

4.14 Public Utilities

This section evaluates potential impacts to public utilities (storm drain, wastewater, water, water supply, and solid waste disposal) that could result from the project. Public utility information was acquired through consultation with the City and review of public documents, including the San Diego County Water Authority Urban Water Management Plan (SDCWA UWMP), other relevant UWMPs, utility master plans, and the City General Plan and Municipal Code.

4.14.1 Existing Conditions

4.14.1.1 Storm Drain System

The City has an extensive storm drainage system that consists of 65 miles of underground storm drain pipe, 1,789 storm drain boxes, and over 90 miles of channels. These facilities intercept storm water runoff and convey it from the eastern part of the City to the west where it discharges into either the San Elijo Lagoon, south of the City, or Batiquitos Lagoon, north of the City. The coastal area of the City discharges through several outfalls to the ocean. The City's Public Works Department is responsible for maintaining the storm drain infrastructure. Presently, there is inadequate storm water capacity in north Leucadia near the Alt-2 housing site.

4.14.1.2 Wastewater System

The City is served by three sewer districts: Cardiff Sanitation District (CSD), Encinitas Sanitary Division (ESD), and Leucadia Wastewater District (LWD) as shown on Figure 4.14-1. The CSD and ESD are part of the City Public Works Department. The LWD is a separate agency that provides sewer services to residents in Leucadia and New Encinitas. The existing City wastewater collection system is also shown in Figure 4.14-1. Sewage is conveyed through 123 miles of sewer lines pipes, sized between 6 to 18 inches in diameter, for treatment and disposal to either the Encina Wastewater Authority (EWA) in Carlsbad, or the San Elijo Water Reclamation Facility (SEWRF) in Cardiff.

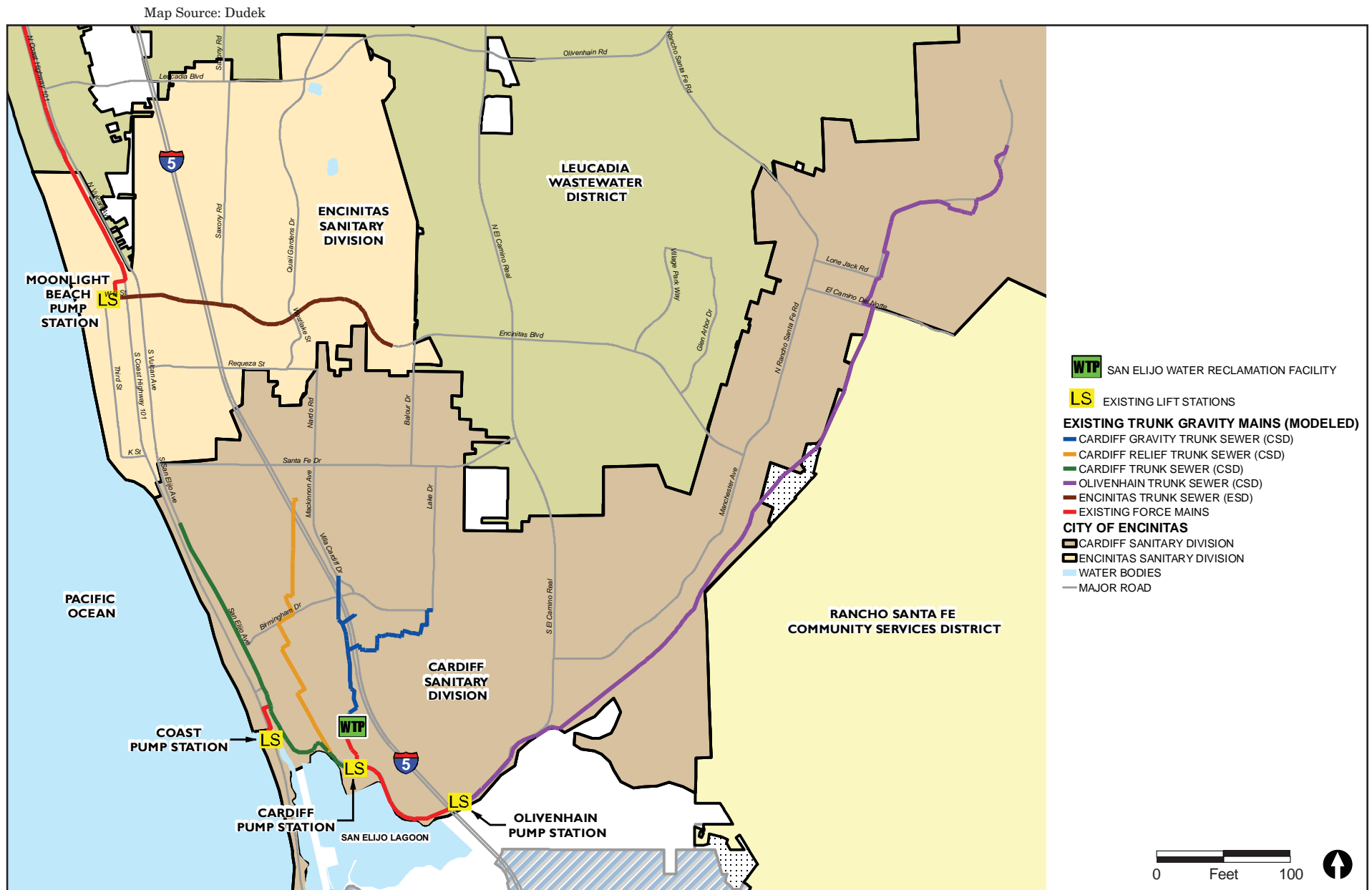


FIGURE 4.14-1
City of Encinitas Wastewater Collection System

a. Sanitary Divisions/Districts

Encinitas Sanitary Division

The ESD serves a population of approximately 16,500 residents in a three-square-mile area in the westerly central portion of the City. All flow from the ESD drains into the Moonlight Pump Station, which is pumped through a force main to the Batiquitos Pump Station, a joint facility with LWD, and then pumped together with flow from LWD to the EWA.

