. This method can be used on both a large and small scale and one turbine could produce enough electricity to power either a school or a home. In addition, there are wind "farms" where turbines are grouped together in the windiest areas. About 11 percent of the world's wind-generated electricity is found in California. Currently, there is one wind energy facility within the San Diego region, the 50 MW Kumeyaay Wind Project on the Campo Indian Reservation, which began producing power in 2005 (County 2011). There are no wind energy facilities within the proposed project area.

4.17.1.8 Telecommunications

Several private companies provide telecommunication services to Escondido residents and businesses, including AT&T, Cox, Verizon, Time Warner, and others. Communication technology continues to evolve. Advancements in the field of telecommunications provide more efficient options that improve quality of life and enhance economic opportunities. Benefits of a sophisticated telecommunications system provide residents opportunities to utilize technology for establishing home offices, which decreases commutes, reduces greenhouse gas emissions, improves neighborhood security, and provides flexibility for working parents.

4.17.2 Regulatory Framework

4.17.2.1 Federal

Federal Water Pollution Control Act, 1972

In 1972, the Federal Water Pollution Control Act Amendments were enacted to address water pollution problems. After an additional amendment in 1977, this law was dubbed the Clean Water Act (CWA). Thereafter, it allowed for the regulation of discharges of pollutants into the waters of the U.S. by the federal Environmental Protection Agency (EPA). Under the CWA, the EPA can implement pollution control programs and set water quality standards. Additionally, the CWA makes it unlawful for any person to discharge any pollutant from a point source into navigable waters, unless a permit is obtained under its provisions.

Safe Drinking Water Act

Passed in 1974 and amended in 1986 and 1996, the Safe Drinking Water Act (SDWA) gives the EPA the authority to set drinking water standards. Drinking water standards apply to public water systems, which provide water for human consumption through at least 15 service connections, or regularly serve at least 25 individuals. There are two categories of drinking water standards, the National Primary Drinking Water Regulations (NPDWR) and the National Secondary Drinking Water Regulations (NSDWR). The NPDWR are legally enforceable standards that apply to public water systems. These standards

protect drinking water quality by limiting the levels of specific contaminants that can adversely affect public health and are known or anticipated to occur in water.

4.17.2.2 State

California Code of Regulations Energy Efficiency Standards (Title 24, Part 6)

The Energy Efficiency Standards for Residential and Nonresidential Buildings were established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. The Energy Efficiency Standards for Residential and Nonresidential Buildings include energy building regulations; mandatory requirements for the manufacture, construction and installation of systems, equipment and building components; mandatory requirements for space-conditioning and service water-heating systems and equipment; mandatory requirements for lighting systems and equipment; performance and prescriptive compliance approaches for achieving energy efficiency; mandatory features and devices; and performance and prescriptive compliance approaches.

California Drinking Water Standards

State drinking water standards are based on federal standards and are listed in Title 22 of the California Code of Regulations. The California Department of Health Services administers the state drinking water standards.

California Integrated Waste Management Act (AB 939)

The California Integrated Waste Management Act (IWMA) was enacted by the Legislature in 1989 with the goal of reducing dependence on landfills for the disposal of solid waste, and to ensure an effective and coordinated system for the safe management of all solid waste generated within the state. The IWMA established a hierarchy of preferred waste management practices which include: 1) source reduction; 2) reuse of resources, 3) recycling and composting; and 4) environmentally safe disposal by transformation or landfill. It addresses all aspects related to solid waste regulation including the details regarding the lead enforcement agency's requirements and responsibilities, the permit process including inspections and denials of permits, enforcement, and site clean-up and maintenance. It requires the County to prepare a Countywide IWMP, with input from each city in the County, and is reviewed at least once every five years to assure that waste management practices remain consistent with the practices defined in the Public Resources Code. As part of the Countywide IWMP, each jurisdiction (cities and county) is required to prepare and maintain a Source Reduction and Recycling, Household Hazardous Waste and Non-Disposal Facility Elements. The Countywide IWMP is a summary plan that combines all these elements and is required to be approved by the County Board of Supervisors and the majority of the cities within the County.

California Water Code

The California Water Code contains provisions that control almost every consideration of water and its use. Division 2 of the California Water Code provides that the State Water Resources Control Board (SWRCB) shall consider and act upon all applications for permits to appropriate waters. Division 6 of the

Water Code controls conservation, development and utilization of state water resources. Division 7 addresses water quality protection and management.

Senate Bill (SB) 610

On January 1, 2002, SB 610 took effect. SB 610, which has been codified in the Water Code beginning with Section 10910, requires the preparation of a water supply assessment (WSA) for projects within cities and counties that propose to construct 500 or more residential units or the equivalent. SB 610 stipulates that when environmental review of certain large development projects is required, the water agency that is to serve the development must complete a WSA to evaluate water supplies that are or will be available during normal, single dry and multiple dry years during a 20-year projection to meet existing and planned future demands, including the demand associated with the project. SB 610 requirements do not apply to the general plans of cities or counties, but rather to specific development projects.

Senate Bill (SB) 221

Enacted in 2001, SB 221, which has been codified in the Water Code beginning with Section 10910, requires that the legislative body of a city or county which is empowered to approve, disapprove or conditionally approve a subdivision map must condition such approval upon proof of sufficient water supply. The term "sufficient water supply" is defined in SB 221 as the total water supplies available during normal, single dry, and multiple dry years within a 20-year projection that would meet the projected demand associated with the proposed subdivision. The definition of sufficient water supply also includes the requirement that sufficient water encompass not only the proposed subdivision, but also existing and planned future uses, including, but not limited to, agricultural and industrial uses. SB 221 requirements do not apply to the general plans of cities or counties, but rather to specific development projects.

Groundwater Management Act (AB 3030)

Passed in 1992, AB 3030 (California Water Code Sections 10750-10756) provides a systematic procedure for an existing local agency to develop a groundwater management plan. This section of the code provides such an agency with the powers of a water replenishment district to raise revenue to pay for facilities to manage the groundwater basin (extraction, recharge, conveyance, quality).

Porter-Cologne Water Quality Control Act

The 1969 Porter-Cologne Water Quality Control Act, codified in the California Water Code, authorizes the SWRCB to implement programs to control polluted discharges into state waters. This law essentially implements the requirements of the CWA. Pursuant to this law, the local Regional Water Quality Control Board (San Diego RWQCB) is required to establish the wastewater concentrations of a number of specific hazardous substances in treated wastewater discharge.

Senate Bill 244

SB 244, adopted on October 10, 2011, requires cities to review and update the Land Use Elements of their general plans to include data and analysis, regarding unincorporated islands, fringe, or legacy communities. unincorporated communities within or adjacent to the City's SOI, SB 244 requires the City prepare a determination regarding the existing and planned adequacy of public facilities and public

services, including: wastewater, potable water, stormwater, police and fire. SB 244 prohibits the Local Agency Formation Commission (LAFCO) from approving an annexation to a city of any territory greater than 10 acres, where there exists a disadvantaged unincorporated community that is contiguous to the area of proposed annexation, unless an application to annex the disadvantaged unincorporated community to the city has been filed with LAFCO and evaluates the present and probable sewers, water, stormwater, police and fire protection needs or deficiencies.

Urban Water Management Planning Act

In 1983, the California Legislature enacted the Urban Water Management Planning Act (California Water Code Sections 10610 through 10656) which requires every urban water supplier that provides water to 3,000 or more customers, or provides over 3,000 AF of water annually, to make every effort to ensure the appropriate level of reliability in its water service to meet the needs of its customers during normal, dry, and multiple dry years. The Act describes the contents of UWMPs as well as how urban water suppliers should adopt and implement the plans. It was the Legislature's intent to permit levels of water management planning commensurate with the number of customers served and the volume of water supplied.

Water Conservation Projects Act

The state requirements for water conservation are codified in the Water Conservation Projects Act of 1985 (California Water Code Sections 11950 through 11954), which encourages local agencies and private enterprise to implement potential water conservation and reclamation projects. Potential water conservation and reclamation projects may include facilities for municipal and industrial advanced wastewater treatment; regulatory impoundments; improvements to water supply and delivery systems; tailwater recovery systems; and sprinkler or drip irrigation systems.

4.17.2.3 Regional/Local

Chapter 22 of the City of Escondido Municipal Code

Chapter 22 of the Municipal Code establishes regulations related to stormwater management and discharge control, harmful waters and wastes, sewer service charges, private sewage disposal systems, sewer connection fees, sewer-connection laterals, and industrial wastewater. The purpose of the stormwater management and discharge control regulations (Article 2) identified in this ordinance is to ensure the health, safety and general welfare of the citizens of the City by controlling non-stormwater discharges to the stormwater conveyance system; by eliminating discharges to the stormwater conveyance system from spills, dumping, or disposal of solid or liquid waste other than stormwater; and by preventing, eliminating or reducing pollutants in urban stormwater discharges to the maximum extent practicable. Article 5 of Chapter 22 requires all subsurface sewage disposal units and systems to be designed, placed and maintained in accordance with the rules and regulations of the County of San Diego. The County Department of Environmental Health (DEH) is the primary agency charged with regulating the design, construction, and maintenance of septic tanks, leach lines, seepage pits, and alternative onsite wastewater treatment systems throughout the County through a delegation from the San Diego RWQCB. The purpose of the industrial water regulations (Article 8) is to provide for the maximum possible beneficial public use of the City's wastewater collection and treatment facilities through adequate regulations and permit requirements governing nonresidential discharges, to provide

for equitable distribution of the City's costs, and to provide procedures for complying with requirements placed upon the City by other regulatory agencies.

City of Escondido Local Drainage and Sanitary Sewer Fees

Article 18D of Chapter 6 of the Municipal Code establishes the local drainage and sanitary sewer fees for the City. This article is adopted under the authority granted to the City to impose conditions for the payment of fees for purposes of transferring the actual or estimated costs of constructing planned drainage facilities and sanitary sewer facilities for local sanitary sewer areas under the provisions of Section 66483 of the California Government Code, Section 32-206.01.C of the Subdivision Code and judicial decisions.

City of Escondido Water Conservation Plan

Article 5 of Chapter 31 of the Municipal Code establishes the Water Conservation Plan for the City. The objectives of the plan are to: 1) prevent water supply shortages through aggressive and effective water management programs such as water conservation, water education and use restrictions; 2) minimize the impact of a water supply shortage on the City's population and economy; 3) provide first for public health and fire protection and other essential services, second for the economic health of the City, and third for other uses of water; and 4) ensure that water users who have implemented exemplary conservation practices during normal year hydrology and wet year hydrology are not disadvantaged by the plan during shortages. The Water Conservation Plan establishes water use restrictions and measures, water shortage response levels and planned response in the event of sudden catastrophic water supply shortage.

City of Escondido Water Conservation Program Ordinance 91-12

Water Conservation Program Ordinance 91-12, adopted in 1991, developed a seven stage rationing plan to invoke during declared water shortages. The rationing plan includes voluntary and mandatory rationing, depending on the causes, severity, and anticipated duration of the water supply shortage. Stage 1 is to be observed under normal conditions and Stage 7 would be applied under worst-case conditions. The Water Conservation Program Ordinance describes each water supply shortage stage in detail. All stages are designed to increase public awareness of a pending or actual emergency and allow customers to adjust water use accordingly. Water conservation efforts are closely coordinated with the SDCWA and its member agencies, and is a priority in water use planning.

City of Escondido Water Reclamation Plan

Article 6 of Chapter 31 of the Municipal Code establishes that it is the policy of the City that reclaimed water shall be used within the jurisdiction wherever its use is economically justified, financially and technically feasible, and consistent with legal requirements, preservation of public health, safety and welfare, and the environment. This Article establishes that, as appropriate, the City may mandate construction of reclaimed water distribution systems or other facilities in new and existing developments for current or future reclaimed water use as a condition of any development approval or continued water service if future reclamation facilities could adequately serve the development.

County of San Diego Integrated Waste Management Plan

The County of San Diego IWMP was adopted in 1996. The IWMP discusses the need for a reduction in solid waste and includes a Source Reduction and Recycling Element, Household Hazardous Waste Element, Non-Disposal Facility Element, Countywide Siting Element, and the Countywide Summary Plan. The Countywide Siting Element of the 1996 IWMP was updated in 2005, as required by the IWMA. It provides a description of the facilities and strategies to provide adequate capacity for the disposal of solid waste within the County, including the incorporated cities, over the next 15 years, including alternatives such as additional waste diversion programs and waste export. The Element presents a strategy to assist local governments and private industry in planning for integrated waste management and the siting of solid waste disposal facilities. The goals and policies listed in the Countywide Siting Element are intended to assist all jurisdictions within the County, including Escondido, to plan and implement a solid waste management program.

Sewer System Management Plan and Sewer Overflow Response Plan

The City's Sewer System Management Plan (SSMP) and Sewer Overflow Response Plan (SORP) address the standards for operation and maintenance of the City 's wastewater collection system. The SSMP addresses goals and organization of personnel for the operation and maintenance of the sewerage system in addition to major issues in terms of sewer overflow prevention. The SORP is designed to assure that every report of a sewer spill is immediately dispatched to the appropriate City crews so that the impacts of the overflow can be minimized. The SORP also includes provisions to assure that impacted surface waters are posted for public health and safety pursuant to the directions provided by County DEH and that notifications are made to the appropriate City and regional authorities. The SORP provides a guideline for collection system, maintenance, and plant operations personnel. The SORP serves as the emergency procedure guideline in the event of a sewer overflow.

