2.13. Utilities and Service Systems

This section addresses potential utilities and service systems impacts that may result from construction and/or operation of the Safari Highlands Ranch (SHR) project. The following discussion addresses the existing utilities and service systems conditions in the project area, identifies applicable regulations, evaluates the SHR project's consistency with applicable goals and policies, identifies and analyzes environmental impacts, and recommends measures to reduce or avoid adverse impacts anticipated from project implementation, as applicable.

The following analysis is largely based on the Safari Highlands Wastewater Report and the Safari Highlands Ranch Potable Water and Recycled Water Report and prepared by Dexter Wilson Engineering (2017a and 2017b, respectively) and peer-reviewed by Michael Baker International; the Safari Highlands Ranch CEQA Drainage Study prepared by Hunsaker & Associates (2016) and peer-reviewed by Michael Baker International; and the Water Supply Assessment for the Safari Highlands Ranch Project prepared by Dexter Wilson Engineering (2017c) and peer-reviewed by Michael Baker International. The CEQA Drainage Study is included in **Appendix 2.8-1**. The other reports listed above are included in their entirety in **Appendix 2.13.**

The table below summarizes the utilities and service systems impacts detailed in **Section 2.13-4.**

Summary of Utilities and Service Systems Impacts

Threshold Number	Issue	Determination	Mitigation Measures	Impact After Mitigation
1	Wastewater Treatment Requirements or New Water and Wastewater Facilities	Potentially Significant Impact	UTIL-1	Less than Significant Impact
2	Sufficient Storm Water Drainage Facilities	Less than Significant Impact	None required	Less than Significant Impact
3	Adequate Water Supply	Less than Significant Impact	None required	Less than Significant Impact
4	Adequate Wastewater Treatment Capacity	Less than Significant Impact	None required	Less than Significant Impact
5	Sufficient Landfill Capacity	Less than Significant Impact	None required	Less than Significant Impact
6	Solid Waste Regulations	Less than Significant Impact	None required	Less than Significant Impact

2.13.1. Existing Conditions

Water

Water System

Currently, the project site does not have a public water supply source, nor is it located within any water service district. Upon the property's annexation to the City's boundaries, public water service would be provided by the City of Escondido. The City's water service area covers approximately 20,000 acres and is not aligned with the city's incorporated boundary. The city and its water service area include residential, open space, commercial, industrial, and agricultural land uses.

The City purchases water from the San Diego County Water Authority (SDCWA), which supplies a blend of imported supplies that include purchased water from the Metropolitan Water District (MWD) of Southern California, water transfers and conservation savings from the Colorado River, and desalinated seawater. The City also operates facilities supplying local water from the San Luis Rey River watershed in conjunction with the Vista Irrigation District (VID). Adjacent to the city's water service area lies the Rincon del Diablo Municipal Water District (Rincon), which was formed in 1954 in order to purchase and distribute water from SDCWA to areas outside the city boundaries. As the city grew, portions of Rincon's service area were incorporated into the city's water distribution area (Escondido 2016a).

The City maintains a potable water system and a recycled water system to serve customers within its water service area. The potable water system currently uses water from two sources: local water and purchased water from SDCWA. Local water from the San Luis Rey River watershed is stored on a seasonal basis in the Lake Henshaw, Lake Wohlford, and Lake Dixon reservoirs. Local water is shared with the VID and delivered to the city via the Escondido Canal and associated pipelines. Water purchased from SDCWA supplies approximately 80 percent of the city's average potable water demand (Escondido 2016a).

To deliver water, the City owns, operates, and maintains approximately 440 miles of pipeline, eleven reservoirs, five pump stations, and two dams (and associated lakes). The City also co-owns the Escondido-Vista Water Treatment Plant with the VID. The plant treats all raw water supplying the city and is located near Dixon Lake in the northern portion of the city's water service area (Escondido 2016a). The plant was constructed in 1976 and has a treatment capacity of 75 million gallons per day (mgd) (Escondido 2016c). A majority of the existing distribution system is adequately sized to accommodate anticipated future demand; however, infrastructure improvements may be required to accommodate certain future projects.

In addition to supplying potable water, the City also produces and delivers tertiary-treated recycled water at its Hale Avenue Resource Recovery Facility (HARRF). The city's recycled water distribution system includes 18 miles of pipeline and serves over 80 customers, with the majority of recycled water use serving cooling tower demands at the Sempra Energy Power Plant. Two storage sites are used for the city's recycled water; on-site storage at the HARRF, which has a capacity of one million gallons, and Leslie Lane Reservoir, which has a capacity of two million gallons (Escondido 2016a).

In January 2017, the Escondido City Council approved a conditional use permit (CUP) to allow the construction of a microfiltration reverse osmosis treatment facility to be owned and operated by the City. The project involves development of a new city-owned facility to provide advanced treatment for recycled water produced at the HARRF for agricultural uses, with the capacity for future treatment for potable reuse. The facility would be sized for a total production capacity of 2 mgd. This facility represents the potential for additional recycled water supplies to be made available for public use, including the SHR project, in the future.

Water Demand

The City of Escondido's adopted 2015 Urban Water Management Plan (UWMP) identifies existing and future water demand and supply for the city. According to the UWMP, the city's public water system had 26,565 water connections and supplied 21,879 acre-feet (AF) of water to these connections in 2015 (Escondido 2016a). Current and projected population for the water service area is shown in **Table 2.13-1**. The water service area is estimated to have a population of 160,388 by 2040.

Table 2.13-1. Current and Projected Water Service Area Population

Year	2015	2020	2025	2030	2035	2040
Population	137,941	150,260	152,827	157,001	159,541	160,388

Source: Escondido 2016a, Table 2-2

Table 2.13-2 presents the actual water use for 2015 and projected water demand through 2040 for the city's public water system.