Cardiff Sanitary Division

The CSD services a population of approximately 19,600 residents in a 12-square-mile area in the southern and easterly portions of the City. Flows generated within the CSD are collected in one of four trunk sewer systems and then pumped or conveyed by gravity to the SEWRF.

Leucadia Wastewater District

The LWD covers a total service area of 16 square miles which includes the northern portions of the City. The LWD provides wastewater collection, treatment, disposal and service to a total population of approximately 60,000. Flows generated in the LWD are ultimately pumped to the EWA.

b. Treatment and Disposal

Encina Wastewater Authority

The EWA operates the Encina Water Pollution Control Facility located in Carlsbad. The facility provides full secondary treatment, sludge handling, and disposal through a deep ocean outfall. The capacity rights for the City are 1.80 million gallons per day (mgd) average daily flow for treatment.

San Elijo Water Reclamation Facility

The SEWRF is owned and operated by the cities of Encinitas and Solana Beach and is comprised of a 5.25 mgd water reclamation facility and a 2.48 mgd water reclamation facility co-located on one property in Cardiff. The allocation of capacity rights for the City is 2.5 mgd average daily flow for treatment.

c. Wastewater Flow Generation and System Capacity

Wastewater flow projections based on future development through 2035 (buildout of the City's General Plan) are identified in the City's 2012 Sewer Master Plan. The calculation of projected wastewater flow is based on known planned development projects and buildout of vacant and underdeveloped parcels consistent with the General Plan. Additionally, the Sewer Master Plan considers that all current septic users would connect to the City's sewer

at buildout. The average daily flow for the ultimate wastewater system is projected to be approximately 1.25 mgd in the ESD and 1.99 mgd in the CSD (City of Encinitas 2012).

d. Treatment Capacity

As discussed in the Sewer Master Plan, the ESD projected average daily flow is 1.25 mgd, which results in a reserve capacity of 0.55 mgd or 55 percent. Therefore, at General Plan buildout it is projected that ESD would have excess capacity. The CSD projected average daily flow is 1.99 mgd, which is within the current capacity allocation. Although capacity appears adequate, capital improvements are proposed over the near-term (five years) and long term (10 years) to improve capacity conditions (City of Encinitas 2012).