County of San Diego Uniform Sewer Ordinance

The County of San Diego Uniform Sewer Ordinance (USO) regulates sewage collection and treatment systems within the County's jurisdiction. The ordinance prohibits any connection between a sewer service lateral and any building sewer upon or within private property without a permit from the County. A Wastewater Discharge permit must also be obtained before the connection can be made. Any such connection must be made to the sewer prior to the installation of any plumbing fixtures discharging into the building sewer.

4.17.3 Analysis of Project Impacts and Determination of Significance

4.17.3.1 Issue 1: Wastewater Treatment Requirements

Guidelines for Determination of Significance

Based on Appendix G of the CEQA Guidelines and existing City policies and regulations, the proposed project would result in a significant impact if it would exceed the wastewater treatment requirements of the San Diego RWQCB.

Impact Analysis

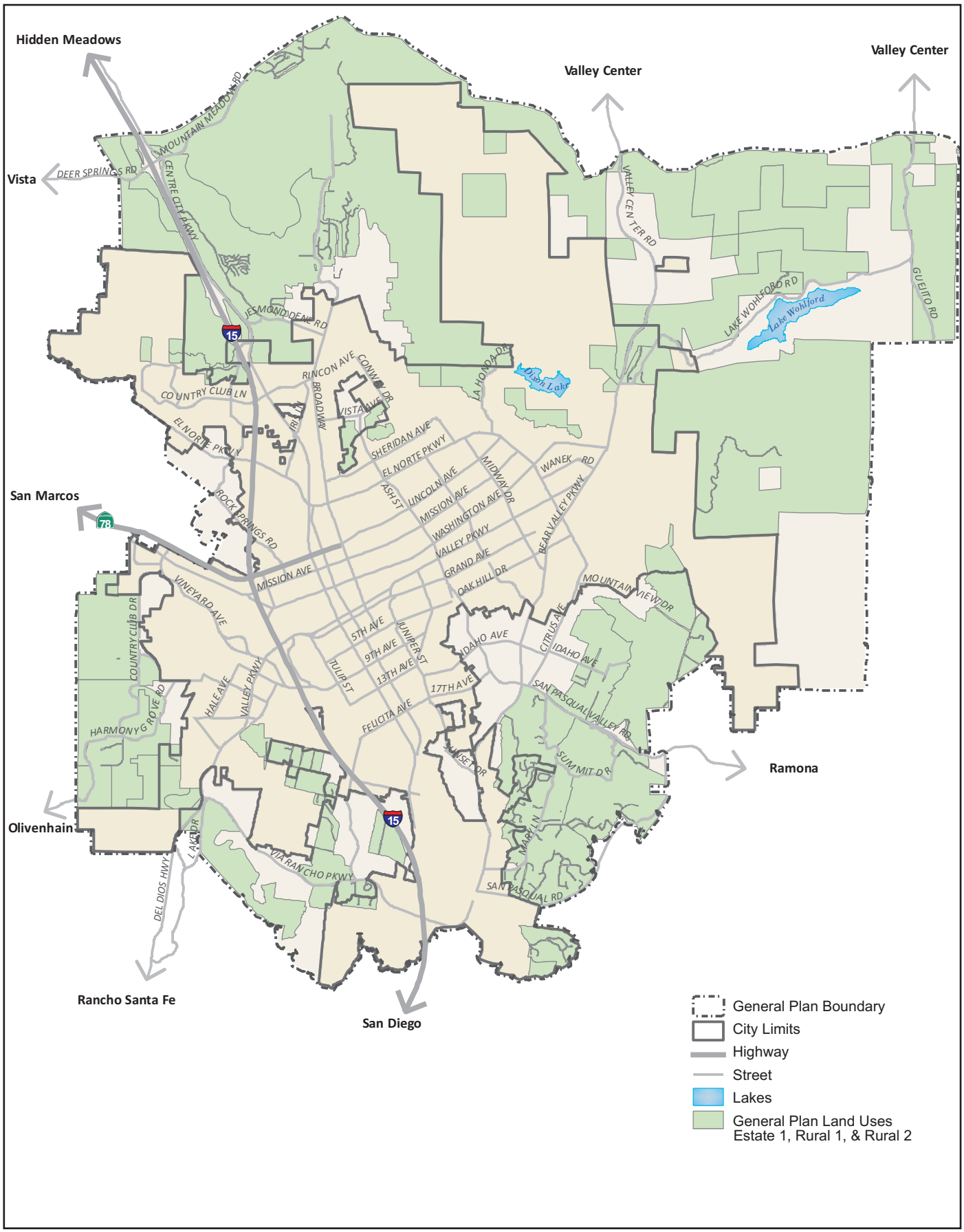
Growth under the proposed Downtown Specific Plan Update would be consistent with the growth identified for the General Plan Update; therefore, the following analysis pertains to both the General Plan Update and the Downtown Specific Plan Update. Impacts related to implementation of the E-CAP are discussed separately below.

General Plan Update and Downtown Specific Plan Update

Wastewater treatment activities within the General Plan Update planning area are under the control of the San Diego RWQCB. The San Diego RWQCB regulates wastewater discharge in the majority of San Diego County. Implementation of the General Plan Update would allow for development to occur in some undeveloped areas of the City that do not presently contain existing wastewater infrastructure and services. The demand for wastewater treatment capacity would potentially increase upon implementation of the General Plan Update land uses from new developments that require wastewater service, such as residential, commercial, office and industrial. An increase in wastewater demand may require the need for new or expanded facilities to be constructed in order to meet the demand of the General Plan Update. In order to be permitted, new facilities would be required to meet the wastewater treatment requirements for the San Diego RWQCB. However, if the demand for wastewater treatment services increased at a rate disproportionate to capabilities of wastewater treatment facilities, a violation in wastewater treatment standards would occur.

For example, under existing conditions, study area EL-6 is primarily vacant and underdeveloped. At buildout of the General Plan Update, the EL-6 study area would result in a substantial increase in office square feet (+152,000) and industrial square feet (+1,364,000) (refer to Table 3-4, General Plan Update Buildout Conditions, in Chapter 3, Project Description). Development of these land uses would require the provision of wastewater service. According to EWWD and VWD, a large percentage of the existing wastewater infrastructure was designed and constructed prior to the existing General Plan Update and would not accommodate the growth anticipated under buildout of the General Plan Update (ESD 2011, VWD 2011). Therefore, buildout of the General Plan Update would potentially require the expansion of the existing HARRF facility or the construction of a new wastewater treatment facility to serve the growth anticipated in the proposed project area. A violation in wastewater treatment standards would occur if the proposed land uses are developed and connected to the existing wastewater system without an appropriate expansion of the HARRF or other wastewater facility. Therefore, the General Plan Update and Downtown Specific Plan Update would have the potential to result in a significant impact related to violations in wastewater treatment requirements.

Additionally, some development allowable under the proposed General Plan Update would potentially require the installation of septic systems. Figure 4.17-3, Future Septic System Areas, identifies areas within the General Plan Update planning area boundary that would potentially require the installation of septic systems. The majority of areas that would potentially require septic systems are located along the periphery of the proposed project area, primarily within unincorporated areas of the County. Any septic system constructed within the City would be subject to Article 5 of Chapter 22 of the Municipal Code, which requires all subsurface sewage disposal units and systems to be designed, placed and maintained in accordance with the rules and regulations of the County of San Diego. As stated in the County of San Diego General Plan Update (County 2011), any septic system located in the unincorporated County has the potential to impair water quality.



Source: City of Escondido 2011

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FUTURE SEPTIC SYSTEM AREAS
FIGURE 4.17-3

A groundwater study for the County of San Diego General Plan Update found that under soil conditions conducive for successful leach fields for septic tanks, 90 to 99 percent of leachate from leach fields reached the water table. This finding indicates that if a septic system contains harmful constituents, there is a high probability that these contaminants will reach the groundwater table and impair water quality. To address this issue, the San Diego RWQCB has issued a waiver of waste discharge requirements for septic systems and delegated oversight to County DEH, who is responsible for ensuring that unincorporated County septic systems are properly sited and installed. County DEH is also responsible for ensuring septic systems within the City of Escondido are properly sited and installed. Under a waiver of waste discharge requirements, leachate from a properly sited and installed septic system may still reach the groundwater table, but this would not be considered a violation of water quality standards if the septic system meets the requirements of the waiver. In this event, a violation of water quality standards would not occur but the septic system would still have the potential to impair water quality.

Escondido Climate Action Plan

The proposed E-CAP involves implementation of several reduction measures that would reduce greenhouse gas (GHG) emissions in the proposed project area. GHG reduction measures are not anticipated to result in a significant increase in wastewater generation as most of the reduction measures involve modification of existing structures and facilities that already have wastewater service (e.g., R2-E5, Existing Residential Retrofits and R2-E6, Existing Commercial Retrofits). However, future GHG reduction measures may involve the construction of new restrooms, bicycle kiosks, and facilities for recreation trails (R2-T2, Bicycle Master Plan) which may result in an additional demand for wastewater services. However, the additional demand for wastewater treatment from implementation of E-CAP measures would be minimal.

Federal, State and Local Regulations and Existing Regulatory Processes

Numerous federal, state and local regulations exist that would reduce the potential for the General Plan Update and Downtown Specific Plan Update to exceed the wastewater treatment requirements of the San Diego RWQCB. These include the: 1) Federal Water Pollution Control Act, which regulates discharges of pollutants into waters of the U.S.; 2) California Water Code, which controls almost all considerations of water and its use; 3) Porter-Cologne Water Quality Control Act, which controls polluted discharges into state waters; 4) Water Conservation Projects Act, which encourages local agencies to implement potential water conservation and reclamation projects; 5) City of Escondido Water Reclamation Plan, which promotes the use of reclaimed water; 6) Escondido Local Drainage and Sanitary Sewer Fees (Municipal Code Chapter 6), which establish sewer fees; and 7) Escondido's SSMP and SORP, which implement standards for the operation of wastewater systems.

SB 244 requires the evaluation of wastewater needs and deficiencies for unincorporated neighborhoods within the City's SOI. Unincorporated communities within the City's SOI are identified in Figure 3-5, Unincorporated Communities, in Chapter 3, Project Description. Wastewater service is provided by private septic systems in the following unincorporated neighborhoods: Eden Valley and Harmony Grove; Felicita Park and Lake Hodges; Citrus Valley; Lake Wohlford; Jesmond Dene; and Lehner Valley. The Rock Springs Road neighborhood is provided wastewater service by both VWD and individual septic systems. The project area for the General Plan Update encompasses the unincorporated communities within the City's SOI. The analysis provided above evaluates if implementation of the proposed project, including future annexation and development within the unincorporated neighborhoods, would exceed the

wastewater treatment requirements of the San Diego RWQCB. Therefore, the proposed project complies with the requirements of SB 244 and provides an evaluation of the present and probable wastewater treatment requirements for unincorporated neighborhoods.

Proposed General Plan Update Policies

The General Plan Update contains several policies in the Economic Prosperity Element, Growth Management Element and Mobility and Infrastructure Element that relate to wastewater treatment requirements. These policies are intended to assure that wastewater treatment requirements are not violated.

Within the Economic Prosperity Element, Minimizing Infrastructure Impediments Policies 9.1, 9.2 and 9.3 require the City to plan for and coordinate sufficient wastewater infrastructure; work with agencies to develop and implement infrastructure improvements; and identify ways to obtain funding for infrastructure improvements.
Within the Growth Management Element, Public Facility Master Plan Policies 2.1 and 2.2 require coordination of adopted growth forecasts and quality of life thresholds with infrastructure planning. Public Facility Financing Policies 3.1, 3.2 and 3.3 identify strategies for financing infrastructure improvements in a timely manner, such as updating development impact fees, conducting fiscal impact analysis and using development agreements. Public Facility Phasing Policies 4.1 and 4.2 require facility master plans to plan for phased and interim improvements; and for infrastructure improvements to minimize disruption to existing residents. Growth Management Monitoring Policies 6.1, 6.2 and 6.3 require interagency coordination and monitoring; capital improvement planning efforts; and development proposals to minimize their environmental impacts.

Within the Mobility and Infrastructure Element, Wastewater System Policies 11.1 through 11.11 relate specifically to wastewater treatment services. Wastewater System Policy 11.1 requires regular updates to EWWD's Wastewater Master Plan; Wastewater System Policies 11.2 and 11.3 require HARRF to provide sufficient demand for existing and future growth specified in the General Plan Update. Wastewater System Policies 11.4, 11.5 and 11.6 outline strategies to obtain the financing required for wastewater infrastructure improvements. Wastewater System Policies 11.7, 11.8 and 11.9 require wastewater facilities to be adequately constructed to serve targeted, prioritized use areas and avoid sewage spills. Wastewater System Policies 11.10 and 11.11 focus on exploring ways to reduce the amount of wastewater requiring treatment and reduce costs and GHG emissions at HARRF.

Within the Land Use and Community Form Element, Environmental Review Policies 18.1 through 18.4 require project conformance with CEQA, the General Plan, facilities plans, and quality of life standards; mitigation of environmental impacts; and an update of environmental thresholds in sensitive areas.

Proposed Downtown Specific Plan Update Policies

The proposed Downtown Specific Plan Update does not include any policies related to wastewater treatment standards.