Table 2.13-2. Current and Projected Water Demand

Use Type	Water Demand by Year (acre-feet)					
	2015	2020	2025	2030	2035	2040
Single-Family	9,662	10,220	10,577	10,793	10,927	11,084
Multi-Family	3,807	3,994	4,023	4,119	4,166	4,184
Commercial	1,783	1,980	1,992	2,004	2,019	2,020
Industrial	171	221	219	216	217	217
Institutional/Government	517	724	726	728	731	731
Landscape Irrigation	1,950	536	536	536	536	536
Agriculture	3,017	2,485	1,917	1,235	1,276	1,313
Losses	384	1,245	1,271	1,292	1,305	1,316
Sales/Transfers/Exchanges to Other Agencies	508	498	508	517	522	527
Total Potable Water Demand	*21,862*	*21,903*	*21,769*	*21,440*	*21,699*	*21,928*
Recycled Water Demand	576	3,000	3,650	4,400	4,400	4,400
Total Demand	**22,438**	**24,903**	**25,419**	**25,840**	**26,099**	**26,328**

Source: Escondido 2016a, Tables 3-2, 3-4, and 3-6

Water Supply

As discussed above, the city's sources of supply are water that is purchased from SDCWA, local surface water, and recycled water. The city receives an average of approximately 80 percent of its water supplies from SDCWA, and SDCWA supplies include water from the State Water Project (SWP), water from the Colorado River, and alternative supplies such as desalinated seawater (Escondido 2016a).

Imported water from the SWP may be subject to restrictions during droughts or certain times of the year as a result of legal decisions to maintain minimum flows for environmental needs, or other legal agreements. Recently, SWP supplies were allocated due to drought conditions, and the risk of allocation is anticipated to continue over the next several years. For the 2015 Urban Water Management Plan, SDCWA evaluated the reliability of these supplies and indicated that in a normal year, deliveries are anticipated to be 51 percent of SDCWA's maximum potential allotment, and that in a single dry year scenario, deliveries are anticipated to be 12 percent of the maximum potential allotment.

Colorado River supplies are subject to the Quantification Settlement Agreement, which is influenced by legal decisions. Continued drought conditions and/or climate change impacts may potentially impact Colorado River water supplies; however, even with potential changes to the settlement agreement and climate change impacts, Colorado River supplies are considered substantially more secure than SWP supplies. Additionally, SDCWA continues to diversify its water supply with alternative sources in order to increase supply reliability, including funding a canal lining project for the All-American and Coachella canals, which conserved water by preventing unplanned loss to incidental recharge. The volume of water conserved by lining a portion of the canal is guaranteed for SDCWA.

Additionally, SDCWA enabled construction of the Claude "Bud" Lewis Desalination Plant located at 4600 Carlsbad Boulevard by agreeing to a minimum annual purchase of desalinated water from the facility. It is anticipated that desalinated seawater from the plant will meet approximately 10 percent of the region's potable water demands (Escondido 2016a).

The city's local surface water supplies (lakes, rivers, etc.) are primarily constrained by seasonal and climatic factors. During a year with higher than average precipitation, local surface water can provide the city with approximately 30 percent of its total supplies. The city's recycled water supplies are relatively reliable, and the amount of recycled water is expected to remain generally consistent across normal, single dry, and multiple dry years (Escondido 2016a).

The city's water supply is based on three water supply condition scenarios: average/normal water year, single dry water year, and multiple dry water years. According to the City's 2015 UWMP, in a normal water year, the city would purchase enough water from SDCWA to fulfill demands. Therefore, in a normal water year, supplies and demands would be equal and there would be no surplus or deficit (Escondido 2012b).

For a single dry year condition (based on the year 2015), it is anticipated that approximately 12 percent of the city's surface water supplies (e.g., Lake Dixon, Lake Henshaw, and Lake Wohlford reservoirs) would be available. Based on modeling performed by SDCWA, demands

would increase by 7 percent in a single dry year; therefore, the City would be required to purchase additional supplies from SDCWA to meet demands (Escondido 2016a).

The multiple dry year condition is based on the period of 2013–2015. It is anticipated that surface supplies would be 26 percent of normal, 20 percent of normal, and 8 percent of normal for years 1, 2, and 3 of a multiple dry year condition. Demands would increase to 107 percent of normal and 111 percent of normal in the first two years of a multiple dry year period.

The SDCWA 2015 UWMP demonstrates that there would be supply reliability for the first two years of a multiple dry year scenario, due to local carryover storage and supply availability from the MWD. In the first two years of a multiple dry year scenario, supplies and demands would be equal, and no surplus or deficit would occur.

SDCWA has indicated that future demands are anticipated to increase at a greater rate than local supply development, which may result in a deficit of approximately 9 percent in purchased water availability in the third year of a multiple dry year period. This analysis assumes that conservation efforts would be implemented locally to account for the potential 9 percent supply deficit in purchased supply availability to ensure that supplies and demands would be equal and that no surplus or deficit occurs (Escondido 2016a).

Factors Affecting Water Demand and Supply

Numerous factors affect water demand and sources of supply to meet demand. Primary factors include climate/weather and drought response, climate change, area demographics, population, economic conditions, and environmental and regulatory constraints. Each factor is described below.

Climate and Drought Response

The City's service area is situated in a semi-arid coastal environment characterized by mild temperatures throughout the year. Prolonged rainstorms are rare, with more than 80 percent of the region's rainfall occurring between November and March (Escondido 2016a). Variations in weather patterns affect regional short-term water requirements, causing reductions in water use during wet cycles and demand spikes during hot, dry periods. However, since a regional drought began gripping the American Southwest in 2002, only five water years (year ending September 30) have experienced above-average rainfall locally: 2003, 2005, 2010, 2011, and 2015. Temperatures also have been above average for the past few years, with new record warm years attained in 2014 and 2015 for the coastal region of Southern California, which includes SDCWA's service area. Water use typically has increased in accordance with the prevailing warmer, drier weather patterns. However, recent patterns show a divergence from the past, as drought restrictions statewide contributed to a year-over-year water use decrease in fiscal years 2015 and 2016 (SDCWA 2016, Section 1.7.2).

Governor Brown declared the statewide drought officially over in April 2017, due to a wetter than average rainy season. The normal precipitation for San Diego is 12.1 inches per rain year, which is defined as October 1 to September 30. As of April 27, 2017, the water-year-to-date precipitation was 15.61 inches, which is 136 percent of the normal water-year-to-date precipitation.