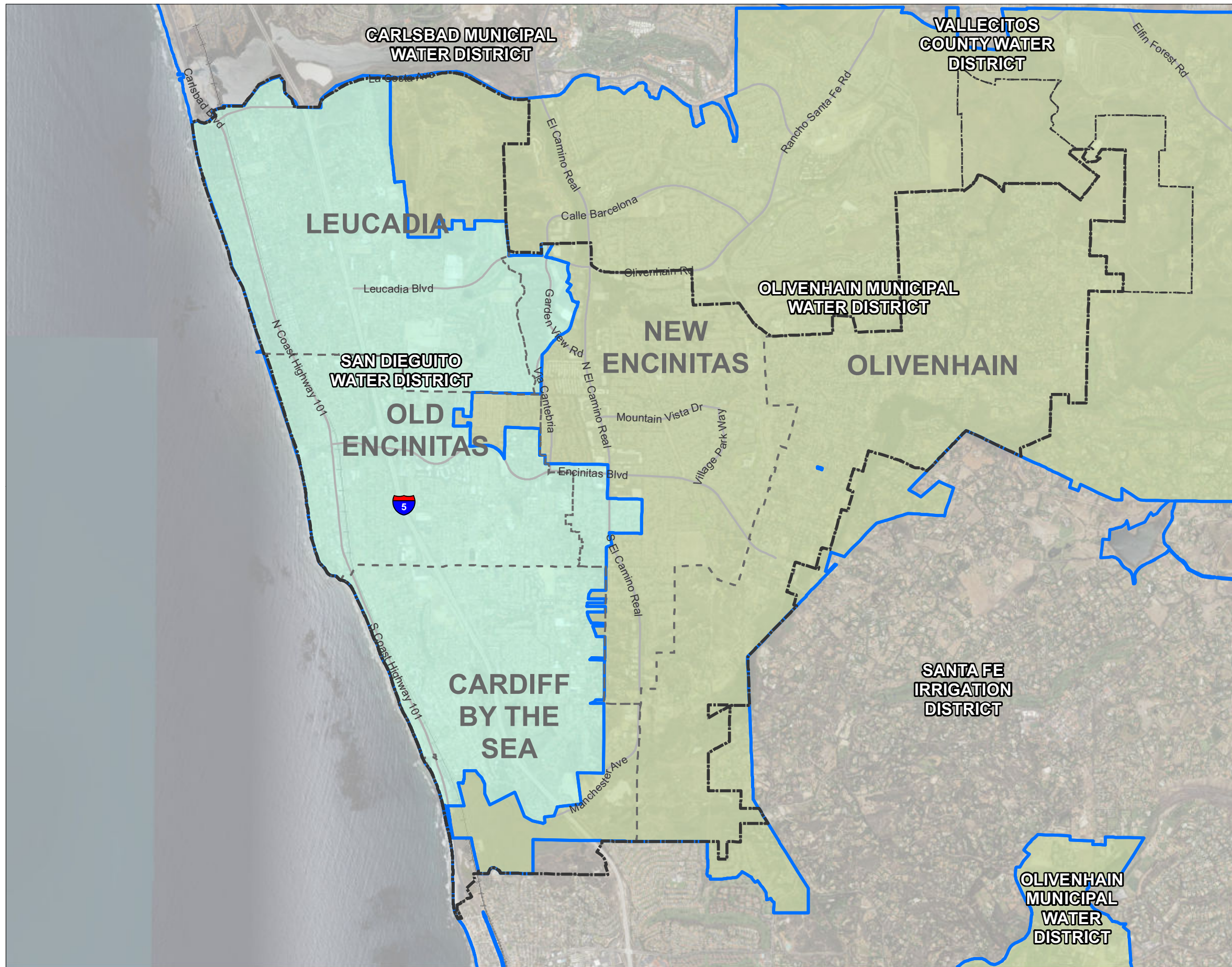
4.14.1.3 Water System

The San Dieguito Water District (SDWD) provides potable water to approximately 38,000 residents through roughly 11,000 meters in the communities of Old Encinitas, Cardiff-by-the-Sea, New Encinitas and Leucadia within the City of Encinitas. Based on projected buildout under the General Plan, the 2010 San Dieguito Water System Master Plan evaluates the water system requirements to determine its ability to adequately serve the estimated demands and recommend improvements.

A majority of the existing distribution system is adequately sized to accommodate future demand; however, within the existing system, there are a number of junctions that are currently unable to satisfy the District's pressure criteria. Pressure deficiencies are attributed to the geography of the area. There are capital improvement projects (CIP) detailed in the San Dieguito Water System Master Plan recommended to improve low flow rates, especially in those areas that cannot maintain adequate fire flow (500 gallons per minute [gpm]) (San Dieguito Water District 2010).

4.14.1.4 Water Supply

The City currently has three sources of water: raw water from the SDCWA through the State Water Project; treated water from the SDCWA; and runoff from the Lake Hodges watershed east of the City. Raw water from the SDCWA and Lake Hodges water are treated at the Badger Filtration Plant in Rancho Santa Fe. The SDWD provides potable (drinking) and recycled water to a majority of the City; the remainder is served by the Olivenhain Municipal Water District (OMWD). Figure 4.14-2 shows the boundaries of the water districts.



- City Limits
- Sphere of Influence
- Community Area Boundaries
- Olivenhain Municipal Water District
- San Dieguito Water District

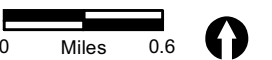


FIGURE 4.14-2
City of Encinitas -
Water District Boundaries

a. Service Providers

San Dieguito Water District

The SDWD joined the SDCWA in 1948 to acquire the right to purchase and distribute imported water throughout its service area. SDCWA purchases the water from the Metropolitan Water District of Southern California (MWD). The SDWD is a subsidiary of the City and provides water to the approximate 38,000 residents in their service district. Approximately 30 percent of the SDWD water is from local sources and the remainder is imported.

The Urban Water Management Planning Act requires every urban water supplier to assess the reliability of its water supply for normal, single-dry and multiple-dry years. Single-dry and multiple-dry year conditions were based on the SDWD's historical water use records. Table 4.14-1 shows estimated water supply projections for the year 2035.

Table 4.14-1 San Dieguito Water District Projected Water Supply and Demand			
	Projected Supplies ¹ (afy ²) Year 2030	Projected Demands (afy ²) Year 2030	Difference
Normal Year	8,840	8,840	0
Single-Dry Year	9,740	9,740	0
Multiple-Dry Year (1 st Year)	9,337	9,337	0
Multiple-Dry Year (2 nd Year)	9,740	9,740	0
Multiple-Dry Year (1 st Year)	9,971	9,971	0
SOURCE: San Dieguito Water District 2010 Urban Water Management Plan. ¹ Takes into account all sources of water supply including CWA, surface diversion from Lake Hodges, and recycled water. ² Acre-feet per year.			

Based on continued commitment to conservation programs, maintaining current adjudicated surface water rights, additional imported water available when needed from SDCWA, and the supply of recycled water, the SDWD anticipates sufficient water to meet its customers' needs through the year 2035 under average, single-dry and multiple-dry year scenarios.

Olivenhain Municipal Water District

The OMWD was incorporated on April 9, 1959, to develop an adequate water supply for landowners and residents. On June 14, 1960, residents of OMWD voted to become a member of the SDCWA, thus becoming eligible to purchase water transported into San Diego County via the SDCWA and its wholesaler, MWD. The OMWD currently serves a population of approximately 84,000 residents in northern San Diego County, including parts of the City.

To model future water supply and demands, OMWD equates historic water demand patterns to variables such as household income, consumer response to the price of water,

and weather, to predict future water demands. Table 4.14-2 shows estimated water supply projections for the year 2035.

Table 4.14-2 Olivenhain Municipal Water District Projected Water Supply and Demand			
	Projected Supplies (afy ¹) Year 2030	Projected Demands (afy ¹) Year 2030	Difference (afy ¹)
Normal Year	31,192	31,192	0
Single-Dry Year	31,192	31,192	0
Multiple-Dry Year (1 st Year)	36,612	32,128	4,484
Multiple-Dry Year (2 nd Year)	36,612	34,056	2,556
Multiple-Dry Year (1 st Year)	36,612	36,099	513
SOURCE: Olivenhain Municipal Water District 2010 Urban Water Management Plan.			
¹ Acre-feet per year.			

If OMWD supplies are developed as planned, along with achievement of conservation targets, no shortages are anticipated within OMWD's service area under average, single-dry and multiple-dry year scenarios through the year 2035.

b. Water Reuse – Recycled Water

Recycled water is currently being produced at the EWA and also at the SEWRF. The SEWRF is permitted to discharge 2.48 million gallons of recycled water to its customers per day.

The recycled water infrastructure consists of a network of pipes in streets branching out from the treatment plants. The system also includes pump stations and reservoirs to convey the recycled water to local customers (Encinitas Ranch Golf Course, landscaped medians, homeowners associations, and parks) throughout the City. The City is enforcing an ordinance that requires new customers to hook up to existing recycled water infrastructure if the customer can feasibly connect to the recycled water line. There are no current plans to expand the recycled water treatment capacity at the EWA or SEWRF.