Proposed Escondido Climate Action Plan Reduction Measures

The proposed E-CAP contains a number of reduction measures that would promote water conservation, which would subsequently reduce wastewater treatment demand. Reduction Measure R2-W2, Water Conservation Strategies, aims to increase the use of recycled water and the incorporation of water

efficient fixtures, drought tolerant landscaping, permeable hardscapes, and onsite stormwater capture and reuse facilities. Reduction Measure R3-W1, Water Efficiency and Conservation Education, promotes water conservation strategies.

Summary

Buildout of the General Plan Update would potentially require the expansion of the existing HARRF facility or the construction of a new wastewater treatment facility to serve the growth anticipated in the proposed project area. Implementation of the E-CAP reduction strategies may also result in a small increase in wastewater treatment demand. If new or expanded wastewater facilities are not provided to serve new development under the General Plan Update, a violation in wastewater treatment standards would occur. However, multiple regulations and proposed General Plan Update policies relate specifically to the adequate and timely provision of wastewater treatment facilities so that wastewater standards are not violated. Further, the proposed E-CAP contains a number of reduction measures that would promote water conservation, which would subsequently reduce wastewater treatment demand. Implementation of proposed General Plan Update policies, E-CAP reduction measures and compliance with existing regulations would reduce impacts related to wastewater treatment requirements to below a level of significance. Therefore, the proposed project would not result in a significant impact associated with wastewater treatment requirements.

4.17.3.2 Issue 2: New Water and Wastewater Facilities

Guidelines for Determination of Significance

Based on Appendix G of the CEQA Guidelines and existing City policies and regulations, the proposed project would result in a significant impact if it would require or result in new water or wastewater treatment facilities or require the expansion of existing facilities, the construction of which could cause significant environmental effects.

Quality of life standard #5 relates to the City's wastewater system and requires the following: the City wastewater system shall have adequate conveyance pipelines, pumping, outfall and secondary treatment capacities to meet both normal and peak demands to avoid wastewater spills affecting stream courses and reservoirs, and shall provide capacity to treat a minimum of 250 gallons per day (gpd) for each residence on said system in urban areas or as established in the City's Sewer Master Plan.

Quality of life standard #10 relates to the City's water system and requires the following: the City shall maintain provisions for an adequate water supply, pipeline capacity and storage capacity to meet normal and emergency situations and shall have the capacity to provide a minimum of 540 gpd per household or as established by the City's Water Master Plan. Federal and state drinking water quality standards shall be maintained. The City shall continue efforts to implement water reclamation and water conservation programs.

Impact Analysis

Growth under the proposed Downtown Specific Plan Update would be consistent with the growth identified for the General Plan Update; therefore, the following analysis pertains to both the General

Plan Update and the Downtown Specific Plan Update. Impacts related to implementation of the E-CAP are discussed separately below.

General Plan Update and Downtown Specific Plan Update

The development of future land uses, as designated in the proposed General Plan Update, would result in the construction of residential, commercial, office and industrial structures, which would result in an increased need for water and wastewater treatment services. In order to meet the increased demand, new and expanded water and wastewater treatment facilities would potentially need to be constructed within the EWWD, RDD, VID, VCMWD and VWD service areas. As part of environmental analysis for the proposed project, the primary water and wastewater providers for the General Plan Update area (EWWD, RDD, VWD) were contacted to evaluate future facility needs under implementation of the General Plan Update. The following discussion is based upon the written responses from these agencies, which are included as Appendix G, Utility Providers Correspondence, of this EIR.

Escondido Water Division and Escondido Wastewater Division

A large percentage of the existing EWWD water, wastewater and recycled water infrastructure was designed and constructed prior to the preparation of the General Plan Update. As water, wastewater and recycled water infrastructure is upgraded or replaced, they are sized based on potential future land use and flow projections. These flow projections include development needs for water service as well as fire protection requirements. Under existing conditions, the existing and planned water, wastewater and recycled water infrastructure does not account for the growth anticipated to occur under buildout of the General Plan Update. EWWD predict that the proposed changes in land use under the General Plan Update would increase water and wastewater flow generation and treatment requirements and would require additional water, wastewater and recycled water infrastructure improvements to serve the General Plan Update planning area. Therefore, implementation of the General Plan Update and Downtown Specific Plan would require the construction of new EWWD water, wastewater and recycled water facilities. This would result in a significant impact.

Rincon Del Diablo Municipal Water District

Currently, RDD is in the process of planning for and constructing two water supply projects within or near the General Plan Update planning area. These projects include a new pipeline in Citracado Parkway (Escondido Research Technology Center (ERTC) North Specific Planning Area (SPA)) and an upgrade in the Johnston Road Pipeline (ERTC South SPA). According to RDD, these two proposed improvement projects would have adequate capacity to serve buildout of the General Plan Update within the RDD service area. Implementation of the proposed project would not require the expansion or construction of existing facilities, beyond those already planned for. RDD is also updating its Water Master Plan, which addresses infrastructure, supply and capacity. During this update, RDD has stated that it will incorporate the proposed land use and growth projections identified under the proposed General Plan Update. With incorporation of the General Plan Update growth projections into RDD's Water Master Plan Update, RDD would be able to adequately serve the buildout of the General Plan Update. Impacts would be less than significant.

Vallecitos Water District

VWD's 2008 Water, Wastewater and Recycled Water Master Plan identifies water and wastewater projects based on current adopted land use data, including the existing City of Escondido General Plan (1990). The 2008 Master Plan does not incorporate the land use and growth projections identified in the

proposed General Plan Update. Therefore, to adequately serve future development projects allowable under the General Plan Update, the construction or expansion of water or wastewater facilities would potentially be required that are not currently planned for by VWD. This would result in a significant impact.

Valley Center Municipal Water District and Vista Irrigation District

The development of future land uses, as designated in the proposed General Plan Update, would result in the construction of residential, commercial, office and industrial structures, which would result in an increased need for water facilities. VID maintains a Strategic Plan and a Potable Water Master Plan that identifies improvements to existing water facilities, including the demolition and replacement of existing reservoirs to meet future service needs. VCMWD maintains a Water Master Plan and a Sewer System Management Plan (2010) that identifies new, expanded or replacement facilities needed to meet future service area needs. In order to meet the increased demand, it is reasonable to assume that VID and VCMWD would require new and expanded water facilities to be constructed due to the fact that their current planning documents and infrastructure improvements do not account for the growth proposed under the General Plan Update. This would result in a significant impact.

San Diego Local Agency Formation Commission

In 2003, the San Diego LAFCO conducted a North County Inland Municipal Service Review (MSR) and SOI Update that evaluated the following water and wastewater agencies: EWWD, VCMWD, RDD, VWD and VID. The Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 requires the preparation and regular update of service reviews and SOIs for all local agencies. Service reviews are important information reports that assist LAFCO, affected agencies, and the public in coordinating the efficient provision of public services to support anticipated growth. SOIs are also important tools that provide guidance for LAFCO in the establishment of physical boundaries and service areas of cities and special districts.

The 2003 LAFCO MSR concluded that water and wastewater services provided by EWWD, VCMWD, RDD, VWD and VID are efficiently provided to serve the existing population. The MSR dealt with infrastructure needs and deficiencies; growth and population projections for the affected area; financing constraints and opportunities; cost avoidance opportunities; opportunities for rate restructuring; opportunities for shared facilities; government structure options, including advantages and disadvantages of consolidation or reorganization of service providers; evaluation of management efficiencies; and local accountability and governance. The 2003 LAFCO MSR also recommended that the Escondido SOI be updated and expanded to include property along its southeastern border (Rancho Vistamonte, Ferrick, Harwood, et al. properties). Since 2003, the Rancho Vistamonte, Ferrick and Harwood properties have been annexed into the City's jurisdictional boundary.

Future Facility Construction

The construction of any new or expanded water and/or wastewater facilities to serve new development occurring in designated areas under the proposed General Plan Update would have the potential to cause secondary environmental effects to air quality, biological resources, cultural resources, noise, hydrology and water quality or other environmental issues. The complexity of the environmental impacts is often a function of how extensive or complex the development is. For example, water and wastewater treatment plants require the construction of buildings and structures in addition to transmission lines. Any future water and/or wastewater treatment projects proposed to serve the

buildout of the General Plan Update would be required to conduct environmental review pursuant to CEQA prior to approval. CEQA requires proposed projects to provide detailed information on the potentially significant environmental effects they are likely to have, list ways in which the significant environmental effects would be minimized, and identify alternatives that would reduce or avoid the significant impacts identified for the project. To the extent feasible, significant environmental impacts would be mitigated to below a level of significance, consistent with CEQA.

Escondido Climate Action Plan

The reduction measures proposed in the E-CAP are not anticipated to result in a significant increase in water or wastewater treatment demand as most of the reduction measures involve modification of existing structures and facilities that already have water and wastewater service and are served by existing treatment facilities. However, some reduction measures may involve the construction of new restrooms, bicycle kiosks, and facilities for recreation trails (R2-T2, Bicycle Master Plan), which would result in increased demand for potable water and wastewater services. Although it is anticipated the water demand and wastewater generation attributed to the E-CAP reduction measures would be minor in nature, implementation of these measures could contribute to the need for new or expanded water or wastewater treatment facilities.

Federal, State and Local Regulations and Existing Regulatory Processes

Numerous federal, state and local regulations exist which regulate environmental impacts related to water and wastewater treatment facilities. These include: 1) SDWA, which sets national drinking water standards for public water systems; 2) Federal Water Pollution Control Act, which regulates discharges of pollutants into waters of the U.S.; 3) California Water Code, which controls almost all considerations of water and its use; 4) California Drinking Water Standards, which establishes state drinking water standards; 5) Porter-Cologne Water Quality Control Act, which controls polluted discharges into state waters; 6) Water Conservation Projects Act, which encourages local agencies to implement potential water conservation and reclamation projects; 7) USO, which regulates sewage collection and treatment systems; 8) City of Escondido Water Conservation Plan, which established water use restrictions and measures; 9) City of Escondido Water Reclamation Plan, which promotes the use of reclaimed water; 10) Escondido Local Drainage and Sanitary Sewer Fees (Escondido Municipal Code Chapter 6), which establish sewer fees; and 11) Escondido's SSMP and SORP, which implement standards for the operation of wastewater systems. Additionally, new water, wastewater and recycled water facilities would be subject to CEQA review as well as certain land use compatibility findings.

SB 244 requires the evaluation of water and wastewater needs and deficiencies for unincorporated neighborhoods within the City's SOI. Unincorporated communities within the City's SOI are identified in Figure 3-5, Unincorporated Communities, in Chapter 3, Project Description. Wastewater service is provided by private septic systems in the following unincorporated neighborhoods: Eden Valley and Harmony Grove; Felicita Park and Lake Hodges; Citrus Valley; Lake Wohlford; Jesmond Dene; and Lehner Valley. The Rock Springs Road neighborhood is provided wastewater service by both VWD and individual septic systems. Potable water service is provided to the Eden Valley and Harmony Grove neighborhoods by RDD; to the Lehner Valley neighborhood by EWWD; to the Lake Wohlford neighborhood by VCMWD; to the Citrus Valley, Felicita Park and Lake Hodges neighborhoods by EWWD and RDD; to the Rock Spring Road neighborhood by VWD and VID; and to the North Broadway and Jesmond Dene Neighborhoods by VWD, VCMWD, RDD and EWWD. The project area for the General Plan Update encompasses the unincorporated communities within the City's SOI. The analysis provided above evaluates if

implementation of the proposed project, including future annexation and development within the unincorporated neighborhoods, would require or result in new water or wastewater treatment facilities or require the expansion of existing facilities, the construction of which could cause significant environmental effects. Therefore, the proposed project complies with the requirements of SB 244 and evaluates the present and probable water and wastewater treatment needs and deficiencies for unincorporated neighborhoods within the City's SOI.

Proposed General Plan Update Policies

The General Plan Update contains several policies within the Growth Management Element, Mobility and Infrastructure Element and Land Use and Community Form Element that relate to the adequate provision of water, wastewater and recycled water facilities. These policies are intended to assure that new facilities are constructed only when needed and do not result in excessive environmental impacts. The proposed General Plan Update policies identified above in Section 4.17.3.1, Issue 1: Wastewater Treatment Requirements, also apply to this issue.

In the Mobility and Infrastructure Element, Water System Policies 10.1 through 10.14 relate specifically to potable water infrastructure. Policies 10.1 through 10.4 require regular updates of the Water Master Plan; maintenance of an adequate water supply, treatment, and distribution system to meet normal and emergency situations; and design of the water supply and distribution system, including EVWTP, to address the General Plan Update land use projections. Water System Policies 10.5 and 10.6 address financing of new water infrastructure and require new development to provide adequate water facilities or finance the costs of improvements. Water System Policies 10.7 through 10.14 require the proper construction of new water infrastructure; improvements to target areas; reduced costs and GHG emissions; adherence to federal and state drinking water quality standards; implementation of water conservation programs; incorporation of water conservation techniques into building and site design; increased recycled water use; and education about water conservation and reclamation.

Proposed Downtown Specific Plan Update Policies

The proposed Downtown Specific Plan Update does not include any policies related to the construction or expansion of water or wastewater treatment facilities.

Proposed Escondido Climate Action Plan Reduction Measures

The proposed E-CAP reduction measures identified above in Section 4.17.3.1, Issue 1: Wastewater Treatment Requirements, also apply to this issue. Additionally, reduction measure R2-W3, Increased Recycled Water Use, promotes development that incorporates the use of recycled water.