Regionally, over the past decade, California's water supplies have been limited as a result of increased environmental restrictions due to litigation affecting the SWP and the Central Valley Project operations (to protect listed fish species), coupled with two significant droughts: one from 2007 to 2011 and the other from 2012 to 2016 (SDCWA 2016, Section 11.2.3). Further, the American Southwest has been in the midst of a prolonged drought that began in the early 2000s and that has affected Colorado River water supply availability to the MWD (SDCWA 2016, Sections 1.7.2 and 11.2.3).

Drought conditions can adversely affect and reduce water supplies. However, agency drought responses, summarized below, have culminated in planning and actions taken by the California Department of Water Resources (DWR), the MWD, and SDCWA and its member agencies (including Escondido and Rincon). Based on SDCWA's analysis, such actions, addressed below, were effective in managing severe multiyear droughts.

In summary, since 2012, California has been in the midst of an unprecedented multiyear drought following record-breaking dry and warm weather across the state. In response to drought conditions, on January 17, 2014, Governor Brown proclaimed a state of emergency throughout California, calling for increased conservation across the state. In February 2014, SDCWA activated its Water Shortage and Drought Response Plan, notifying its member agencies of a Level I drought watch and declaring implementation of a Stage I voluntary supply management program under the Water Shortage and Drought Response Plan (SDCWA 2016, Section 11.2.3).

In April 2014, in response to continued drought conditions, Governor Brown directed that the SWRCB adopt an emergency regulation calling for increased statewide water conservation. In July 2014, the SWRCB adopted such regulations for urban water conservation aimed at reducing outdoor water use in water agency service areas. Also in July 2014, SDCWA increased the regional drought response to a Level II drought alert and implemented a Stage II supply enhancement under the Water Shortage and Drought Response Plan (SDCWA 2016, Section 11.2.3).

In the spring of 2015, dry conditions continued. In April 2015, Governor Brown issued an order directing the SWRCB to impose restrictions on urban suppliers to achieve a statewide reduction in potable urban water use of 25 percent. Following this direction, in May 2015, SDCWA issued additional requirements to its emergency regulation, including mandatory water-use reductions that ranged from 12 to 36 percent for SDCWA member agencies with an aggregate water conservation target of 20 percent (SDCWA 2016, Section 11.2.3).

Also in May 2015, the MWD's board called for a 15 percent cutback in fiscal year 2016 deliveries in its service area. In response, in May 2015, SDCWA declared a mandatory supply cutback, approved member agency municipal and industrial and transitional special agricultural water rates, and required its member agencies to restrict irrigation of ornamental landscapes and turf with potable water. The result of such efforts was that the San Diego region effectively reduced its potable water use by 21 percent from June 2015 through February 2016, outperforming the state's aggregate regional target of 20 percent during the initial phase of unprecedented state water-use mandates (SDCWA 2016, Section 11.2.3).

In November 2015, Governor Brown issued an order extending the urban water-use restriction until October 31, 2016, and directing the SWRCB to consider modifying its restrictions. In February 2016, the SWRCB extended the emergency regulation through October 2016 and provided for adjustments to conservation standards for significant investments in new, local, drought-resilient sources of potable water supply (SDCWA 2016, Section 11.2.3).

In March 2016, the SWRCB certified that supplies from the Carlsbad Desalination Plant were drought-resilient, lowering the range of member agencies' conservation standards to between 8 and 28 percent, with the regional aggregate water conservation target reduced from 20 percent to about 13 percent (SDCWA 2016, Section 11.2.3).

In the winter of 2016, the state's water supply conditions improved somewhat, with an El Niño weather pattern bringing rain and snow to California. In March 2016, SDCWA modified its shortage management actions and rescinded its July 2014 notification of a regional Level II drought alert (SDCWA 2016, Section 11.2.3). In May 2016, the MWD's board rescinded its member agency allocations effective May 10, 2016. In May 2016, SDCWA modified its shortage management actions to end member agency allocations effective May 26, 2016, and established a drought awareness effort. Also in May 2016, the SWRCB modified its emergency regulation from a mandated conservation standard to a self-certification approach, effective June 1, 2016, through January 2017.

During this time frame, SDCWA conducted a fiscal year 2016 analysis of water supply allocation from the MWD, combined with member agency dry-year local supplies and other diversified supplies from SDCWA, and compared those supplies to its 2014 water demands. The analysis showed that a projected shortage of less than 1 percent for the region, which demonstrated that the planning and actions taken by SDCWA and its member agencies were effective in managing severe multiyear droughts (SDCWA 2016, Section 11.2.3).

Climate Change

SDCWA and its member agencies (including Escondido and Rincon) recognize the challenges that climate change poses to the San Diego region and are committed to proactively addressing climate change issues (SDCWA 2016, Sections 1.7.3, 2.4.4). In addition, DWR and the MWD have been committed to addressing the challenges of climate change for well over a decade.

For example, DWR prepared the California Water Plan Update 2005, which contained the first-ever assessment of potential climate change impacts in a California Water Plan. Volume 1, Chapter 4, of the plan, titled Preparing for an Uncertain Future, lists the potential impacts of global climate change based on more than a decade of scientific studies on the subject. Additionally, in July 2006, DWR prepared a report titled Progress on Incorporating Climate Change into Management of California's Water Resources. This report demonstrated how various analytical tools could be used to address issues related to climate change.

The results of the report indicated that climate change already had been observed; in the last 100 years, air temperatures have risen about one degree Fahrenheit; and there had been a documented greater variance in precipitation, with greater extremes in both flooding and droughts. Another key finding was that increases in air temperature were expected to have

significant impacts on watersheds that traditionally receive at least some of their precipitation in the form of snow. The report also provided an overview of the advances that DWR has made since 2006 toward using future climate projection information to support decision-making by quantifying possible impacts to water resources for a range of climate scenarios.

Climate change also poses several issues related to the availability and reliability of imported SWP water supplies. Reduction of snowpack patterns (the source of the SWP's water supply in Lake Oroville) and changes in hydrologic patterns, sea level, rainfall intensity, and statewide water demands are all possible should climate change prove to be increasing over time. Computer models have been developed to show water planners what types of effect climate change could have on water supply, and it is intended that agencies like SDCWA and the retail purveyors (including the City of Escondido and Rincon) can plan accordingly.