4.14.1.5 Solid Waste Disposal

The City has an exclusive franchise agreement with EDCO Waste and Recycling Services (EDCO) to provide solid waste collection services in the City for both residential and commercial customers. EDCO is the only authorized company that can haul solid waste in the City. Residential trash service includes curbside green waste collection and recyclable materials (mixed paper, glass, plastic, and aluminum cans) collection at no additional charge.

Residential recycling is collected once weekly. Commercial and industrial recycling is collected from one to six times per week, depending on the volume generated. According to the City Public Works Department, the State of California changed the reporting methodology in 2007 to a per capita waste generation. Official waste generation (pounds

per person per day, or ppd) as calculated by the State for the most recent year (2014) for residential was 6.1 ppd (State 50 percent goal was 7.5 ppd), which translates to approximately 59 percent diverted from landfill.

Landfill waste originating in Encinitas has declined from a high of 81,870 tons annually in 2005 to 67,772 tons in 2014. EDCO, the City's franchised waste hauler, anticipates that annual landfill waste disposal will stabilize in this range for the foreseeable future. Factors contributing to this are the implementation of AB 341 (mandatory commercial recycling) and AB 1826 (mandatory organics recycling).

4.14.2 Regulatory Framework

4.14.2.1 State

a. California Water Plan (Update 2013)

The California Water Plan is the State's strategic plan for managing and developing water resources statewide for current and future generations, as required by the California Water Code.

b. The Water Conservation Act of 2009

Senate Bill (SB) X7-7 was enacted in November 2009, requiring all water suppliers to increase water use efficiency. Specifically, the legislation sets an overall goal of reducing per capita urban water use by 20 percent by December 31, 2020. The State shall make incremental progress towards this goal by reducing per capita water use by at least 10 percent by December 31, 2015. Effective 2016, urban retail water suppliers who do not meet the water conservation requirements established by this bill are not eligible for State water grants or loans.

c. Water Conservation in Landscaping Act of 2006

This act requires cities, counties, charter cities, and charter counties, to have adopted landscape water conservation ordinances by January 1, 2010 (see also Section 4.14.2.2, Local, below).

d. California Senate Bill 1087: Sewer and Water Service Priority for Housing Affordable to Lower-Income Households (2006)

This statute requires local governments to provide a copy of the updated housing element to water and sewer providers immediately subsequent to adoption. Water and sewer providers must grant priority for service allocation to proposed development that includes housing units affordable to lower-income households. Additionally, Urban Water Management Plans are required to include projected water use for future lower-income households.

e. California State Senate Bill 221 and Senate Bill 610 (2002)

SB 610 requires water suppliers to prepare a Water Supply Assessment (WSA) report for inclusion by land use agencies within the CEQA process for new developments subject to SB 610. SB 221 requires water suppliers to prepare written verification that sufficient water supplies are planned to be available prior to approval of large-scale subdivisions. As defined in SB 221 and SB 610, large-scale projects include residential development projects that include more than 500 residential units and/or shopping centers or business establishments resulting in a net increase of more than 1,000 employees or more than 500,000 square feet of floor space.

f. 2006 Waste Discharge Requirements Order

The State Water Resources Control Board adopted Statewide General Waste Discharge Requirements for Sewer Systems (Order No. 2006-0003-DWQ). The intent of the order is to regulate all collections systems in the State in an effort to reduce or eliminate the number of Sanitary Sewer Overflows (SSOs) which, by their nature, pollute the environment. A SSO is any overflow, spill, release, discharge, or diversion of wastewater from a sewer system.

The order is applicable for all publicly owned sewage collection systems with more than one mile of sewer pipe. The City has more than one mile of sewer pipe, and therefore, is subject to this order. In response to the order, the City prepared their Sewer System Master Plan.

The plan addresses the City's plans, schedules, and programs to assure that all feasible steps are taken to contain and control effects that could occur in the event of a SSO. The Sewer System Master Plan dated November 2014 is discussed in subsection 4.14.2.2c.

g. California Integrated Waste Management Act of 1989 (as amended by Assembly Bill 341)

Originally, the Integrated Waste Management Plan mandated to divert 25 percent of their solid waste by 1995 and 50 percent by 2000. Assembly Bill (AB) 341 (introduced in 2011 by Assembly Member Chesbro) amends these requirements as follows: (1) CalRecycle to issue a report to the Legislature that includes strategies and recommendations that would enable the State to divert 75 percent of the solid waste generated in the State from disposal by January 1, 2020; (2) requires businesses that meet specified thresholds in the bill to arrange for recycling services by January 1, 2012; (3) streamlines the amendment process for non-disposal facility elements, by allowing changes without review and comment from a local task force; and (4) allows a solid waste facility to modify their existing permit, instead of having to undergo a permit revision, under specified circumstances.

4.14.2.2 Local

a. General Plan/Local Coastal Program

Pertinent General Plan goals and policies related to the provision of adequate public services are listed below in Table 4.14-3.