Summary

The development of future land uses as designated in the proposed General Plan Update and Downtown Specific Plan Update would have the potential to require or result in the construction of new or expanded water, wastewater or recycled water facilities, the construction of which would have the potential to cause significant environmental effects, such as air quality, biological resources, cultural resources, noise, and hydrology and water quality. Additionally, the E-CAP measures may contribute to increased demand for water and wastewater services, which could ultimately require the construction or expansion of new water, wastewater or recycled water facilities. CEQA review would be required in the event new water, wastewater or recycled water facilities are constructed or expanded, which would

identify and reduce any significant impacts associated with the new facilities. Additionally, multiple General Plan Update policies are proposed which would reduce the need to construct new water, wastewater, or recycled water facilities and reduce associated environmental impacts. Further, the proposed E-CAP contains a number of reduction measures that would promote water conservation, which would subsequently reduce the demand for water and wastewater and their associated treatment facilities. Implementation of proposed General Plan Update policies, E-CAP reduction measures and compliance with existing regulations would reduce the proposed project's impacts related to the expansion or construction of new water, wastewater or recycled water facilities to a less than significant level.

4.17.3.3 Issue 3: Sufficient Stormwater Drainage Facilities

Guidelines for Determination of Significance

Based on Appendix G of the CEQA Guidelines and existing City policies and regulations, the proposed project would result in a significant impact if it would result in new stormwater drainage facilities or the expansion of existing facilities, the construction of which could cause significant environmental effects.

Impact Analysis

Growth under the proposed Downtown Specific Plan Update would be consistent with the growth identified for the General Plan Update; therefore, the following analysis pertains to both the General Plan Update and the Downtown Specific Plan Update. Impacts related to implementation of the E-CAP are discussed separately below.

General Plan Update and Downtown Specific Plan Update

The development of new residential, commercial, office and industrial land uses consistent with the land use designations proposed in the General Plan Update would increase the amount of impermeable surfaces within the General Plan Update area. Examples of new impermeable surfaces include buildings, rooftops, parking lots, roads and driveways. An increase in impermeable surfaces would increase stormwater runoff within the General Plan Update planning area and would potentially result in a volume of runoff that would exceed the capacity of existing stormwater drainage systems. This would require the construction of new or expanded stormwater facilities to adequately convey the increased runoff flows. Pursuant to CEQA, projects in the General Plan Update planning area involving the construction of stormwater drainage facilities would be required to conduct an environmental review prior to approval. CEQA requires proposed projects to provide detailed information on the potentially significant environmental effects they are likely to have, list ways in which the significant environmental effects would be minimized, and identify alternatives that would reduce or avoid the significant impacts identified for the project. To the extent feasible, significant environmental impacts would be mitigated to below a level of significance.

Escondido Climate Action Plan

Implementation of some E-CAP reduction measures, such as R2-T3, Transit Improvements, would result in the construction of impervious surfaces, which may alter existing drainage patterns and increase stormwater runoff. This would potentially require the construction of new or expanded stormwater facilities to adequately convey the increased runoff flows. However, similar to projects proposed under

the General Plan Update and Downtown Specific Plan Update, projects proposed by the E-CAP would be required to conduct an environmental review prior to approval, consistent with CEQA. As part of this process, significant environmental impacts would be mitigated to below a level of significance, to the extent feasible.

Federal, State and Local Regulations and Existing Regulatory Processes

Numerous federal, state and local regulations exist that regulate environmental impacts related to stormwater drainage facilities and stormwater discharges. These include the following: 1) Federal Water Pollution Control Act, which regulates discharges of pollutants into waters of the U.S.; 2) California Water Code, which controls almost all considerations of water and its use; and the 3) Porter-Cologne Water Quality Control Act, which controls polluted discharges into state waters.

SB 244 requires the evaluation of stormwater drainage needs and deficiencies for unincorporated neighborhoods within the City's SOI. Unincorporated communities within the City's SOI are identified in Figure 3-5, Unincorporated Communities, in Chapter 3, Project Description. The unincorporated neighborhoods within the City's SOI have no formal stormwater drainage systems; with the exception of the Rock Springs Road neighborhood which is served by a combination of stormwater drains in suburban tracts and open culverts in more rural/underdeveloped areas. The project area for the General Plan Update encompasses the unincorporated communities within the City's SOI. The analysis provided above evaluates if implementation of the proposed project, including future annexation and development within the unincorporated neighborhoods, would result in new stormwater drainage facilities or the expansion of existing facilities, the construction of which could cause significant environmental effects. Therefore, the proposed project complies with the requirements of SB 244 and evaluates the present and probable stormwater drainage facility needs and deficiencies for unincorporated neighborhoods within the City's SOI.

Proposed General Plan Update Policies

The General Plan Update contains several policies within the Mobility and Infrastructure Element that promote the provision of sufficient stormwater drainage facilities throughout the General Plan Update planning area. Storm Drainage Policies 12.1 and 12.2 require regular updates of the Master Drainage Plan and correction of identified storm drain deficiencies. Storm Drainage Policies 12.3 and 12.4 require adequate financing of new facilities from levy drainage fees or development fees. Storm Drainage Policy 12.5 requires new development to demonstrate no net increase in stormwater runoff and compliance with adopted stormwater plans. Storm Drainage Policies 12.6 and 12.7 require minimization of impervious surfaces and stormwater runoff contaminants. Storm Drainage Policies 12.8 through 12.12 require the incorporation of appropriate BMPs; consideration of nonstructural flood protection; use of joint stormwater drainage facilities; maintenance of stormwater facilities; and design of storm drain facilities to reduce maintenance needs. Storm Drainage Policy 12.13 requires the design and maintenance of detention facilities to be environmentally sustainable and compatible.

Within the Land Use and Community Form Element, Environmental Review Policies 18.1 through 18.4 require project conformance with CEQA, the General Plan, facilities plans, quality of life standards; mitigation of environmental impacts; and an update of environmental thresholds in sensitive areas.

Proposed Downtown Specific Plan Update Policies

The proposed Downtown Specific Plan Update does not include any policies related to stormwater drainage facilities.

Proposed Escondido Climate Action Plan Reduction Measures

Reduction Measure R2-W2, Water Conservation Strategies, aims to increase the use of onsite stormwater capture and reuse facilities, which would reduce the need for new or expanded offsite stormwater systems.

Summary

The development of future land uses as designated in the proposed General Plan Update and Downtown Specific Plan Update would have the potential to increase the amount of impermeable surfaces within the General Plan Update area, thereby increasing stormwater runoff. Implementation of some E-CAP measures may also increase impervious surfaces and associated stormwater runoff. The increase in stormwater runoff would require the construction or expansion of new stormwater facilities to handle the increased runoff flows, which would have the potential to result in significant environmental impacts. The construction of new stormwater facilities would be subject to CEQA review, which would minimize associated environmental impacts. Additionally, multiple General Plan Update policies and one E-CAP measure are proposed that would reduce the need to construct new stormwater drainage facilities and reduce associated environmental impacts. Implementation of these General Plan Update policies, the E-CAP reduction measure and compliance with existing regulations would reduce impacts related to the construction of new or expanded stormwater facilities to below a level of significance. Therefore, the proposed project would not result in a significant impact associated with new or expanded stormwater drainage facilities.

4.17.3.4 Issue 4: Adequate Water Supplies

Guidelines for Determination of Significance

Based on Appendix G of the CEQA Guidelines and existing City policies and regulations, the proposed project would result in a significant impact if it would: 1) result in a demand for water that exceeds existing entitlements and resources, or necessitates new or expanded entitlements; or 2) 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 (for example, 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 are granted).

Impact Analysis

Growth under the proposed Downtown Specific Plan Update would be consistent with the growth identified for the General Plan Update; therefore, the following analysis pertains to both the General Plan Update and the Downtown Specific Plan Update. Impacts related to implementation of the E-CAP are discussed separately below.

General Plan Update and Downtown Specific Plan Update

Any increase in population, housing units, and other development within the General Plan Update area would result in an increase in the demand for potable water service. As population, housing units and other development increases, so does the demand for potable water service. Therefore, regional water supply planning is needed to ensure that available water supplies meet increasing demand as the region grows. In 1992, SDCWA and SANDAG entered into an agreement to ensure ongoing communication on future growth and water supply planning. This agreement called for SDCWA to use SANDAG's most recent growth forecast for planning purposes and for water supply to be a component of the region's overall growth management strategy. SANDAG's growth forecast is based on the adopted land use policies of the incorporated cities and the unincorporated County of San Diego. Because SDCWA does not have land use approval authority, it can neither directly cause nor prevent growth. How and where development occurs in the SDCWA service area is decided by the 18 incorporated cities and the County, which have local land use approval authority. SDCWA's job is to make sure water is available when it is needed.

SANDAG updates its growth forecast approximately every five years. Water districts update their demand forecasts and supply needs based on the most recent SANDAG forecast approximately every five years to coincide with preparation of their UWMPs. The planning documents upon which MWD, SDCWA, EWWD, VWD, VCMWD, VID and RDD rely on to secure and provide a sustainable long term supply of potable water to the City of Escondido, including UWMPs, IRPs and the Regional Water Facilities Master Plan, do not currently account for the growth proposed under the General Plan Update. In general, the 2010 UWMP growth forecasts are based upon the SANDAG 2050 regional growth forecast. The 2050 regional growth forecast is based upon the adopted land use plans of the 19 incorporated cities and the County of San Diego. Water supply and demand projections in the EWWD 2010 UWMP were based on a forecasted population of 154,584 persons in the year 2035. This population projection assumes 55,416 fewer persons than are identified in year 2035 by the General Plan Update (up to 210,000 persons). Therefore, the proposed project would result in increases in population, housing growth and other development in areas not accounted for in the most current MWD, SDCWA, EWWD, VWD, VCMWD, VID and RDD water planning documents.

The following sections describe the water supply and demand projections identified in the MWD, SDCWA, EWWD, VWD, VCMWD, VID and RDD UWMPs, water supply source planning and the environmental impacts associated with acquiring new water supply sources.

Urban Water Management Plans

The most recent UWMPs are from 2010. Under the Urban Water Management Act, every URMP must include an assessment of water supply reliability. The water supply and demand assessment must compare the total projected water use with the expected water supply over the next 20 years in five-year increments. This reliability assessment is required for normal, single dry and multiple dry water years.

In the 2010 UWMP, MWD determined that adequate water supplies would be available to serve existing service areas under normal water year, single dry water year and multiple dry water year conditions through the year 2035. SDCWA's 2010 UWMP determined that adequate water supplies would be available to serve existing service areas under normal water years and single dry water years; however, under multiple dry water years, some level of water supply shortages could occur. SDCWA water

shortages in the near term are expected to occur because the Carlsbad seawater desalination project is not yet operational and IID transfer supplies have not reached maximum deliveries. SDCWA shortages in the long term are expected to occur primarily due to increasing water demand from growth in the region.

The 2010 UWMPs for RDD and VWD are consistent with SDCWA's 2010 UWMP projections, indicating adequate supply during normal water years and single dry water years, with potential shortages during multiple dry water years. The 2010 UWMPs for VID, VCMWD and EWWD are consistent with MWD's 2010 UWMP projections and determine that adequate water supplies would be available to serve existing service areas under normal, single dry and multiple dry water year conditions through the year 2035. Water shortages identified in the SDCWA, RDD and VWD UWMPs would be addressed through various management actions by each individual water agency, such as the implementation of extensive conservation measures.

Implementation of the General Plan Update would increase population, housing units and other development within the General Plan Update planning area. The 2010 UWMPs for SDCWA, VWD and RDD predict potable water shortages under multiple-dry water years. Additionally, none of the 2010 UWMPs for MWD, SDCWA, EWWD, VWD, VID, VCMWD or RDD account for the growth anticipated under implementation of the General Plan Update. Therefore, implementation of the General Plan Update would result in a demand for water that may exceed existing entitlements and resources, or necessitate new or expanded entitlements. This would result in a significant impact.

Groundwater Recharge

Within the General Plan Update area, groundwater sources occur in the form of privately owned and maintained wells. None of water agencies that provide service to the General Plan Update area use groundwater resources for potable water supply. Therefore, implementation of the General Plan Update would not substantially deplete groundwater supplies from potable water extraction in a manner that would result in a lowering of the local groundwater table. Refer to Section 4.9, Hydrology and Water Quality, for a discussion of the potential for the General Plan Update to interfere substantially with groundwater recharge.

Water Supply Source Planning

The following discussion focuses on the water supply planning strategies for MWD and SDCWA, the water supply agencies that provide the majority of imported water for EWWD, VWD, VID, VCMWD and RDD.

Metropolitan Water District. MWD's long term strategy for a sustainable water supply is outlined in its 2010 IRP. The IRP identifies a mix of resources (imported and local) that would provide 100 percent reliability for full-service demands. This mix of resources includes implementing conservation measures, local supplies, SWP supplies, Colorado River supplies, groundwater banking, and water transfers through the year 2030. In addition, MWD is active in increasing local supplies through sponsoring recycling, conservation, groundwater recovery, and desalination efforts. MWD's 2010 IRP, accounted for the unexpected climatic and legal factors and the regulatory constraints (i.e., cutbacks) on pumping of MWD water supplies from the SWP that had occurred since the adoption of the 2004 IRP.