DWR's State Water Project Final Delivery Reliability Report 2013 (2013 Delivery Reliability Report; DWR 2013) is intended to assist SWP contractors in assessing the delivery reliability of the SWP component of their overall water supplies. The stability and reliability of SWP water deliveries can be threatened by physical factors affecting facilities or water quality anywhere in the SWP system. The Delta is particularly vulnerable, and climate change has the potential to simultaneously affect availability of source water, ability to convey water, and users' demands for water.

The 2013 Delivery Reliability Report (DWR 2013) continues DWR's efforts to assess the effects on the SWP from climate change, including decreased water availability with reduced snowpack, increased SWP water demands, and sea level rise. The updated 2013 report presented estimates of the SWP's delivery reliability for the then existing (2013) and future conditions (2033), and these estimates reflected hydrologic changes that could result from climate change (DWR 2013).

Further, DWR's final State Water Project Delivery Capability Report 2015 provides updated estimates of the current (2015) and future (2035) SWP delivery capability and incorporates regulatory requirements for the SWP and Central Valley Project operations in accordance with US Fish and Wildlife Service and National Marine Fisheries Service biological opinions. Estimates of future capability also reflect potential impacts of climate change and sea level rise.

In addition, the MWD has evaluated climate change effects relative to California's water resources and has stated that climate change may prove to be the most significant challenge to water supply reliability for Southern California (MWD 2015). According to the Metropolitan Water District, it remains uncertain as to how the climate is changing in California; however, the potential outcomes of a changing climate will affect both supplies and demands. The vast majority of global circulation models show increasing air temperatures in the MWD's service area and in both the Northern California and Colorado River watersheds. In these watersheds, the reduced snowpack that will result from warmer temperatures will lead to the loss of the natural water management that snowpack provides. Warmer temperatures in Southern California will affect water demands by increasing the water requirements for plant life and landscapes and increasing evaporation rates in storage reservoirs. Reduced precipitation will also affect the natural recharge of groundwater and surface water resources.

According to the MWD, the past 10 years have given Southern California a glimpse into climate change challenges. Historically, local rainfall has been sharply below normal and imported supply watersheds have already experienced the range of higher temperatures and reduced snowpack that is foreseen by climate change scientists. While uncertainties remain regarding the exact timing, magnitude, and regional impacts of these temperature and precipitation changes, researchers have identified several areas of concern for California's water resources. These include the following:

- Reduction in Sierra Nevada snowpack
- Reduction in runoff and river flow in the Colorado River basin
- Increased intensity and frequency of extreme weather events
- Rising sea levels resulting in the following:
    - Impacts to coastal groundwater basins due to seawater intrusion
    - Increased risk of damage from storms, high-tide events, and the erosion of levees
    - Potential pumping cutbacks on the SWP and Central Valley Project due to increased salinity

Other important issues of concern due to global climate change include the following:

- Effects on local supplies such as groundwater
- Changes in urban and agricultural demand levels and patterns
- Impacts to human health from waterborne pathogens and water quality degradation
- Declines in ecosystem health and function
- Alterations to power generation and pumping regimes

The MWD—a major steward of the region's water supply resources—has been committed to facing the challenge of climate change for well over a decade. The MWD's (2015) Integrated Water Resources Plan 2015 Update (IRP) sets forth the adaptation actions that the district has taken to increase the proportion of the region's water resources and to make them more resilient to projected climate change effects. The 2015 report continues to refine adaptive management strategies to ensure water supply reliability (MWD 2015).

In addition, SDCWA has prepared a climate change and sustainability management strategy since 2008. In addition, Section 2.4.4 of SDCWA's 2015 Urban Water Management Plan includes the acknowledgement that although definitive projections are still forthcoming with regard to the evaluation of potential climate change impacts on water demand, advances in climate modeling have occurred since preparation of the 2010 UWMP.

Thus, SDCWA's 2015 UWMP evaluated five climate change scenarios using regional-average projections of changes in precipitation and temperature for two future climate change projection periods (2040 to 2060 and 2080 to 2099) (SDCWA 2016, Section 2.4.4). Section 10 of the 2015 UWMP also included a scenario planning process that addressed adapting to potential supply and demand impacts due to climate change (SDCWA 2016).

In general, SDCWA found that all projections indicated increases in average temperatures in the future, while various projections indicated increases or decreases in average precipitation. No dramatic shifts in seasonal patterns of precipitation and average maximum daily temperature for the San Diego region were observed under any of the five scenarios. However, on average, annual amounts of precipitation tend to be more concentrated in the winter, with lesser proportions of total annual precipitation occurring in the spring and fall (SDCWA 2016, Section 2.4.4).

SDCWA addressed the 2040–2060 and 2080–2099 climate projection periods. Under the 2040–2060 climate projection period, all of SDCWA's climate change scenarios resulted in higher estimates of total water use above the baseline normal weather demands. The average climate change impact ranged from negligible under the cool/wet scenario to about a 9 percent increase in the warm/dry scenario under one of the four climate scenarios. Under the 2080–2090 climate projection period, average projected impacts range from a 2 percent decrease in demands relative to historical normal weather conditions to about a 16 percent increase under the warm/dry scenario.

Wastewater

The City owns and operates the HARRF, which is a secondary-treatment wastewater treatment facility with a capacity of 18 million gallons per day (mgd). The HARRF treats raw sewage from the City of Escondido and the Rancho Bernardo community located in the City of San Diego. Wastewater collection and treatment are achieved via a network of lift stations, gravity pipelines, and sanitary sewer mains. The facility operates 24 hours a day, and the average daily flow is 15.6 mgd, generally comprising an estimated 11.8 mgd from Escondido and 3.8 mgd from Rancho Bernardo (Escondido 2016b).

In addition, the HARRF includes a recycled water component using tertiary treatment to create high quality water for reuse as irrigation on local golf courses, parks, school grounds, greenbelts, roadway medians, and open space and for industrial use; however, recycled water is not available for residential landscape irrigation. The use of recycled water helps to offset the need for additional potable water supplies. The HARRF is currently permitted to produce up to 9 mgd of recycled water. Additional treated recycled water produced at the HARRF not utilized by the city is sold to other agencies, providing an additional source of revenue. Additionally, as stated above, the City is currently developing a new facility to provide expanded advanced treatment for recycled water produced at the HARRF for agricultural uses, with the capacity for future treatment for potable reuse.