Table 4.14-3 Goals and Policies Related to Public Services	
Goal/Policy	Description
City of Encinitas General Plan Land Use Element	
Goal 2	The City should manage slow, orderly growth in accordance with a long- term plan which protects and enhances community values.
2.3	Growth will be managed in a manner that does not exceed the ability of the City, special districts and utilities to provide a desirable level of facilities and services.
2.10	Development shall not be allowed prematurely, in that access, utilities, and services shall be available prior to allowing the development.
Goal 4a	The City will ensure that the rate of residential growth does not create a demand which exceeds the capability of available services and facilities.
City of Encinitas General Plan Resource Management Element	
Goal 1	The City will conserve, protect, and enhance the water resources in the Planning Area
1.1	Require new development to utilize measures designed to conserve water in their construction.
1.3	The City will implement a program for both the using and sale of treated wastewater from a new wastewater treatment facility. The City should attempt to use the treated wastewater for the landscaping of transportation corridors, parks and recreation areas, and other public uses.
1.7	Investigate ways to reduce the reliance of local water users on imported water. The City will seek reductions in per capita water consumption and will support reclaiming sewage effluent for re- use.
1.10	Promote the use of water efficient sprinkling and gardening systems to include ordinances and technology to encourage drought tolerant plants.
1.11	If a development can be connected to the sewer system, the system must have the capacity to handle the additional load of the proposed project.
Goal 6	The City will make every effort to reduce the amount of solid and liquid waste generated in the Planning Area and will identify ways to responsibly deal with these wastes.
6.1	The City will phase in all practical forms of mandatory recycling as soon as possible.
6.4	The City will cooperate with other cities in the region to site and operate both landfill and recycling facilities.
SOURCE: City of Encinitas 1989, amended 2014.	

b. Municipal Code

City of Encinitas Municipal Code Chapter 11.20 Solid Waste Management

The purpose of this chapter is to codify the City's requirement for the periodic collection of garbage, rubbish, and other refuse from all residences and places of business in the City.

Additionally, this chapter requires the diversion of designated recyclables from the City's waste stream by all residential, commercial, and industrial customers within the City.

City of Encinitas Municipal Code Title 18 - Sewer Regulations Ordinance

The purpose of this section of the Municipal Code is to identify the rules and regulations and set forth the terms and conditions under which the City will authorize connections and provide sewer service to customers.

City of Encinitas Municipal Code Chapter 23.26 - Water Efficient Landscape Regulations

As required by the Water Conservation in Landscaping Act, the City adopted a landscape water conservation ordinance. Pursuant to the act, this ordinance establishes water use standards for landscaping. Specifically, the requirements of this chapter of the Municipal Code reduce water use associated with irrigation of outdoor landscaping by setting a maximum amount of water to be applied to landscaping and by designing, installing and maintaining water-efficient landscapes consistent with the water allowance. A project that is subject to this chapter is required to use recycled water for irrigation. Per State law, an updated Municipal Water Efficient Landscape Ordinance will be adopted by the City in 2016.

c. Plans and Programs

Metropolitan Water District of Southern California

The MWD was formed in 1928 to develop, store, and distribute supplemental water in southern California for domestic and municipal purposes. The MWD is a wholesale supplier of water to its member agencies. It obtains supplies from local sources as well as the Colorado River via the Colorado River Aqueduct which it owns and operates, and the Sacramento-San Joaquin Delta via the State Water Project. Planning documents such as the Regional Urban Water Management Plan (RUWMP) and Integrated Water Resources Plan (IWRP) help ensure the reliability of water supplies and the infrastructure necessary to provide water to southern California. MWD's 2010 RUWMP documents the availability of these existing supplies and additional supplies necessary to meet future demands. The 2010 RUWMP includes the resource targets included in the IWRP and contains a water supply reliability assessment that includes a detailed evaluation of the supplies necessary to meet demands over a 25-year period in average, single-dry year and multiple-dry year periods. As part of this process, MWD also uses the San Diego Association of Governments (SANDAG) regional growth forecast in calculating regional water demands. In accordance with State law, the RUWMP is updated every five years.

MWD's IWRP identifies a mix of resources (imported and local) that, when implemented, will provide 100 percent reliability for full-service demands through the attainment of regional targets set for conservation, local supplies, State Water Project supplies, Colorado River supplies, groundwater banking, and water transfers. The latest IWRP (2013) includes a planning buffer to mitigate against the risks associated with implementation of local and

imported supply programs. The planning buffer identifies an additional increment of water that could potentially be developed if other supplies are not implemented as planned. The planning buffer is intended to ensure that the southern California region, including the City of Encinitas, will have adequate water supplies to meet future demands.

San Diego County Water Authority

The SDCWA purchases water from the MWD that is delivered to the region through two aqueducts. The SDWCA also obtains water via long-term Colorado River water conservation and transfer agreements with agencies in the Coachella Valley and Imperial County. As retail member agencies of the SDCWA, both the SDWD and OMWD purchase water from the SDCWA for retail distribution within their service areas.

The SDCWA's 2010 UWMP, in accordance with State law and the RUWMP, contains a water supply reliability assessment that identified a diverse mix of imported and local supplies necessary to meet demands over the next 25 years in average, single-dry year and multiple-dry year periods. The UWMP is based on SANDAG's 2050 Regional Growth Forecast which has been refined to include an economic outlook that factors in the current recession and local jurisdictions' general/specific plan updates. The UWMP documents that no shortages are anticipated within its service area. The SDCWA also prepared an annual water supply report for use by its members that provides updated documentation on existing and projected water supplies.

Integrated Regional Water Management Program for the San Diego Region (2013)

The Integrated Regional Water Management (IRWM) program is a local water resources management approach preferred by the Governor, California Department of Water Resources (DWR), and State Water Resources Control Board. It is aimed at securing long-term water supply reliability within California by first recognizing the inter-connectivity of water supplies and the environment, and then pursuing projects yielding multiple benefits for water supplies, water quality, and natural resources.

The San Diego IRWM program is an interdisciplinary effort by water retailers, wastewater agencies, storm water and flood managers, watershed groups, the business community, tribes, agriculture, and regulatory agencies to coordinate water resource management efforts and to enable the San Diego region to apply for grants tied to DWR's IRWM program. The Regional Water Management Group (RWMG), which is the group responsible for administering and implementing the San Diego IRWM program, is comprised of the SDCWA, City of San Diego, and County of San Diego. A Regional Advisory Committee (RAC) serves to shape the IRWM program and upcoming planning and funding application(s). Additionally, broad stakeholder outreach engages members of the public and other interested parties in the IRWM planning process.