San Diego County Water Authority. Within its Regional Water Facilities Master Plan, SDCWA has determined that the best way to ensure a reliable water supply for the future is to diversify its water supply portfolio. Diversification includes water that originates locally, such as recycled water and desalinated seawater. SDCWA selected seawater desalination as the preferred method for providing a new, safe and reliable water supply for the region. However, the development of desalination facilities has been delayed due to issues associated with the permitting process. In addition to pursuing the construction of desalination facilities, the SDCWA has reduced the severity of cutbacks from MWD by developing additional water supplies as part of its long term water supply diversification strategy. SDCWA has a water transfer agreement with the IID (beginning in 1998) that will last up to 75 years, as well as a 110-year agreement (beginning in 2003) that brings water conserved by canal-lining projects in the Imperial Valley to San Diego County. SDCWA has also been working with its member agencies to develop greater local water supplies, from sources such as groundwater and recycled water. An integral assumption in the SDCWA's water demand projections is that water conservation will increase significantly, more than tripling by 2020. Increased water recycling and increased use of groundwater also play important roles in making sure SDCWA is able to provide enough water in the future (SDCWA 2009). Although SDCWA is exploring multiple venues for providing adequate water supplies in the future, unexpected factors including difficulty permitting desalination plants and record drought conditions increase the uncertainty that projected supplies identified in SDCWA planning documents will meet future demand.

Alternative Water Supplies

Long term water conservation strategies occur on both local and regional levels and are outlined in respective UWMPs, IRPs, Drought Management Plans and Regional IRWMPs. Additionally, in 2008 Governor Schwarzenegger created a new state water conservation goal to achieve a 20 percent reduction in per capita water use statewide by 2020. In the event that preferred water supply projects do not come to fruition, alternative water supply projects are identified within water planning documents. For example, within the SDCWA Regional Water Facilities Master Plan, five reasonably foreseeable alternatives were evaluated, in addition to the preferred method for obtaining future water supply (seawater desalination). The five alternatives to seawater desalination include: 1) conveyance of supplies from the north or MWD with Pipeline No. 6; 2) conveyance of supplies from the east or Regional Colorado River Conveyance Facility (RCRCF); 3) increase local supply above planned yield through a combination of recycled water and groundwater projects; 4) increase water conservation; and 5) no project.

Environmental Impacts of Water Supply Sources

To evaluate the potential impacts of the methods that may be used to obtain additional water supply, this EIR document hereby incorporates by reference the Final EIR for the SDCWA Regional Water Facilities Master Plan dated November 2003 (SCH No. 2003021052). This document can be found on SDCWA's website at www.sdcwa.org and is summarized below.

The EIR for the SDCWA Regional Water Facilities Master Plan evaluates a program of water supply projects. The Master Plan does not describe every proposed facility in detail, but describes the types of facilities needed to meet the region's future water needs. For example, while the Master Plan describes a proposal to develop seawater desalination as a new regional water supply, it does not provide an in-depth analysis of any specific seawater desalination project.

The EIR for the SDCWA Regional Water Facilities Master Plan determined that multiple environmental impacts associated with the construction of water supply projects would potentially occur. Of all the potential methods to ensure additional water supply, water conservation is the only approach which would not result in adverse environmental impacts. Other water supply projects, including desalination projects, the conveyance of supplies from the north, east or west, or increasing local supply above planned yield have the potential to result in significant environmental impacts. Potentially significant environmental impacts from implementation of proposed SDCWA water supply projects are associated with the following environmental issues: land use, water resources, biological resources, transportation and traffic, noise, air quality, utilities and public services, aesthetics, geology and soils, cultural resources, public safety and hazardous materials, paleontological resources, agricultural resources, and recreation. The Final EIR for the SDCWA Regional Water Facilities Master Plan determined that mitigation proposed in the document would reduce all potentially significant environmental impacts to a level that is less than significant (SDCWA 2003). Therefore, the water supply projects contained in the SDCWA Regional Water Facilities Master Plan, which would provide additional future water supply to EWWD, VWD, VID, VCMWD and RDD, have been adequately evaluated and mitigated on a programmatic level, consistent with CEQA.

On a project level, any future facility development of a specific water supply project in the General Plan Update area would be required to conduct environmental review pursuant to CEQA (and/or NEPA if a federal agency is involved) prior to approval. CEQA and NEPA require detailed information to be provided regarding the potentially significant environmental effects that a proposed project is likely to have, list ways in which the significant environmental effects would be minimized, and identify alternatives that would reduce or avoid the significant impacts identified for the project. To the extent feasible, significant environmental impacts would be reduced to below a level of significance. Projects proposing the construction or expansion of water supply projects would be approved by the individual water districts and would not be subject to discretionary approval by the City, with the exception of projects constructed by EWWD which would be subject to discretionary approval by the City. Water districts are able to serve as their own lead agency under CEQA.

Escondido Climate Action Plan

Some reduction measures within the E-CAP may involve the construction of new restrooms, bicycle kiosks, and facilities for recreation trails (R2-T2, Bicycle Master Plan and R2-T3, Transit Improvements), which could result in a slight increase in demand for potable water.

Federal, State and Local Regulations and Existing Regulatory Processes

Numerous federal, state and local regulations exist to ensure adequate water supplies are available. These include the following: 1) California Water Code, which controls almost all considerations of water and its use; 2) SB 610, which requires water supply assessments for large projects within cities and counties; 3) SB 221, which requires proof of sufficient water supply for subdivision projects; 4) Urban Water Management Planning Act, which requires water suppliers ensure a reliable water supply; 5) Water Conservation Projects Act, which encourage local agencies to implement potential water conservation and reclamation projects; 6) City of Escondido Water Conservation Plan, which establishes water use restrictions and measures; 7) City of Escondido Water Reclamation Plan, which promotes the use of reclaimed water; 8) Escondido Local Drainage and Sanitary Sewer Fees (Escondido Municipal Code Chapter 6), which establishes sewer fees; and 9) Escondido's SSMP and SORP, which implement standards for the operation of wastewater systems.

SB 244 requires the evaluation of potable water needs and deficiencies for unincorporated neighborhoods within the City's SOI. Unincorporated communities within the City's SOI are identified in Figure 3-5, Unincorporated Communities, in Chapter 3, Project Description. Potable water service is provided to the Eden Valley and Harmony Grove neighborhoods by RDD; to the Lehner Valley neighborhood by EWWD; to the Lake Wohlford neighborhood by VCMWD; to the Citrus Valley neighborhood, Felicita Park neighborhood and Lake Hodges neighborhood by EWWD and RDD; to the Rock Spring Road neighborhood by VWD and VID; and to the North Broadway and Jesmond Dene neighborhoods by VWD, VCMWD, RDD and EWWD. The project area for the General Plan Update encompasses the unincorporated communities within the City's SOI. The analysis provided above evaluates if implementation of the proposed project, including future annexation and development within the unincorporated neighborhoods, would result in a demand for water that exceeds existing entitlements and resources, necessitates new or expanded entitlements, or substantially depletes groundwater supplies or recharge. Therefore, the proposed project complies with the requirements of SB 244 and evaluates the present and probable potable water needs and deficiencies for unincorporated neighborhoods within the City's SOI.

Proposed General Plan Update Policies

Multiple policies in the Mobility and Infrastructure Element of the General Plan Update relate to the provision of an adequate water supply. In the Mobility and Infrastructure Element, Water System Policies 10.1 through 10.14 relate specifically to potable water infrastructure. Policies 10.1 through 10.4 require regular updates of the Water Master Plan; maintenance of an adequate water supply, treatment, and distribution system to meet normal and emergency situations; and design of the water supply and distribution system, including EVWTP, to address the General Plan Update land use projections. Water System Policies 10.5 and 10.6 address financing of new water infrastructure and require new development to provide adequate water facilities or finance the costs of improvements. Water System Policies 10.7 through 10.14 require the proper construction of new water infrastructure; improvements to target areas; reduced costs and GHG emission; adherence to federal and state drinking water quality standards; implementation of water conservation programs; incorporation of water conservation techniques into building and site design; increased recycled water use; and education about water conservation and reclamation.

Within the Land Use and Community Form Element, Environmental Review Policies 18.1 through 18.4 require project conformance with CEQA, the General Plan, facilities plans, and quality of life standards; mitigation of environmental impacts; and an update of environmental thresholds in sensitive areas.

Proposed Downtown Specific Plan Update Policies

The proposed Downtown Specific Plan Update does not include policies related to adequate water supply.

Proposed Escondido Climate Action Plan Reduction Measures

The proposed E-CAP contains a number of reduction measures that would promote water conservation, which would subsequently reduce potable water demand. Reduction measure R2-W2, Water Conservation Strategies, aims to increase the use of recycled water and the incorporation of water efficient fixtures, drought tolerant landscaping, permeable hardscapes, and onsite stormwater capture and reuse facilities. Reduction measure R2-W3, Increased Recycled Water Use, promotes development

that incorporates the use of recycled water. Reduction measure R3-W1, Water Efficiency and Conservation Education, promotes water conservation strategies.

Summary

Implementation of the proposed General Plan Update and Downtown Specific Plan Update would result in an increase in housing units to accommodate planned population growth, which would increase demand for water provided by EWWD, VWD, VID, VCMWD and RDD. Implementation of the E-CAP may also result in a slight increase in water demand associated with the construction of transit-related facilities. Although multiple planning documents exist to ensure a reliable water supply is available for future growth, none of the 2010 UWMPs account for the growth proposed under the General Plan Update or Downtown Specific Plan Update. Additionally, the UWMPs of SDCWA, VWD and RDD predict water supply shortages during multiple dry water years until 2035. Although regulations, proposed General Plan Update policies and proposed E-CAP reduction measures would reduce water supply demand, they would not reduce demand to the extent that an adequate water supply would be assured. Therefore, implementation of the proposed project has the potential to result in a demand for water supply that exceeds existing entitlements and resources, or necessitates new or expanded entitlements. Impacts would be significant.

4.17.3.5 Issue 5: Adequate Wastewater Facilities

Guidelines for Determination of Significance

Based on Appendix G of the CEQA Guidelines and existing City policies and regulations, the proposed project would result in a significant impact if it would result in a determination by the wastewater provider which serves the planning area that it has inadequate capacity to service the projected demand in addition to the provider's existing commitments.

Impact Analysis

Growth under the proposed Downtown Specific Plan Update would be consistent with the growth identified for the General Plan Update; therefore, the following analysis pertains to both the General Plan Update and the Downtown Specific Plan Update. Impacts related to implementation of the E-CAP are discussed separately below.

General Plan Update and Downtown Specific Plan Update

The development of future land uses as designated in the proposed General Plan Update would result in increased demand on existing wastewater systems due to increased sewage flows from residential, commercial, office and industrial land uses. Wastewater service within the General Plan Update area is provided by EWWD and VWD. The potential for these providers to have inadequate capacity to service the demands of the General Plan Update are discussed below.

Escondido Wastewater Division

EWWD maintains a Wastewater Collections Master Plan that considers existing and proposed land uses as well as growth projections to evaluate system adequacy for wastewater service. Unit generation rates are established within the Wastewater Collections Master Plan and provide a guideline for planning and designing properly sized wastewater infrastructure and capacity. Within the Wastewater

Collections Master Plan, where deficiencies are determined, projects are recommended and priorities are established. According to written correspondence with EWWD, a large percentage of the existing wastewater infrastructure in the City's service area does not account for the growth identified in the General Plan Update nor does the existing Wastewater Collections Master Plan. However, the City is currently in the process of updating the Wastewater Collections Master Plan to incorporate the proposed General Plan Update growth projections. However, until the updated Master Plan is adopted, the current Master Plan would remain in effect, which may not provide adequate capacity to serve the buildout of the General Plan Update. This would result in a potentially significant impact.

Vallecitos Water District

VWD's 2008 Master Plan identifies the wastewater projects and system capacity needed to meet future wastewater needs in the VWD service area. Existing VWD infrastructure and the 2008 Master Plan do not account for the land use and growth projections proposed under the General Plan Update. The VWD 2008 Master Plan is based upon SANDAG's 2030 regional growth forecast, which is based upon the currently adopted General Plan for the City of Escondido (1990). Therefore, it is possible that implementation of the General Plan Update would result in VWD having inadequate capacity to service the area. This would result in a significant impact. Once adopted, the General Plan Update growth projections and land use designations would be incorporated into the next VWD Master Plan Update process, which occurs approximately every 5 years.

Escondido Climate Action Plan

The proposed E-CAP involves implementation of several reduction measures that reduce GHG emissions in the proposed project area. GHG reduction measure projects are not anticipated to result in a significant increase in wastewater generation as most of the reduction measures involve modification of existing structures and facilities that already have wastewater service (R2-E5, Existing Residential Retrofits and R2-E6, Existing Commercial Retrofits). However, future GHG reduction measures may involve the construction of new restrooms, bicycle kiosks, and facilities for recreation trails (R2-T2, Bicycle Master Plan and R2-T3, Transit Improvements) which may result in an additional wastewater flows. Although, the additional wastewater flows from implementation of E-CAP would be minimal, the potential exists for EWWD or VWD to have inadequate capacity to service the projected flows.

Federal, State and Local Regulations and Existing Regulatory Processes

Numerous federal, state and local regulations exist to ensure safe and adequate wastewater facilities are available. These include the: 1) Federal Water Pollution Control Act, which regulates discharges of pollutants into waters of the U.S.; 2) Porter-Cologne Water Quality Control Act, which controls polluted discharges into state waters; 3) USO, which regulates sewage collection and treatment systems; 4) City of Escondido Water Reclamation Plan, which promotes the use of reclaimed water; 5) Escondido Local Drainage and Sanitary Sewer Fees (Escondido Municipal Code Chapter 6), which establish sewer fees; and 6) Escondido's SSMP and SORP, which implement standards for the operation of wastewater systems.