Water that is treated at the HARRF but is not beneficially reused or sold is disposed of through the Escondido Land Outfall. This outfall connects to the San Elijo Ocean Outfall, which is shared with the San Elijo Joint Powers Authority (JPA), and ultimately discharges to the Pacific Ocean. The effluent exits the pipeline approximately 1.5 miles offshore (Escondido 2016b).

Stormwater Drainage

The city's stormwater drainage system operates under San Diego Regional Water Quality Control Board (RWQCB) Order Number R9-2013-0001 (MS4 Permit), as amended by Order

Numbers R9-2015-0001 and R9-2015-0100. This permit was issued to manage discharges from municipal separate storm sewer systems (MS4s) in the San Diego region and was adopted on May 8, 2013, replacing the 2007 Municipal Stormwater Permit (R9-2007-0001). The 2013 MS4 Permit applies to all 21 municipal agencies in San Diego County, including the City of Escondido (Escondido 2015).

This permit requires each municipality in San Diego County to prepare a Jurisdictional Runoff Management Plan for the area under its jurisdiction. The City has developed multiple programs and systems by which to monitor and identify pollution sources, inventory pollutant-generating facilities, enforce environmental regulations and development guidelines, establish and inspect best management practices (BMPs), and educate municipal staff and the public on reducing the impacts of urban runoff.

The primary function of the City's MS4 is to collect and convey surface runoff during storm events to prevent flooding. The MS4 is a network of natural creeks and streams, retention areas, curbs/gutters, inlets, catch basins, pipes, culverts, and concrete channels. It also includes underground pipes and surface culverts that drain mostly to earthen or concrete flood control channels. Some older and/or steep roads in the city were developed without storm drains, and thus, runoff in these areas may flow along curbs for some distance before reaching an MS4 structure. The City has identified approximately 112 major MS4 outfalls as defined in the MS4 Permit (Escondido 2015).

Solid Waste

Solid waste disposal service for the city is provided by Escondido Disposal, Inc. (EDI), which offers solid waste, green waste, and recyclables pickup. EDI also operates a household hazardous waste facility in Escondido, which is open to city residents. Solid waste generated in the city is disposed of at the Sycamore Landfill or, alternatively, the Otay Landfill.

According to the California Department of Resources Recycling and Recovery (CalRecycle) (2016a), in 2015, the Sycamore Landfill received approximately 98.1 percent (or 144,552 tons) of Escondido's solid waste, and the Otay Landfill received approximately 1.1 percent of the city's solid waste. As of 2015, the Sycamore Landfill had a remaining capacity of 39.6 million cubic yards. The estimated closure year for the Sycamore Landfill is 2043 (CalRecycle 2016b). It is anticipated that landfill waste originating in Escondido will stabilize or even decrease in the foreseeable future. Factors contributing to this are the implementation of Assembly Bill (AB) 341, which requires mandatory commercial recycling, and AB 1826, which requires organic recycling.

As of April 1, 2016, CalRecycle requires businesses and multifamily residential dwellings of five or more units are required to recycle their organic waste, depending on the amount of waste generated per week. Organic waste is defined as food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste. However, multifamily dwellings are not required to have a food waste diversion program. This law phases in the mandatory recycling of commercial organics over time, while also offering an exemption process for rural counties (CalRecycle 2017).

2.13.2. Regulatory Framework

Federal

Clean Water Act

The Clean Water Act (CWA) is the primary federal legislation governing surface water quality protection. The statute employs a variety of regulatory and non-regulatory tools to reduce direct pollutant discharges into waterways, finance municipal wastewater treatment facilities, and manage polluted runoff. These tools are employed to achieve the goal of restoring and maintaining the chemical, physical, and biological integrity of the nation's waters so that they can support the protection and propagation of fish, shellfish, and wildlife and recreation in and on the water.

Pollutants regulated under the CWA include "priority" pollutants, including various toxic pollutants; "conventional" pollutants, such as biochemical oxygen demand (BOD), total suspended solids (TSS), fecal coliform, oil and grease, and pH; and "non-conventional" pollutants, including any pollutant not identified as conventional pollutants, toxic pollutants, or thermal discharges. These include chloride, iron, ammonia, color, and total phenols. The CWA regulates both direct and indirect discharges (EPA 2012).

National Pollutant Discharge Elimination System

The National Pollutant Discharge Elimination System (NPDES) program, Section 402 of the CWA, controls direct discharges into navigable waters. Direct discharges, or point source discharges, are from sources such as pipes and sewers. NPDES permits, issued by either the US Environmental Protection Agency (EPA) or an authorized state or Native American tribe, contain industry-specific, technology-based, and/or water-quality-based limits and establish pollutant monitoring and reporting requirements.

The EPA has authorized 40 states to administer the NPDES program, including California, under which the regional water boards administer the NPDES program. A facility that intends to discharge into the nation's waters must obtain a permit before initiating a discharge. A permit applicant must provide quantitative analytical data identifying the types of pollutants present in the effluent. The permit establishes the conditions and effluent limitations under which a facility may make a discharge (EPA 2012).

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA), which amends the Solid Waste Disposal Act of 1965, was enacted in 1976 to address municipal and industrial solid waste generated nationwide. The act gives the EPA the authority to control hazardous waste from "cradle to grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. The RCRA also sets forth a framework for the management of nonhazardous solid wastes. The federal Hazardous and Solid Waste Amendments to the RCRA were adopted in 1984 and were aimed at waste minimization and phasing out land disposal of hazardous waste, as well as providing guidance for corrective action of releases.

The amendments also allowed for increased enforcement authority for the EPA, more stringent hazardous waste management standards, and a comprehensive underground storage tank program. Amendments to the RCRA in 1986 further enabled the EPA to address environmental hazards relative to underground tank storage of petroleum and other hazardous substances (EPA 2012).

Safe Drinking Water Act

Passed in 1974 and amended in 1986 and 1996, the Safe Drinking Water Act grants the EPA the authority to set drinking water standards. Drinking water standards apply to public water systems that 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 and the National Secondary Drinking Water Regulations. The National Primary Drinking Water Regulations 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. The National Secondary Drinking Water Regulations are non-mandatory guidelines for certain substances that do not present a risk to public health.