The IRWM Plan provides a mechanism for: (1) coordinating, refining, and integrating existing planning efforts within a comprehensive, regional context; (2) identifying specific regional and watershed-based priorities for implementation projects; and (3) providing

funding support for the plans, programs, projects, and priorities of existing agencies and stakeholders (San Diego Integrated Regional Water Management 2013).

Local Utility Districts

City of Encinitas Sewer System Management Plan (November 2014)

The Sewer System Master Plan was prepared in response to the State Water Resources Control Board's adoption of Order No. 2006-0003-DWQ, relating to the elimination of SSO. The plan is required to provide response processes for sewer overflow emergencies and to assure adequate facilities exist to support the needs of the City. The plan is required to be updated every five years.

Leucadia Wastewater District Asset Management Plan (January 2013)

The Asset Management Plan is used as the District's asset planning tool. The plan provides a comprehensive inventory of sewer facility assets and summarizes needed capital improvements to support the District's growth. The plan is updated every five years.

Olivenhain Municipal Water District Update of Potable and Recycled Water Master Plan Capital Improvement Program (March 2011)

The OMWD completed a comprehensive Potable Water Master Plan and Capital Improvement Program in 2000 and updated it in 2006. The Master Plan and Capital Improvement Program was last updated in 2011. The goal of the 2011 update was to further refine the CIP and estimate current and future development, population, and potable water demands to guide infrastructure planning. These are key ingredients of the District's capacity fees which were updated concurrently.

Cardiff and Encinitas Sewer Master Plan Update (April 2011)

The purpose of the Sewer Master Plan Update is to evaluate the City's existing and future sewer facility needs related to the Cardiff and Encinitas Sanitary Divisions, make recommendations and prepare a preliminary opinion of probable cost for each of the proposed improvements. The plan is intended to be updated every five years.

San Dieguito Water District 2010 Urban Water Management Plan (June 2011)

The UWMP provides an assessment of the existing water system conditions and demands. The plan concluded that the overall system is adequately sized to accommodate buildout under the adopted General Plan.

Olivenhain Municipal Water District 2010 Urban Water Management Plan (June 2011)

The 2010 UWMP was prepared to guide the OMWD's conservation and water resource management programs. The 2010 UWMP serves as the OMWD's long-term planning document to ensure a reliable water supply at the local level.

San Dieguito Water District Water System Master Plan (June 2010)

The San Dieguito Water District's Water System Master Plan analyzed the distribution system for reliability, water quality, adequacy of fire flow demands and storage requirements. The plan identifies and prioritizes capital improvement projects for the distribution system. The Master Plan identified areas for improvement that were then included into the future planning horizon (year 2030) CIP. These CIP includes pipeline system upgrades, valve replacement, meter replacement, and treatment plant upgrades. The City codified water utility specifications in Municipal Code Chapter 21. Municipal Code Chapter 21 includes water system regulations regarding service connections, extensions of water mains, and backflow.

4.14.3 Significance Determination Thresholds

Consistent with Appendix G of the CEQA Guidelines, impacts related to public utilities would be significant if implementation of the Housing Element Update (HEU) would:

1. Result in a need for new systems, or require substantial alterations to existing utilities, including storm water, wastewater, reclaimed water, or water infrastructure, the construction of which would create physical impacts;
2. Result in a demand for potable water supply such that purveyors have insufficient water supplies available to serve buildout of the project from existing entitlements and resources, and new or expanded entitlements are needed;
3. Result in a demand for wastewater treatment such that local wastewater treatment provider(s) have inadequate capacity to serve project buildout in addition to the provider's existing commitments and new or expanded facilities are needed; or
4. Require the construction of a new solid waste disposal facility.

4.14.4 Methodology

The impact analysis in the following subsections evaluates: (1) whether the proposed project would result in the need for substantial alterations or expansions to existing utility or solid waste facilities or the construction of new facilities; and (2) if the expansion or construction of new facilities necessitated by the project would result in environmental impacts.

4.14.4.1 Sources

Public utility information was acquired through consultation with the City and review of public documents, including the SDCWA UWMP, other relevant UWMPs, utility master plans, and the City General Plan and Municipal Code.

4.14.4.2 Future Project Implementation

The adopted City of Encinitas General Plan contains goals and policies relative to the provision of adequate utilities, water supply, and solid waste disposal to serve future demand. The City would continue to review project applications for the availability of utilities and water supply. Compliance with applicable requirements would be required and specific conditions would be administered as part of the approval process. Adoption of the HEU floating zone would not alter the City's adopted discretionary review process. Redevelopment of any of the housing sites may occur with or without implementation of the HEU floating zone.

The impact analysis below describes the type and magnitude of the potential environmental impacts of future development on the housing sites and how such impacts would affect the existing environment. Future development has the potential result to impacts associated with increased demand for utilities, water supply and waste disposal. The analysis in the following section identifies the potential need for increased capacity or supply, the potential for impacts resulting from the construction of new facilities and a mitigation framework for future projects. Subsequent "by right" development within the new floating zone district created through the HEU would not be subject to further CEQA review to analyze project-level impacts on utilities, unless otherwise noted. Compliance with development standards required for "by right" development as well as the mitigation framework identified in this PEIR would serve to minimize the potential for significant impacts associated with implementation of the HEU.

4.14.5 Issue 1a: Storm Water System

Would the project result in a need for new systems, or require substantial alterations to existing storm water infrastructure, the construction of which would create physical impacts?

4.14.5.1 Impacts

a. Housing Sites

The HEU does not propose the construction of new housing or other development; it provides capacity for future development consistent with State Housing Element Law.