SB 244 requires the evaluation of wastewater needs and deficiencies for unincorporated neighborhoods within the City's SOI. Unincorporated communities within the City's SOI are identified in Figure 3-5, Unincorporated Communities, in Chapter 3, Project Description. Wastewater service in provided by private septic systems in the following unincorporated neighborhoods: Eden Valley and Harmony Grove; Felicita Park and Lake Hodges; Citrus Valley; Lake Wohlford; Jesmond Dene; and Lehner Valley. The Rock

Springs Road Neighborhood is provided wastewater service by both VWD and individual septic systems. The project area for the General Plan Update encompasses the unincorporated communities within the City's SOI. The analysis provided above evaluates if implementation of the proposed project, including future annexation and development within the unincorporated neighborhoods, would result in a determination by the wastewater provider which serves the planning area that it has inadequate capacity to service the projected demand in addition to the provider's existing commitments. Therefore, the proposed project complies with the requirements of SB 244 and evaluates the present and probable wastewater treatment capacity needs and deficiencies for unincorporated neighborhoods within the City's SOI.

Proposed General Plan Update Policies

The General Plan Update contains several policies within the Economic Prosperity Element, Growth Management Element and Mobility and Infrastructure Element that assist in providing adequate wastewater facilities. These policies are intended to assure that wastewater providers have adequate capacity to serve projected growth. The proposed General Plan Update policies identified above in Section 4.17.3.1, Issue 1: Wastewater Treatment Requirements, are also applicable to this issue.

Proposed Downtown Specific Plan Update Policies

The proposed Downtown Specific Plan Update does not include any policies related to wastewater.

Proposed Escondido Climate Action Plan Reduction Measures

The proposed E-CAP contains a number of reduction measures that would promote water conservation, which would subsequently reduce demand for wastewater. Reduction Measure R2-W2, Water Conservation Strategies, aims to increase the use of recycled water and the incorporation of water efficient fixtures, drought tolerant landscaping, permeable hardscapes, and onsite stormwater capture and reuse facilities. Reduction Measure R3-W1, Water Efficiency and Conservation Education, promotes water conservation strategies.

Summary

The development of future land uses as designated in the proposed General Plan Update and Downtown Specific Plan Update would result in increased demand on existing wastewater systems due to increased sewage flows associated with the new development. Some E-CAP measures may also minimally increase wastewater flows within the proposed project area. An increase in wastewater flows could result in EWWD or VWD having inadequate capacity to serve the projected demand associated with the buildout of the General Plan Update. Multiple regulations and General Plan Update policies would assist in providing adequate wastewater capacity and infrastructure for the growth anticipated under the General Plan Update. Additionally, the proposed E-CAP contains a number of reduction measures that would promote water conservation, which would subsequently reduce wastewater treatment demand. Implementation of the proposed General Plan Update policies, E-CAP reduction measures and compliance with existing regulations would reduce impacts related to inadequate capacity. However, until EWWD's Wastewater Master Plan and VWD's Master Plan is updated to account for growth anticipated under the proposed General Plan Update, impacts would remain significant. Therefore, the proposed project would result in a potentially significant impact related to adequate wastewater facilities.

4.17.3.6 Issue 6: Sufficient Landfill Capacity

Guidelines for Determination of Significance

Based on Appendix G of the CEQA Guidelines and existing City policies and regulations, the proposed project would result in a significant impact if it would be served by a landfill (for example, Sycamore or Otay Mesa landfills) with insufficient permitted capacity to accommodate the project's solid waste disposal needs.

Impact Analysis

Growth under the proposed Downtown Specific Plan Update would be consistent with the growth identified for the General Plan Update; therefore, the following analysis pertains to both the General Plan Update and the Downtown Specific Plan Update. Impacts related to implementation of the E-CAP are discussed separately below.

General Plan Update and Downtown Specific Plan Update

Escondido Disposal, Inc. is responsible for the collection and disposal of solid waste and recyclables from homes, businesses and industry in the General Plan Update planning area. Residential collection of solid waste by Escondido Disposal is transferred to the Escondido Disposal Transfer Station where it is then taken to either the Sycamore or Otay Mesa landfills. Table 2.16-1, Otay and Sycamore Landfill Capacity, identifies the capacity of the Otay and Sycamore landfills. Physical landfill capacity is defined as the remaining volumetric capacity of existing landfills. Physical capacity represents the volume available to be filled, and is different from the rate at which materials would enter the landfill. The rate at which materials would enter these landfills is restricted by daily traffic and tonnage limits at disposal and transfer facilities, even though there may be sufficient physical capacity. The permitted daily disposal tonnages are specified in the Solid Waste Facility Permit (SWFP) for the facility, and sometimes in other permits. These limits are a matter of traffic control and health and welfare protection, and are changed through the permit review, modification or revision process.

Due to factors such as population growth, economics and development, there has been a consistent increase in annual solid waste disposal tonnages within the San Diego region, including the City of Escondido. The 2005 IWMP Siting Element predicts disposal will increase from 3.7 million tons in 2002 to 6.1 million tons in 2017. Based on the 1995 - 2001 historic disposal tonnages, imported and exported tonnages, and a 50 percent diversion rate, it is estimated that San Diego County jurisdictions will need to accommodate disposal capacity for over 5.6 million tons of solid waste in 2017 and 6.1 million tons in 2020. These numbers reflect the most current solid waste disposal projections from the Siting Element. Within the Siting Element, the existing landfill disposal and capacity analysis was based upon historical rates of solid waste disposal, rather than population projections. The annual rate of increase in the disposal rate was approximately 5.4 percent from 2002 to 2003 and estimated to gradually decrease to approximately 3.4 percent from 2016 to 2017, due to recycling and conservation efforts. Implementation of the proposed General Plan Update is unlikely to increase the annual disposal rate above the Siting Element projections. Rather, it is more likely that implementation of the proposed General Plan Update would reduce disposal rates more than those projected, due to the proposed policies discussed below that support additional recycling efforts and waste reduction measures. Regardless, the solid waste disposal needs projected for 2035 in the region would be greater than 6.1 million tons and additional landfill capacity would be required, or additional diversion technologies

would have to be implemented, such as recycling. Therefore, the development of future land uses as designated in the proposed General Plan Update would have the potential to be served by landfills with insufficient capacity to accommodate future solid waste disposal needs.

The Siting Element also states that if no additional in-County capacity is added, jurisdictions within the County of San Diego, including the City of Escondido, will run out of physical landfill capacity in 2016. Planning for additional landfill space in underway; however, landfill approval and permitting processes are often controversial and can take decades to complete. The proposed Gregory Canyon Landfill, which would be located along SR-76, three miles east of I-15, would provide an additional 33.4 million tons of capacity if/when it is constructed. San Diego County voters supported the Gregory Canyon Landfill project twice at the polls, in 1994 and 2004, and the project has been upheld in court on 19 separate occasions. In August 2011, the landfill received a Solid Waste Disposal Permit from the San Diego County's Department of Environmental Health Local Enforcement Agency (LEA) and CalRecycle. In October 2011, Governor Brown vetoed SB 833, which would have prohibited the construction of the landfill in the proposed location. The Campo landfill, if/when built would provide an additional 28 million tons of capacity. The 2008 Master Plan for the Sycamore Landfill would also add 116.6 million tons to the capacity in the County. The additional capacity of the three proposals would provide an excess of 179 million tons of capacity. Implementation of the proposed General Plan Update would result in an increase in solid waste disposal needs from future residential, commercial, office and industrial land uses that require solid waste disposal facilities. Existing landfill space is insufficient to serve the long term buildout of the proposed project. If the Gregory Canyon Landfill Project, Sycamore Landfill Project, Campo Landfill Project or other solid waste capacity increasing project does not occur, the San Diego Siting Element estimates that the San Diego region, including the City of Escondido, will run out of physical landfill capacity in 2016. Therefore, implementation of the General Plan Update has the potential to be served by landfills with insufficient capacities to accommodate future solid waste disposal needs. This would result in a significant impact. As an alternative, waste recycling at a 75 percent rate Countywide would also reduce or eliminate the necessity for additional landfill space (County 2005).

Escondido Climate Action Plan

Implementation of the E-CAP reduction measures that promote renovation of existing structures (R2-E5, Existing Residential Retrofits, and R2-E6, Existing Commercial Retrofits) would result in the generation of solid waste that requires disposal at an authorized landfill or hazardous materials disposal site. As mentioned above, the proposed project area has the potential to be served by a landfill with insufficient capacity. Therefore, insufficient landfill capacity may be available to serve the increases in solid waste demand generated by some E-CAP measures. Impacts would be potentially significant.

Federal, State and Local Regulations and Existing Regulatory Processes

Numerous federal, state and local regulations exist to ensure adequate solid waste facilities are available. These include: 1) IWMA, which regulates the management of solid waste within the state; 2) Non-Exclusive Solid Waste Management Agreement, which regulates waste collection in a market driven business; and 3) IWMP, which presents strategies to assist in the siting of solid waste disposal facilities.

Proposed General Plan Update Policies

The General Plan Update contains several policies within the Mobility and Infrastructure Element to assist in ensuring adequate landfill capacity is available to the City. Solid Waste and Recycling Policy

13.1 requires the support of efforts to maintain adequate solid waste facilities and services by working with local service providers of solid waste collection, disposal, and recycling. Solid Waste and Recycling Policies 13.2 through 13.7 require regular updates of the Citywide Recycling Plan; continued support of residential, commercial, and construction recycling programs; consideration of commercial recycling programs; encouragement of construction waste recycling; provision of electronic waste dropoff locations; and encouragement of recycled materials in new construction. Solid Waste and Recycling Policies 13.8 through 13.11 promote local businesses that manufacture, distribute, and sell recycled materials; sponsor annual clean-up events; allow small solid waste collection facilities in commercial and industrial areas; and allow sites for solid waste transfer stations in designated areas.

Within the Land Use and Community Form Element, Environmental Review Policies 18.1 through 18.4 require project conformance with CEQA, the General Plan, facilities plans, and quality of life standards; mitigation of environmental impacts; and an update of environmental thresholds in sensitive areas.

Proposed Downtown Specific Plan Update Policies

The proposed Downtown Specific Plan Update does not include any policies related to landfills or solid waste.

Proposed Escondido Climate Action Plan Reduction Measures

The proposed E-CAP includes two reduction measures that would reduce solid waste generation and disposal. Reduction measure R2-S1, Waste Disposal Programs, sets a stringent target for Escondido waste disposal rates and reduction measure R3-S2, Waste-Related Education and Outreach, promotes public education efforts about residential and commercial waste reduction.

Summary

If additional landfills are not constructed and existing landfills are not expanded, the IWMP Siting Element estimates that the County of San Diego, including the proposed project area, will run out of physical landfill capacity by 2016. The horizon year of the General Plan is 2035 and land uses proposed under the general plan could generate solid waste requiring disposal well beyond year 2035. Therefore, the development of future land uses as designated in the proposed General Plan Update and Downtown Specific Plan Update would have the potential to be served by landfills with insufficient capacity to accommodate future solid waste disposal needs. Solid waste generated from implementation of E-CAP reduction measures would also be potentially served by landfills with insufficient capacity. While proposed General Plan Update policies, E-CAP reduction measures and existing regulations are intended to provide adequate solid waste disposal facilities for the future and increase waste diversion, unless additional landfill facilities are provided, impacts would remain significant.

4.17.3.7 Issue 7: Solid Waste Regulations

Guidelines for Determination of Significance

Based on Appendix G of the CEQA Guidelines and existing City policies and regulations, the proposed project would result in a significant impact if it would not comply with federal, state and local statutes and regulations related to solid waste, such as the California IWMA.

Impact Analysis

Growth under the proposed Downtown Specific Plan Update would be consistent with the growth identified for the General Plan Update; therefore, the following analysis pertains to both the General Plan Update and the Downtown Specific Plan Update. Impacts related to implementation of the E-CAP are discussed separately below.

General Plan Update and Downtown Specific Plan Update

The development of future land uses as designated in the proposed General Plan Update would be required to comply with all applicable federal, state and local statutes and regulations related to solid waste. The County San Diego Solid Waste LEA has the primary responsibility for ensuring the proper operation and closure of solid waste facilities and disposal sites in San Diego County, including the Otay and Sycamore landfills. They also have responsibilities for ensuring the proper storage and transportation of solid wastes. The LEA: 1) provides solid waste inspection and permitting services to the various jurisdictions within the County; 2) conducts enforcement, inspection and permitting for solid waste facilities, operations, and disposal sites, including those which are permitted, exempt, illegal, inactive, closed, or abandoned; 3) maintains LEA certification in good standing with California Integrated Waste Management Board (CIWMB); 4) maintains communication with the CIWMB as well as other local enforcement and regulatory agencies; and 5) promotes interagency cooperation with all entities involved in solid waste management and disposal in San Diego County.

Additionally, the CIWMB is the state agency responsible to oversee, manage, and track California's 92 million tons of waste generated each year. The CIWMB promotes a sustainable environment where resources are not wasted but can be reused or recycled. In addition to many innovative programs and incentives, the CIWMB promotes the use of new technologies for the practice of diverting California's resources away from landfills. California passed the IWMA of 1989 (AB 939) when California was disposing 90 percent of its waste and recycling only 10 percent. The act mandated that California's 450 jurisdictions implement waste management programs to achieve a 25 percent diversion rate by 1995 and a 50 percent diversion rate by 2000. In 2006, California diverted 54 percent of its waste stream from landfills (CalRecycle 2011). Therefore, the state and all of the jurisdictions within it, including the City of Escondido, is in compliance with this law. The development of future land uses as designated in the proposed General Plan Update would also be required to comply with this law.