State

Water

California Urban Water Management Planning Act

Section 10610 of the California Water Code establishes the Urban Water Management Planning Act. The act states that all urban water service providers serving 3,000 or more customers, or supplies over 3,000 acre-feet (AF) of water annually, should prepare an urban water management plan every five years. The UWMP is intended to ensure the appropriate level of reliability in the provision of water service sufficient to meet the needs of customers during normal, dry, and multiple dry years.

Water Conservation Act of 2009

The Water Conservation Act (SBX7-7; Water Code Section 10608) requires that all water suppliers increase water-use efficiency. This legislation sets an overall goal of reducing per capita urban water use, compared to 2009 use, by 20 percent by December 31, 2020. The state was required to make incremental progress toward this goal by reducing per capita water use by at least 10 percent on or before December 31, 2015. Each urban retail water supplier had to develop urban water use targets and an interim urban water use target by July 1, 2011.

Agricultural water suppliers also were required to implement efficient water management practices including adoption of agricultural management plans by December 31, 2012, and updated plans by December 31, 2015, and every 5 years thereafter. Effective 2013, agricultural water suppliers not in compliance with these planning requirements are ineligible for state water grants or loans.

Senate Bill 221

Enacted in 2001, Senate Bill (SB) 221 (Government Code Sections 66455.3 and 66473.7) 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 water 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 project, 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. In addition, SB 221 only applies in the event that the proposed development is considered a "project" under SB 610 (discussed below). Therefore, SB 221 would not apply to the project (DWR 2003).

Urban Water Management Planning Act

In 1983, the State Legislature enacted the Urban Water Management Planning Act (California Water Code Sections 10610–10656), which requires specified urban water suppliers within the state to prepare an Urban Water Management Plan and update it every 5 years. State and local agencies and the public frequently use such plans to determine if agencies are planning adequately to reliably meet water demand in various service areas. As such, the plans serve as an important element in documenting water supply availability and reliability for compliance with state laws, including SB 610 and SB 221, which link water supply sufficiency to large land-use development project approvals. Urban water suppliers also must prepare such plans, pursuant to the Urban Water Management Planning Act, to be eligible for state funding and drought assistance.

The UWMPs include information on water usage, water supply sources, and water reliability planning. They also may provide implementation schedules to meet projected demands over a planning horizon, a description of opportunities for new development of desalinated water, groundwater information (where groundwater is identified as an existing or planned water source), a description of water quality over the planning horizon, and identification of water management tools that maximize local resources and minimize imported water supplies. A UWMP's water supply analysis includes a water supply reliability assessment, water shortage contingency plan, and development of a plan in case of an interruption in water supply.

California Water Plan

Water Code Sections 10004 through 10013 describe the components and characteristics of the California Water Plan. The plan addresses the coordinated control, protection, conservation, development, and utilization of the state's water resources. Updated every 5 years, the most recent water plan is the California Water Plan Update 2013, released in October 2014.

Section 15155 of the CEQA Guidelines – Water Supply Assessment

Primary environmental legislation in California is found in the California Environmental Quality Act (CEQA) and its implementing guidelines (CEQA Guidelines), which require that

projects with potential adverse effects (or impacts) on the environment undergo environmental review. Adverse environmental impacts are typically mitigated as a result of the environmental review process in accordance with existing laws and regulations.

Senate Bill (SB) 610 requires water suppliers to prepare a water supply assessment (WSA) report for inclusion in the CEQA process for new development. Section 15155 of the California Environmental Quality Act (CEQA) Guidelines details the types of projects that require a water supply assessment per SB 610. A WSA is required if:

- A project would result in the construction of more than 500 residential units and/or require a water demand equivalent to a 500-dwelling-unit project;
- A project would include a commercial component that would employ more than 1,000 persons or have more than 250,000 square feet of floor space;
- A project would include a hotel or motel, or both, having more than 500 rooms; and/or
- A proposed residential development would account for an increase of 10 percent or more in the number of the public water system's existing service connections.

As the SHR project proposes to develop 550 dwelling units, it surpasses the 500 dwelling unit threshold. A WSA has therefore been prepared for the project and is included in **Appendix 2.13-3** of this EIR (Dexter Wilson Engineering 2017).

California Water Recycling Standards

The California Legislature has developed state requirements for the production, discharge, distribution, and use of recycled water. These requirements are contained in the California Code of Regulations, Title 22, Division 4, Chapter 3, Reclamation Criteria, Sections 60301 through 60475, and Title 17. The California Department of Public Health administers the state recycling water standards.

California Green Building Standards Code

The California Green Building Standards Code, commonly referred to as the CALGreen Code, is set forth in California Code of Regulations, Title 24, Part 11, and establishes voluntary and mandatory standards pertaining to the planning and design of sustainable site development and water conservation, among other issues. Under the CALGreen Code, all water closets (i.e., flush toilets) are limited to 1.28 gallons per flush and urinals are limited to 0.5 gallon per flush. In addition, maximum flow rates for faucets are established as follows: 2.0 gallons per minute (gpm) at 80 pounds per square inch (psi) for showerheads; 1.5 gpm at 60 psi for residential lavatory faucets; and 1.8 gpm at 60 psi for kitchen faucets.

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 within or adjacent to the city's sphere of influence. SB 244 requires the city to 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.

Safe Water Drinking Act

Similar to the federal act, California implements the Safe Drinking Water Act (Health & Safety Code, Sections 116270 et seq.) to ensure public health and safety relative to clean drinking water. Under this act, the California Department of Public Health has the authority to protect public drinking water by adopting contaminant levels not to be exceeded in potable water supplies. Such thresholds are equal to or more stringent than established at the federal level under the EPA.

Wastewater and Stormwater

Porter-Cologne Water Quality Control Act

In 1967, the California legislature enacted the Porter-Cologne Water Quality Control Act to preserve, enhance, and restore the quality of the state's water resources. The act established the State Water Resources Control Board (SWRCB) and nine Regional Water Quality Control Boards as the principal state agencies with the responsibility for controlling water quality in California. Under the act, water quality policy is established, water quality standards are enforced for both surface water and groundwater, and the discharges of pollutants from point and non-point sources are regulated. The act authorizes the SWRCB to establish water quality principles and guidelines for long-range resource planning, including groundwater and surface water management programs and control and use of recycled water (USDOE 2012).