The existing storm water system generally has adequate capacity to serve existing development within the City. However, inadequate storm drain capacity has been identified specifically in north Leucadia near housing site ALT-2. Future development of the housing sites would primarily result in redevelopment of already developed sites. The overall drainage area as well as the drainage characteristics/patterns in the post-buildout condition would be similar to existing conditions. However, an increase in paved areas would result in an increase in impervious surfaces, thereby increasing storm water runoff to existing storm drain systems.

As discussed in Section 4.8, Hydrology and Water Quality, future development would conform to applicable Federal, State, and City regulatory standards to effectively avoid and/or address potentially significant impacts related to runoff rates and volumes. Additionally, Goals 2 and 4 of the City's General Plan Land Use Element (LUE) reinforce the requirement that the demands of growth do not exceed the capability of available services and facilities. Consistent with General Plan policies LUE 2.3 and 2.10, no development associated with the HEU would be allowed prematurely, in that all utilities are required to be available prior to allowing the development. Additionally, the City's Stormwater Manual requires future development to implement project-specific measures to control and reduce storm water runoff. Therefore, at this program-level of review, the HEU would not result in a need for expanded or newly constructed storm water facilities, and impacts would be less than significant. Should new facilities be required to be constructed in the future, each would undergo site-specific analysis to evaluate the storm water system, as needed.

b. Housing Strategy Summaries

Adoption of housing strategy 1 – Ready Made (RM), housing strategy 2 – Build Your Own (BYO), or housing strategy 3 - Modified Mixed Use Places (MMUP) would not result in any need to construct new storm water facilities. Therefore, there would be no inherent differences in impacts among the housing strategies.

4.14.5.2 Significance of Impacts

Since there is adequate capacity in the storm water system and future projects are required to assure that storm water is adequately handled on-site, no construction or expansion of storm water facilities is required in conjunction with the HEU. Impacts to the City's storm water system would be less than significant at the program-level.

4.14.6 Issue 1b and 3: Wastewater

Would the project:

- Result in a need for new systems, or require substantial alterations to existing utilities, including wastewater, or reclaimed water infrastructure, the construction of which would create physical impacts?*
- Result in a demand for wastewater treatment such that local wastewater treatment provider(s) have inadequate capacity to serve project buildout in addition to the provider's existing commitments and new or expanded facilities are needed?*

4.14.6.1 Impacts

a. Housing Sites

The Sewer Master Plans based their future assessments of growth on buildout of the General Plan. As previously noted, based on this anticipated growth both sewer districts are operating under capacity with pipelines currently adequate to support increased flow.

The HEU does not propose the construction of new housing or other development; rather, it provides capacity for future development consistent with State Housing Element Law. Future buildout under the HEU would exceed projected buildout under the adopted General Plan. Ultimate buildout of the housing sites would therefore generate additional wastewater beyond that contemplated by the adopted General Plan.

The Sewer Master Plan identifies several projects that would be required to improve capacity and treatment throughout the City. The Master Plan is required to be updated every five years. Therefore, the 2012 plan would be updated in 2017, and would address potential deficiencies to assure adequate flow and treatment capacity to serve the growing needs of the City, including future buildout of the housing sites. Furthermore, pursuant to SB 1087, the sewer service provider is required to provide priority service for lower-income households.

In addition to improvements identified in the existing Sewer Master Plan, the City's General Plan goals and policies assure that adequate wastewater facilities would be available to serve new development. Specifically, as stated above, the City's General Plan LUE requires the assurance of available utilities prior to approval of future development. Applications for future development on any housing site would be required to provide documentation from the sewer district that adequate capacity is available to serve the project. Furthermore, the Leucadia Wastewater District levies capacity fees on new development. The District's capacity fee recovers the costs associated with providing wastewater facility capacity to new users and existing users requiring additional capacity. The capacity fee is designed to recover the cost for the additional capacity needed to accommodate the new connections. Therefore, at this program-level of review, the HEU would not result in a need for expanded or newly constructed wastewater facilities, and

impacts would be less than significant. The City currently has excess capacity at its facilities; however, should new facilities be required to be constructed in the future, each would undergo site-specific analysis to evaluate the wastewater system for improvements, as needed.

b. Housing Strategy Summaries

Adoption of Housing strategy 1 (RM), housing strategy 2 (BYO), or housing strategy 3 (MMUP) would not result in any need to construct new facilities. Therefore, there would be no inherent differences in impacts among the housing strategies.

4.14.6.2 Significance of Impacts

Sewer master planning is in place to assure adequate facilities would be available to serve new development and, no construction or expansion of storm water facilities is required in conjunction with the HEU. Impacts to the City's wastewater system would therefore be less than significant at the program-level.

4.14.7 Issue 1c: Water System

Would the project require or result in the construction of new water facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

4.14.7.1 Impacts

a. Housing Sites

The HEU does not propose the construction of new housing or other development; rather, it provides capacity for future development consistent with State Housing Element Law. Future development consistent with the HEU could generate additional demand for water and recycled water infrastructure.

The housing sites are located within the water service area of either the SDWD or OMWD. The master plans for both water districts provide details for each district's foreseeable CIPs to maintain and improve water flow throughout the City. Water districts periodically update their master plans to evaluate the ability of the district's potable water distribution system to adequately meet existing and future system demands. Pursuant to SB 1087, water districts are required to provide priority service for lower-income households. Therefore, buildout of the HEU would be considered by the districts in subsequent master plan updates that would be used to estimate projected water demands for the City. Any needs for additional infrastructure would be addressed and accounted for in the updated plans.