Escondido Climate Action Plan

Implementation of the E-CAP reduction measures that promote the renovation of existing structures (R2-E5, Existing Residential Retrofits, and R2-E6, Existing Commercial Retrofits) would result in the generation of solid waste that requires disposal at an authorized landfill or hazardous materials disposal site. All solid waste generated under the E-CAP is required by law to be disposed of properly. Therefore, implementation of the E-CAP reduction measures would comply with federal, state and local statutes and regulations related to solid waste.

Federal, State and Local Regulations and Existing Regulatory Processes

Numerous federal, state and local regulations exist that are related to solid waste. These include 1) California IWMA, which regulates the management of solid waste within the state; 2) Non-Exclusive Solid Waste Management Agreement, which regulates waste collection in a market-driven business; and

3) IWMP, which presents strategies to recycle, as well as assist in the siting of solid waste disposal facilities.

Proposed General Plan Update Policies

The General Plan Update contains several policies within the Mobility and Infrastructure Element to assist in ensuring adequate landfill capacity is available to the City. Solid Waste and Recycling Policy 13.1 requires the support of efforts to maintain adequate solid waste facilities and services by working with local service providers of solid waste collection, disposal, and recycling. Solid Waste and Recycling Policies 13.2 through 13.7 require regular updates of the Citywide Recycling Plan; continued support of residential, commercial, and construction recycling programs; consideration of commercial recycling programs; encouragement of construction waste recycling; provision of electronic waste dropoff locations; and encouragement of the use of recycled materials in new construction. Solid Waste and Recycling Policies 13.8 through 13.11 promote local businesses that manufacture, distribute, and sell recycled materials; sponsor annual clean-up events; allow small solid waste collection facilities in commercial and industrial areas; and allow sites for solid waste transfer stations in designated areas.

Within the Land Use and Community Form Element, Environmental Review Policies 18.1 through18.4 require project conformance with CEQA, the General Plan, facilities plans, and quality of life standards; mitigation of environmental impacts; and an update of environmental thresholds in sensitive areas.

Proposed Downtown Specific Plan Update Policies

The proposed Downtown Specific Plan Update does not include any policies related to the regulation of solid waste.

Proposed Escondido Climate Action Plan Reduction Measures

The proposed E-CAP includes two reduction measures that would reduce solid waste generation and disposal. Reduction measure R2-S1, Waste Disposal Programs, sets a stringent target for Escondido waste disposal rates. Reduction measure R3-S2, Waste-Related Education and Outreach, promotes public education efforts about residential and commercial waste reduction.

Summary

Development of future land uses designated in the proposed General Plan Update and Downtown Specific Plan Update, and implementation of E-CAP measures, would comply with federal, state and local statutes and regulations related to solid waste. Additionally, proposed General Plan Update policies and E-CAP measures regarding solid waste disposal would further ensure compliance with applicable regulations. Therefore, impacts associated with solid waste regulations would be less than significant.

4.17.3.8 Issue 8: Energy

Guidelines for Determination of Significance

The proposed General Plan Update would be considered to have a significant impact if it would require or result in the construction of new energy production and/or transmission facilities or expansion of existing facilities, the construction of which would cause significant environmental effects.

Impact Analysis

Growth under the proposed Downtown Specific Plan Update would be consistent with the growth identified for the General Plan Update; therefore, the following analysis pertains to both the General Plan Update and the Downtown Specific Plan Update. Impacts related to implementation of the E-CAP are discussed separately below.

General Plan Update and Downtown Specific Plan Update

As part of environmental analysis for the proposed project, SDG&E was contacted to evaluate future facility needs under implementation of the General Plan Update. The following discussion is based upon a written response from SDG&E, which is included in Appendix G, Utility Providers Correspondence, of this EIR.

Development of land uses as designated in the proposed General Plan Update would require energy for construction and operation, thereby increasing energy demand in the General Plan Update planning area. An increase in energy demand would affect SDG&E energy facilities located both within and outside the General Plan Update planning area, that serve the area. Under existing conditions, SDG&E does not have adequate capacity to serve the buildout of the proposed General Plan Update. Implementation of the General Plan Update would require an expansion of existing facilities to serve the anticipated energy demand associated with the growth accommodated by the General Plan Update. In addition to various expansions, two substations would need to be constructed to serve the anticipated energy needs of the General Plan Update. Additional infrastructure such as trenching, conduit, cable, poles, substructures and equipment would also need to be installed as development occurs under the General Plan Update.

The construction or expansion of energy facilities would have the potential to cause significant environmental effects. The projected increase in demand is anticipated to be met by a mix of energy technologies that include generation plants located both within and outside of the General Plan Update planning area, many of which have not yet been constructed. Any future energy projects would be required to conduct environmental review pursuant to CEQA and/or NEPA depending on the lead agency approving the project. CEQA and NEPA require proposed projects to provide detailed information on the potentially significant environmental effects they are likely to have, list ways in which the significant environmental effects would be minimized, and identify alternatives that would reduce or avoid the significant impact identified for the project. To the extent feasible, significant environmental impacts would be mitigated to below a level of significance.

Escondido Climate Action Plan

The reduction measures proposed in the E-CAP are intended to reduce energy consumption and associated GHG emissions. Implementation of the E-CAP reduction measures would reduce energy consumption and the subsequent need to construct new energy production and/or transmission facilities or expand existing facilities. No impact would occur.

Federal, State and Local Regulations and Existing Regulatory Processes

The California Energy Efficiency Standards for residential and non-residential buildings would reduce the potential for impacts related to excessive energy usage and the need for expansion or construction of energy facilities.

Proposed General Plan Update Policies

The General Plan Update contains several policies within the Mobility and Infrastructure Element that would reduce energy consumption and the need to construct new or expand existing energy facilities. Energy Policy 14.1 requires coordination with local utility providers to ensure that adequate electricity and natural gas services and facilities are available for new and existing development. Energy Policies 14.2 through 14.4 require the implementation of energy conserving land use practices; encourage site and building design that reduces exterior heat gain and heat island effects; and require building orientations and landscaping to reduce energy demands. Energy Policies 14.5 and 14.6 promote the installation of renewable energy systems and facilities and energy-efficient appliances. Energy Policies 14.7 and 14.8 require coordination with service providers to increase energy efficiency and energy conservation. Energy Policies 14.9 and 14.10 encourage energy production facilities that directly benefit the community; and ensure that local power plants utilize state-of-the-art designs. Energy Policies 14.11 and 14.12 require review of power plant submittals to ensure they do not result in significant individual or cumulative environmental impacts; and require new utility lines to be constructed underground and along existing utility corridors.

Within the Land Use and Community Form Element, Environmental Review Policies 18.1 through 18.4 require project conformance with CEQA, the General Plan, facilities plans, and quality of life standards; mitigation of environmental impacts; and an update of environmental thresholds in sensitive areas.

Proposed Downtown Specific Plan Update Policies

The proposed Downtown Specific Plan Update does not include any policies related to energy.

Proposed Escondido Climate Action Reduction Plan

The proposed E-CAP includes a variety of reduction measures focused on energy efficiency and the reduction of energy consumption. Reduction measure R1-E1, Renewable Portfolio Standard for Building Energy Use, establishes a Renewable Portfolio Strategy target of 33 percent by the year 2020. Reduction measures R1-E2 and R1-E3, Assembly Bill 1109 Energy Efficiency Standards for Lighting, provide energy efficiency standards for general purpose lighting. Reduction measure R1-E4, Electricity Energy Efficiency, and reduction measure R1-E5, Natural Gas Efficiency, would increase electricity and natural gas energy efficiency. Reduction measure R1-E6, Increased Combined Heat and Power, would reduce energy demand by increasing combined heat and power activities. Reduction measure R1-E7, Industrial Efficiency Measures, would implement industrial energy saving requirements. Reduction measures R2-E1, New Residential Energy Efficiency Requirements; R2-E2, New Commercial Energy Efficiency Requirements; R2-E3, New Residential Renewable Energy Requirements; and R2-E4, New Commercial Renewable Energy Requirements, provide energy efficient measures that would lessen the energy impact of new development. Reduction measures R2-E5, Existing Residential Energy Retrofits; and R2-E6, Existing Commercial Energy Retrofits, provide energy efficient measures that lessen the energy impact of existing development. Reduction measure R3-E1, Regional Energy Planning Coordination, supports coordination in the San Diego region to optimize energy efficiency and renewable resource development and usage. Reduction measure R3-E2, Energy Efficient Development, and reduction measure R3-E2, Renewable Energy Deployment Facilitation and Streamlining, encourages the City to identify and remove any regulatory and procedural barriers to the implementation of green building practices and the incorporation of renewable energy systems. Reduction measure R3-E3, Energy Efficiency Training and Public Education, provides public education and publicity about energy efficiency measures and reduction programs.

Summary

Development of land uses as designated in the General Plan Update and Downtown Specific Plan would require energy for construction and operation, thereby increasing energy demand in the General Plan Update planning area. To accommodate the projected increase in energy demand, energy facilities would need to be constructed or expanded, which would have the potential to cause significant and unavoidable environmental effects. Implementation of the E-CAP reduction measures would reduce energy consumption, and the subsequent need to construct or expand new energy production and/or transmission facilities. Additionally, multiple General Plan Update policies are proposed to reduce the need to construct new energy facilities and reduce associated environmental impacts. Further, the construction of new energy facilities would be subject to CEQA review, which would minimize associated environmental impacts. Therefore, the proposed project would not result in a potentially significant impact associated with new or expanded energy facilities, the construction of which could cause significant environmental effects.

4.17.4 Cumulative Impacts

The geographic scope of the cumulative impact analysis for utilities is the entire County of San Diego, including unincorporated and incorporated areas, whose population is served by many individual utility, service system, and energy providers within specific service areas.

Issue 1: Wastewater Treatment Requirements

Cumulative projects within the region would result in an increase in residential, commercial, office and industrial development that would require wastewater treatment services. Similar to the proposed General Plan Update, an increase in wastewater treatment demand that is disproportionate to wastewater treatment capabilities would result in a violation of the treatment requirements of the San Diego RWQCB. However, compliance with regulations such as the Federal Water Pollution Control Act, California Water Code, Porter-Cologne Water Quality Control Act, Water Conservation Projects Act, DEH regulations, specific jurisdictional ordinances, and CEQA and/or NEPA would reduce cumulative impacts related to potential wastewater treatment violations to below a significant level and a significant cumulative impact would not occur. Therefore, implementation of the proposed project, in combination with other cumulative projects, would not result in a significant cumulative impact associated with wastewater treatment.

Issue 2: New Water and Wastewater Facilities

Cumulative projects would result in an increase in residential, commercial, office and industrial development that would increase the demand for water and wastewater treatment services. An increase in the demand for these services has the potential to require or result in the construction of new or expanded water or wastewater treatment facilities, the construction of which would potentially result in significant environmental effects. Most future water treatment or wastewater treatment projects would be required to conduct environmental review pursuant to CEQA and/or NEPA. To the extent feasible, significant environmental impacts would be mitigated to below a level of significance. In addition, cumulative projects would be required to comply with numerous federal, state and local regulations, including: SDWA; Federal Water Pollution Control Act; California Water Code; California Drinking Water Standards; Porter-Cologne Water Quality Control Act; Water Conservation Projects Act;

City of Escondido Water Conservation Plan; City of Escondido Water Reclamation Plan; Escondido Local Drainage and Sanitary Sewer Fees (Municipal Code Chapter 6); and Escondido's SSMP and SORP. Compliance with these regulations would also reduce the potential for significant impacts to occur. Therefore, cumulative impacts associated with the development of water and wastewater facilities from cumulative projects would be less than significant. Implementation of the proposed project, in combination with other cumulative projects, would not result in a significant cumulative impact associated with water and wastewater facilities.

Issue 3: Sufficient Stormwater Drainage Facilities

Cumulative projects would result in an increase in impervious surfaces from development of new land uses which would increase stormwater runoff volumes. To effectively manage the increased runoff, the construction or expansion of stormwater drainage facilities may be required, the construction of which would have the potential to result in significant environmental effects. Most future stormwater drainage facilities would be required to conduct environmental review pursuant to CEQA and/or NEPA. To the extent feasible, significant environmental impacts would be mitigated to below a level of significance. In addition, cumulative projects would typically be required to comply with numerous local, state and federal regulations, such as the Federal Water Pollution Control Act; California Water Code; and Porter-Cologne Water Quality Control Act. Compliance with these regulations would also reduce the potential for a significant cumulative impact to occur. Therefore, impacts associated with the construction of new stormwater drainage facilities from cumulative projects would be less than significant. The proposed project, in combination with other cumulative projects, would not result in a significant cumulative impact associated with stormwater drainage.

Issue 4: Adequate Water Supplies

Many water districts that would serve cumulative project areas have prepared and adopted UWMPs and/or other planning documents that include supply and demand projections and procurement strategies to ensure a reliable water supply exists to meet the projected demand within the region. The most recent UWMPs available are from 2010. The SDCWA 2010 UWMP predicts water shortages during multiple dry water year conditions. Cumulative projects would increase the demand for potable water in the service area of SDCWA and would be subject to, and potentially exacerbate, the water shortage during multiple dry water years. Therefore, a significant cumulative impact would occur. Additionally, the proposed General Plan Update and Downtown Specific Plan Update growth projections are not accounted for in the various 2010 UWMPs prepared by water district's serving the proposed project area and would potentially be subject to inadequate water supplies. Therefore, the proposed project's contribution would be cumulatively considerable.