State Water Resources Control Board

Created by the California legislature in 1967, the five-member SWRCB allocates water rights, adjudicates water right disputes, develops statewide water protection plans, establishes water quality standards, and guides the nine RWQCBs located in the major watersheds of the state. The joint authority of water allocation and water quality protection enables the SWRCB to provide comprehensive protection for California's waters (SWRCB 2012). The SWRCB is responsible for implementing the Clean Water Act and issues NPDES permits to cities and counties through the regional boards. Escondido is located within the jurisdiction of the San Diego RWQCB (Region 9).

Solid Waste

California Integrated Waste Management Act

AB 939 established the California Integrated Waste Management Act of 1989 (Public Resources Code Sections 42900–42927), which requires all California cities and counties to reduce the volume of solid waste deposited in landfills by 50 percent by the year 2000 and continue to remain at 50 percent or higher for each subsequent year. The act is intended to reduce, recycle, and reuse solid waste generated to the maximum extent feasible.

The act requires each California city and county to prepare, adopt, and submit to CalRecycle a source reduction and recycling element (SRRE) that demonstrates how the jurisdiction will meet the act's mandated diversion goals. Each jurisdiction's SRRE must include specific components, as defined in Public Resources Code (PRC) Sections 41003 and 41303. In addition, the SRRE must include a program for management of solid waste generated in the jurisdiction consistent with the following hierarchy: (1) source reduction; (2) recycling and composting; and (3) environmentally safe transformation and land disposal. The SRRE is required to emphasize and maximize the use of all feasible source reduction, recycling, and composting options in order to reduce the amount of solid waste to be disposed of by transformation and land disposal (PRC Sections 40051, 41002, and 41302).

Assembly Bill 341

AB 341 went into effect on July 1, 2012, and established a statewide goal to divert 75 percent of solid waste from landfills by the year 2020. AB 341 requires California commercial enterprises and public entities that generate four or more cubic yards per week of waste, and multi-family housing complexes with five or more units, to arrange for recycling services. Mandatory commercial recycling was one of the measures adopted in the AB 32 Scoping Plan by the California Air Resources Board (CARB), pursuant to the California Global Warming Solutions Act (Chapter 488, Statutes of 2006).

The mandatory commercial recycling measure is focused on increasing waste diversion from commercial uses as a means by which to reduce greenhouse (GHG) emissions (e.g., GHG emissions resulting from decomposition of organic wastes in landfills have been identified as a significant source of emissions contributing to global climate change) and establishes an objective of reducing GHG emissions by five million metric tons of carbon dioxide equivalents (CO_2e). To meet this objective, the commercial sector will be required to recycle an additional two to three million tons of materials annually by the year 2020. This regulation reflects the statutory provisions of AB 341 and provides additional procedural clarifications.

Assembly Bill 1826

AB 1826 was adopted in October 2014, requiring businesses to recycle their organic waste on and after April 1, 2016, depending on the amount of waste they generate on a weekly basis. Additionally, AB 1826 requires that after January 1, 2016, all local jurisdictions implement an organic waste recycling program to divert organic waste generated by businesses, including multi-family residential dwellings that consist of five or more units. Organic waste includes food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste. This law phases in the mandatory recycling of commercial organics over time.

As the minimum threshold of organic waste generation by businesses will be decreased over time (e.g., in 2016, affected businesses are those generating 8 cubic yards or more of organic waste per week; in 2019, affected businesses are those generating 4 or more cubic yards of organic waste, etc.), an increasingly greater proportion of the commercial sector will be required to comply. AB 1826 is aimed at achieving California's recycling and GHG emissions reduction goals. Reducing the amount of organic materials sent to landfills and increasing the production of compost and mulch are part of the AB 32 Scoping Plan.

Local

Water

City of Escondido Water Conservation Plan

The City adopted its Water Conservation Plan in 2008 under Chapter 31, Article 5 (Water Conservation Plan) of the Escondido Municipal Code. The Water Conservation Plan was most recently updated in 2015 through adoption of Ordinance No. 2015-12R. The Water Conservation Plan establishes priorities and restrictions during various levels of water shortages, including a 10 percent to greater than 40 percent reduction in water use. The City's Water Conservation Plan sets forth the following objectives:

1. To prevent water supply shortages through aggressive and effective water management programs such as water conservation, water education, and use restrictions and penalties.
2. To minimize the impact of a water supply shortage on the city's population and economy.
3. To provide first for public health and fire protection and other essential services, then to provide for the economic health of the city, and then to provide for other uses of water.
4. To 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, a "lifeline allowance" will be established by the City Council to reflect the minimum amount necessary to sustain an average household.

The City's Water Conservation Plan includes measures that are always in place and four stages that are in place during water shortage conditions. The City Council sets drought response levels in accordance with drought response levels determined by SDCWA (Escondido 2016a, Section 7.2).

Metropolitan Water District, Water Tomorrow Integrated Water Resources Plan

The Metropolitan Water District adopted its Water Tomorrow Integrated Water Resources Plan (IWRP) in 2015. The IWRP provides guidance for long-term water supply reliability in Southern California at a regional level. The MWD operates as a water provider for a six-county region with a population of nearly 19 million. The IWRP was originally developed in 1996 to address the complexity of developing, maintaining, and delivering water to meet changing demands in the face of growing challenges. The plan establishes targets for a diversified portfolio of supply investments to ensure adequate and continued reliability of the region's water supplies over the long term.

San Diego County Water Authority Urban Water Management Plan

SDCWA is one of the largest of 26 member agencies of the MWD of Southern California; the authority purchases approximately 25 percent of all the water that the MWD delivers. SDCWA was formed in 1944 by the California legislature to provide an additional water supply as the San Diego region's civilian and military populations expanded to meet wartime activity needs.

SDCWA has 24 member agencies and supplies between 75 and 95 percent of the water needs in its service area.

SDCWA implements its Urban Water Management Plan, adopted in June 2015. The UWMP was prepared in accordance and compliance with the Urban Water Management Planning Act (Water Code Sections 10610–10656) and includes the conservation measures, programs, and policies required by Water Code Section 10608.36. Main components of the UWMP include baseline demand forecasts under normal weather, dry weather, and climate change scenarios; conservation savings estimates and net water demand projections; a water supply assessment; supply reliability analysis; and scenario planning.