Future development would be required to conform to City General Plan LUE Policy 2.3 (Growth will be managed in a manner that does not exceed the ability of the City, special districts and utilities to provide a desirable level of facilities and services), Policy 2.10

(Development shall not be allowed prematurely, in that access, utilities, and services shall be available prior to allowing the development), and Goal 4a (The City will ensure that the rate of residential growth does not create a demand which exceeds the capability of available services and facilities). Applications for future development on any housing site would be required to provide documentation from the water district that adequate facilities are available to serve the project. SDWD and OMWD provide and maintain adequate water infrastructure capacity for the City annually based on long-term projections in their master plans. Any future construction of infrastructure required to support future housing would require environmental review which is beyond the scope of this EIR.

b. Housing Strategy Summaries

Adoption of housing strategy 1 (RM), housing strategy 2 (BYO), or housing strategy 3 (MMUP) would not result in any need to construct new facilities. Therefore, there would be no inherent differences in impacts among the housing strategies.

4.14.7.2 Significance of Impacts

Water master planning is in place to assure adequate facilities would be available to serve new development and, no construction or expansion of water facilities is required in conjunction with adoption of the HEU. Impacts to the City's water system would therefore be less than significant at the program-level.

4.14.8 Issue 2: Water Supply

Would the project require or result in the need for new water supply entitlements and resources?

4.14.8.1 Impacts

a. Housing Sites

The housing sites are located within the water service area of either the SDWD or OMWD. The 2010 UWMPs for both districts provide estimates of the water supply and water demand during normal, single-dry, and multiple-dry years. Tables 4.14-2 and 14-3 show adequate supplies from both providers to support buildout under the City's adopted General Plan.

The HEU does not propose the construction of new housing or other development; rather, it provides capacity for future development consistent with State Housing Element Law. Future development consistent with the HEU would generate additional water demand. The additional development allowed by the HEU was not included in the current UWMP growth forecasts used to plan for future water supply demands. Therefore, buildout of the HEU would result in water demands that would exceed water supplies projected in the UWMPs.

UWMPs are required to be updated every five years and would therefore be subject to revision in 2015. Pursuant to SB 1087, the City shall provide the updated housing element to the service providers immediately after adoption for use in the Districts' water supply planning efforts. Furthermore, water districts are required to provide priority service for lower-income households. Any needs for additional supplies based on adoption of the HEU would be addressed and accounted for in the District's updated plans.

Additionally, future projects consistent with the HEU would be required to present service letters from either SDWD or OMWD assuring that adequate water supplies would be available. Individual development projects would also be required to assure adequate measures are proposed to meet all water conservation requirements. Specifically, compliance with General Plan Resource Management Element (RME) Policy 1.1 requires new development to utilize measures designed to conserve water in their construction, and Policy 1.10, which promotes the use of water efficient landscape equipment. Future projects would also be held to water use standards codified in the Water Conservation in Landscaping Act (City Municipal Code Section 23.26). Therefore, at this program-level of review the project would not result in a need for new water supply entitlements, and impacts would be less than significant. Currently, adequate water supply exists from SDWD and OMWD; however, should new facilities be required to be constructed in the future, each would undergo site-specific environmental analysis to evaluate water supply as needed.

b. Housing Strategy Summaries

Adoption of housing strategy 1 (RM), housing strategy 2 (BYO), or housing strategy 3 (MMUP) would not result in any need to construct new facilities. Therefore, there would be no inherent differences in impacts among the housing strategies.

4.14.8.2 Significance of Impacts

Plans for water supply are in place to assure adequate facilities would be available to serve new development and, no construction or expansion of water supply facilities is required in conjunction with adoption of the HEU. Impacts to the City's water supply would therefore be less than significant at the program-level.

4.14.9 Issue 4: Solid Waste Disposal

Would the project:

- *Be served by a landfill without sufficient permitted capacity to accommodate the project's waste disposal needs; or*
- *Not comply with the Federal, State, and local statutes and regulations regarding solid waste?*

4.14.9.1 Impacts

a. Housing Sites

Buildout of the proposed land uses associated with the housing strategies would result in an increased demand for solid waste disposal. Based on the most recent reporting data available through CalRecycle, the Otay Landfill has a remaining capacity of 13 years and Sycamore landfill has a remaining capacity until 2042 (27 years) (CalRecycle 2015).

As previously stated, AB 341 requires cities and counties in California to implement recycling programs, reduce refuse at the source, and compost waste to achieve the established 75 percent diversion of solid waste from landfills. The City's recycling program helps the City meet State requirements. General Plan RME Policy 6.1 requires the City to phase in all practical forms of mandatory recycling as soon as possible. Additionally, City of Encinitas Municipal Code Chapter 11.20 sets the regulations for the collection of solid waste and requires the diversion of designated recyclables from the City's waste stream by all residential, commercial, and industrial customers within the City. Specifically, prior to issuance of a demolition or building permit applicants must prepare a Waste Management Plan for approval.

All future development would be required to participate in the above-mentioned programs and comply with City General Plan requirements and the solid waste and recycling ordinance. Doing so would avoid significant solid waste disposal impacts related to construction and operation of future development in accordance with the HEU. Therefore, at this program-level of review the project would not require increased landfill capacity, and impacts associated with solid waste would be less than significant. Should new solid waste facilities be required to be constructed in the future, each would undergo site specific analysis to evaluate solid waste disposal, as needed.

b. Housing Strategy Summaries

Adoption of housing strategy 1 (RM), housing strategy 2 (BYO), or housing strategy 3 (MMUP) would not result in any need to construct new facilities. Therefore, there would be no inherent differences in impacts among the housing strategies.

4.14.9.2 Significance of Impacts

Solid waste and landfill planning is in place to assure adequate facilities would be available to serve new development and, no construction or expansion of landfill facilities is required in conjunction with adoption of the HEU. Impacts to the City's solid waste disposal would therefore be less than significant at the program-level.