Issue 5: Adequate Wastewater Facilities

Cumulative projects in the region would have the potential to increase demand for wastewater facilities to the point that the wastewater provider has inadequate capacity to serve the projected demand, in addition to the provider's existing commitments. Therefore, cumulative projects would require new or expanded wastewater facilities, the construction of which could have significant environmental impacts. However, most development of new facilities would be subject to CEQA and/or NEPA review and would be required to mitigate environmental impacts to below a level of significance, to the extent feasible. Additionally, multiple federal, state and local regulations exist that pertain to the construction and operation of wastewater facilities, including: Federal Water Pollution Control Act; Porter-Cologne Water

Quality Control Act; USO; City of Escondido Water Reclamation Plan; Escondido Local Drainage and Sanitary Sewer Fees (Municipal Code Chapter 6); and Escondido's SSMP and SORP. Cumulative projects would be required to comply with these regulations. Therefore, a significant cumulative impact would not occur. The proposed project, in combination with other cumulative projects, would not contribute to a significant cumulative impact to wastewater facilities.

Issue 6: Sufficient Landfill Capacity

Many cumulative projects would increase the demand for solid waste disposal and management needs within the region. In San Diego County, existing available landfill capacity is expected to run out by 2016 (County 2011). Since many cumulative projects will be constructed and/or have an operational life that exceeds 2016, the existing regional landfill facilities do not have adequate capacity to accommodate the increase in solid waste disposal needs that would occur from development of cumulative projects. Either new landfill facilities and/or recycling facilities would be needed to meet the anticipated disposal needs, the construction of which could have a significant effect on the environment. However, in many areas included in the cumulative analysis it is often difficult to find suitable sites to provide additional landfill facilities that would increase capacity. The siting, design, environmental and permitting processes for the construction of a new or expanded landfill is often controversial and can take decades to complete. Therefore, cumulative projects would have a potentially significant cumulative impact associated with insufficient landfill capacity. As discussed above, the buildout of the proposed project would also exceed the capacity of existing landfills. Therefore, the proposed project's contribution would be cumulatively considerable.

Issue 7: Solid Waste Regulations

Cumulative projects in the region would be required to comply with all applicable federal, state and local statutes and regulations related to solid waste, including the California IWMA; Non-Exclusive Solid Waste Management Agreement; and the IWMP. Compliance with applicable regulations would ensure that cumulative projects would not result in a significant cumulative impact. The proposed project, in combination with other cumulative projects, would not contribute to a significant cumulative impact.

Issue 8: Energy

Development of cumulative projects in the region would result in an increased demand for energy, which would potentially require the construction of new energy production facilities, transmission facilities, or expansion of existing facilities. Any future energy project would be required to conduct environmental review pursuant to CEQA and/or NEPA prior to approval. As part of the environmental process, identified significant environmental impacts would be mitigated to below a level of significance, to the extent feasible. Therefore, a significant cumulative impact would not occur. The proposed General Plan Update and E-CAP include multiple policies and reduction measures that would reduce energy demand, which would reduce the project's direct environmental impact to below a level of significance. Therefore, the proposed project would not contribute to a significant cumulative impact.

4.17.5 Significance of Impact Prior to Mitigation

Prior to mitigation, the proposed project would result in direct and cumulative significant impacts related to adequate water supply and landfill capacity. Compliance with proposed General Plan Update

policies, E-CAP reduction measures and required regulations would ensure that impacts related to wastewater treatment requirements, new water and wastewater facilities, sufficient stormwater drainage facilities, adequate wastewater facilities, solid waste regulations and energy would be less than significant.

4.17.6 Mitigation

Issue 1: Wastewater Treatment Requirements

The proposed project would not result in a significant impact associated with wastewater treatment requirements. No mitigation is required.

Issue 2: New Water and Wastewater Facilities

The proposed project would not result in a significant impact associated with new water and wastewater facilities. No mitigation is required.

Issue 3: Sufficient Stormwater Drainage Facilities

The proposed project would not result in a significant impact associated with stormwater drainage facilities. No mitigation is required.

Issue 4: Adequate Water Supplies

The General Plan Update policies and E-CAP reduction measures identified above under Section 4.17.3.4, Issue 4: Adequate Water Supplies, would minimize the proposed project's potentially significant impacts associated with adequate water supply. However, even with these policies and reduction measures in place, implementation of the proposed project would accommodate an increase in population, housing and other development within the project area, which would increase water demand and thereby potentially result in an inadequate water supply. The General Plan Update policies, E-CAP reduction measures and compliance with existing regulations would reduce impacts associated with water supply; however, not to below a significant level. Additional mitigation measures have been identified that would fully reduce impacts to below a level of significance. However, some of these measures have been determined by the City as infeasible, as discussed below:

Infeasible Mitigation Measures

1. Implement a Citywide moratorium on building permits and development applications in any areas of the City that would have an inadequate imported water supply to serve future development until adequate supplies are procured. This would effectively result in no increase in the amount of imported water demand within the General Plan Update area. However, this measure would impede the City's ability to implement the General Plan Update and Downtown Specific Plan Update because it would prohibit future development in areas identified for increased growth in the proposed project area. This mitigation measure would also conflict with the project objective to meet the housing needs of existing and future residents. Therefore, for the reasons listed above, this mitigation measure would not be implemented.

Feasible Mitigation Measures

Util-1 The EWWD Water Distribution Master Plan shall be updated to accommodate the buildout of the proposed General Plan Update. This shall be achieved by increasing and/or expanding existing water infrastructure, providing recycled water distribution facilities throughout the City to offset potable water demand for landscaping and other purposes and other measures/strategies that will achieve the goal of providing an adequate water supply to serve the buildout of the General Plan Update.

With implementation of mitigation measure Util-1, impacts related to an adequate water supply would be considered significant and unavoidable due to water supply shortages predicted during multiple dry-water years in the SDCWA 2010 UWMP. Chapter 6, Alternatives, provides a discussion of several land use alternatives to the proposed project that would result in some reduced impacts associated with water supply as compared to the proposed project. However, without significant reductions in the overall growth of the City, impacts would still remain significant and unavoidable.

Issue 5: Adequate Wastewater Facilities

The proposed project would result in a significant impact associated with the provision of adequate wastewater facilities. Implementation of the following mitigation measure would reduce this impact to a level below significant.

Util-2 The EWWD Wastewater Master Plan shall be updated to accommodate the buildout of the proposed General Plan Update. This shall be achieved by increasing and/or expanding existing wastewater infrastructure and other measures/strategies that will achieve the goal of providing adequate wastewater facilities to serve the buildout of the General Plan Update. The City shall also coordinate with VWD during its next Master Plan Update process to ensure that it provides the necessary wastewater facilities to adequately account for the growth identified in the General Plan Update.

Issue 6: Sufficient Landfill Capacity

The General Plan Update policies and E-CAP reduction measures identified above under Section 4.17.3.6, Issue 6: Sufficient Landfill Capacity, would minimize the proposed project's potentially significant impact associated with sufficient landfill capacity. However, even with these policies and reduction measures in place, the proposed project would allow for the development of land uses that would increase the demand for solid waste disposal, thereby resulting in potentially inadequate landfill capacity. Implementation of the General Plan Update policies and E-CAP reduction measures would reduce impacts associated with sufficient landfill capacity; however, not to below a significant level. Additional mitigation measures have been identified that would reduce the potentially significant impact to landfill capacity. However, the City has determined that their implementation would be infeasible for the reasons described below.

Infeasible Mitigation Measures

The following measures (and variations of these measures) were considered in attempting to reduce impacts associated with sufficient landfill capacity to below a level of significance. However, the City has determined these measures to be infeasible for the reasons listed below. Therefore, these mitigation measures would not be implemented.

1. Require all proposed development to obtain written verification of sufficient landfill capacity for the next 20 years. This mitigation measure would prove infeasible because existing landfill facilities are not projected to have sufficient capacity to serve future demand. Therefore, this measure would impede the City's ability to implement the General Plan Update and Downtown Specific Plan Update because it would prohibit future development in areas identified for increased growth in the proposed project area. This mitigation measure would conflict with the project objective to meet the housing needs of existing and future residents because new development would be unable to obtain verification of adequate landfill capacity for the next 20 years and, therefore, future growth in the City would be prohibited. For the reasons listed above, this mitigation measure would not be implemented.

2. Require any proposed project that is expected to result in an increase in solid waste disposal demand to construct a solid waste disposal facility, concurrent with development, to meet the needs of the project. This mitigation measure would prove infeasible because it places the burden of development of new solid waste disposal facilities on the developer, would require permits from local and state agencies, and would have the potential result in significant environmental impacts from the construction of multiple solid waste facilities throughout various areas of the proposed project area. Implementing multiple solid waste disposal sites would increase environmental degradation throughout the proposed project area.

The measures listed above have been found to be infeasible by the City and would not be implemented. Until additional solid waste disposal facilities are permitted and constructed in the San Diego region, impacts would remain significant and unavoidable. Chapter 6, Project Alternatives, provides a discussion of several land use alternatives to the proposed project that would result in some reduced impacts associated with sufficient landfill capacity as compared to the proposed project. However, until additional solid waste disposal capacity is available to serve buildout of the proposed project, impacts would remain significant and unavoidable.

Issue 7: Solid Waste Regulations

Impacts associated with federal, state and local solid waste regulations would be less than significant. Therefore, mitigation is not required.

Issue 8: Energy

Impacts associated with energy would be less than significant. Therefore, no mitigation is required.

4.17.7 Conclusion

The discussion below provides a synopsis of the conclusion reached in each of the above impact analyses, and the level of impact that would occur after mitigation measures are implemented.

Issue 1: Wastewater Treatment Requirements

Implementation of the proposed project could result in the demand for wastewater treatment services to increase at a rate disproportionate to facility capabilities, which would result in a violation in wastewater treatment standards. However, compliance with existing regulations and implementation

of the proposed General Plan Update policies and E-CAP reduction measures would reduce this impact to below a level of significance. Additionally, the proposed project would not contribute to a significant cumulative impact associated with wastewater treatment requirements.

Issue 2: New Water and Wastewater Facilities

Implementation of the proposed project would have the potential to increase the demand for water and wastewater services, thereby requiring the construction of new or expanded water and wastewater facilities, which could result in a significant impact on the environment. However, compliance with existing regulations and implementation of the proposed General Plan Update policies and E-CAP reduction measures would reduce this impact to below a level of significance. Additionally, the proposed project would not contribute to a significant cumulative impact associated with the provision of new water and wastewater facilities.

Issue 3: Sufficient Stormwater Drainage Facilities

Implementation of the proposed project would increase the demand for stormwater drainage facilities, thereby requiring the construction of new or expanded stormwater facilities, which could result in a significant impact on the environment. However, compliance with existing regulations and implementation of the proposed General Plan Update policies and E-CAP reduction measures would reduce this impact to below a level of significance. Additionally, the proposed project would not contribute to a significant cumulative impact associated with stormwater drainage facilities.

Issue 4: Adequate Water Supplies

Implementation of the proposed project would increase demand for water supply. However, adequate water supply may not be available to serve the proposed project due to projections of water shortages during multiple dry water years by SDCWA, VWD and RDD. Cumulative projects would also result in a significant cumulative impact and the proposed project would contribute to a significant cumulative impact associated with adequate water supplies. Even with compliance with existing regulations and implementation of the proposed General Plan Update policies and E-CAP reduction measures, and mitigation measure Util-1, impacts would remain significant and unavoidable.

Issue 5: Adequate Wastewater Facilities

Implementation of the proposed project would generate additional demand on the existing wastewater system that would have the potential to result in inadequate wastewater capacity to serve the projected demand. However, compliance with existing regulations, implementation of the proposed General Plan Update policies and E-CAP reduction measures, and implementation of Util-2 would mitigate this impact to below a level of significance. Additionally, the proposed project would not contribute to a significant cumulative impact associated with wastewater facilities.

Issue 6: Sufficient Landfill Capacity

Implementation of the proposed project has the potential to be served by a landfill with insufficient capacity to accommodate the solid waste disposal needs of the project. Compliance with existing regulations and implementation of the proposed General Plan Update policies and E-CAP reduction measures would reduce impacts associated with sufficient landfill capacity, although not to below a level of significance. Mitigation measures have been identified to reduce impacts to a less than

significant level; however, the City finds these measures to be infeasible because they do not meet the project objectives, would prohibit growth, and place undue burden on developers to create additional landfill capacity. Therefore, the proposed project would result in a significant direct and cumulative impact associated with landfill capacity. Until additional solid waste disposal facilities are permitted and constructed within the San Diego region, the proposed project's impact would remain significant and unavoidable.

Issue 7: Solid Waste Regulations

The development of future land uses associated with the proposed project would be required to comply with federal, state and local statues and regulations related to solid waste. Therefore, direct and cumulative project impacts would be less than significant.

Issue 8: Energy

Implementation of the proposed project would increase demand for energy, resulting in the need for new or expanded energy facilities to be constructed, which would have the potential to result in significant environmental effects. However, the construction of new energy facilities would be subject to CEQA and/or NEPA and impacts would be mitigated, to the extent feasible. Additionally, multiple General Plan Update policies and E-CAP policies exist that would reduce energy consumption and the need to build new energy facilities. Therefore, the proposed project would result in a less than significant direct impact associated with energy. Additionally, the proposed project would not contribute to a significant cumulative impact associated with energy.

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