Wastewater and Stormwater

San Diego Regional Water Quality Control Board

The San Diego RWQCB establishes planning, monitoring, and enforcement techniques for surface water and groundwater quality in San Diego County, including Escondido and the surrounding area. The San Diego RWQCB regulates discharges from Phase I municipal separate storm sewer systems (MS4s) in the San Diego region under the Regional MS4 Permit. The permit covers 39 municipal, county government, and special district entities (referred to jointly as co-permittees) in San Diego County, southern Orange County, and southwestern Riverside County who own and operate large MS4s which discharge storm water runoff to surface waters throughout the San Diego region; refer to **Section 2.8, Hydrology and Water Quality**, for additional discussion. The San Diego RWQCB develops and enforces water quality objectives and implements plans that will best protect the area's waters while recognizing local differences in climate, topography, geology, and hydrology. The RWQCB also protects and enforces the use of water, including for industry, agriculture, municipal districts, and the environment (RWQCB 2012).

Water Reuse Requirements (Permits)

The San Diego RWQCB issues water reuse requirements (permits) for projects that reuse treated wastewater. These permits include water quality and public health protections by incorporating criteria established in Title 22 of the California Code of Regulations. The San Diego RWQCB may incorporate requirements into the permit in addition to those specified in Title 22. Such requirements may include periodic inspection of recycled water systems, cross-connection testing, training of personnel who operate recycled water systems, monitoring of recycled water and groundwater quality, and reporting, as well as maintaining a database and/or permitting individual use sites.

Waste Discharge Requirements

The San Diego RWQCB typically requires a waste discharge requirement (WDR) permit for any facility or person discharging or proposing to discharge waste that could affect the quality of the waters of the state, other than into a community sewer system. Those discharging pollutants (or proposing to discharge pollutants) into surface waters must obtain an NPDES permit from the San Diego RWQCB.

The NPDES permit serves as the WDR permit. For other types of discharges, such as those affecting groundwater or in a diffused manner (e.g., erosion from soil disturbance or waste discharges to land), a Report of Waste Discharge must be filed with the San Diego RWQCB in order to obtain a WDR permit. For specific situations, the San Diego RWQCB may waive the requirement to obtain a waste discharge requirement permit for discharges to land or may determine that a proposed discharge can be permitted more effectively through enrollment in a general NPDES permit or general WDR permit (RWQCB 2012).

City of Escondido General Plan

Vision and Purpose Element

The City of Escondido General Plan includes land use ordinances that facilitate development and manage growth. Chapter I, Vision and Purpose, includes policies that help development and managed growth complement rather than compete with each other. Chapter I also includes Quality of Life Standards that establish minimum thresholds of service levels for various public improvements and facilities. Quality of Life Standards are included for the city's wastewater system and water system, among others. The following excerpted text from the Quality of Life Standards applies to the project:

Quality of Life Standard 5: Wastewater System

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. Capacity to treat a minimum of 250 gallons per day for each residence on said system or as established in the city's Wastewater Master Plan shall be provided.

Quality of Life Standard 10: Water System

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 gallons per day 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.

Mobility and Infrastructure Element

In addition to the Quality of Life Standards listed above, the General Plan includes the Mobility and Infrastructure Element. This element includes a number of policies that address the city's water system, wastewater system, storm drainage, and solid waste and are pertinent to the SHR project. These include:

GOAL 2: Adequate and sustainable infrastructure and water supply to serve a community that values and con-serves water.

Water System Policy 12.1

Regularly review and update a Water Master Plan that establishes service standards; defines needed improvements to systematically expand water distribution, delivery, treatment, and

storage concurrent with planned growth; and incorporates best practices to sustain scarce water resources.

Water System Policy 12.5

Require new development to provide adequate water facilities and/or finance the costs of improvements necessary to serve the demands created by the development and/or anticipated growth determined by the city, as appropriate. Establish a system for the reimbursement of construction costs for backbone water system improvements in master planned development projects involving multiple phases and developers.

Water System Policy 12.7

Require any new water facilities to be constructed to city standards.

Water System Policy 12.9

Employ best practices to maintain the highest possible energy efficiency in the water treatment plant and infrastructure system to reduce costs and greenhouse gas emissions.

Water System Policy 12.10

Implement federal and state drinking water quality standards for public water infrastructure facilities and private development projects.

Water System Policy 12.12

Require new development to incorporate water conservation techniques into building and site design incorporating such elements as water efficient fixtures (e.g., low flow showerheads), drought-tolerant landscape, permeable hardscapes, and on-site stormwater capture and re-use facilities.

GOAL 3: Provision of adequate and sustainable wastewater infrastructure to serve residents, businesses and property.

Wastewater System Policy 13.1

Regularly review and update the Wastewater Master Plan to establish service standards, define needed improvements that systematically expand wastewater collection and treatment facilities concurrent with planned growth; and incorporate best practices that sustains and prevents pollution of water resources.

Wastewater System Policy 13.2

Ensure that the Hale Avenue Resource Recovery Facility (HARRF) and supporting infrastructure provide sufficient capacity to meet normal and emergency demand for existing and future growth based on a minimum standard of 250 gallons per day for each residence served by the HARRF. This standard should be periodically reviewed and modified by updates to the Wastewater Master Plan to account for changes in sanitary waste generation and conservation practices.

Wastewater System Policy 13.3

Design the wastewater system to support development of properties at the intensities specified by the General Plan Land Use Plan.

Wastewater System Policy 13.5

Require new development to provide adequate wastewater facilities and finance the costs of improvements necessary to serve the additional demands created by the development and/or anticipated growth determined by the city, as appropriate. Establish a system for the reimbursement of construction costs for backbone wastewater system improvements in master planned development projects involving multiple phases and developers.

Wastewater System Policy 13.7

Require any new wastewater system facilities be constructed to city standards.

GOAL 4: Provision of adequate and sustainable infra-structure that is environmentally sensitive to serve residents, businesses, and property.

Storm Drainage Policy 14.1

Regularly review and update the Master Drainage Plan to establish standards for each drainage basin, define needed improvements to accommodate stormwater runoff on full development of the drainage basin at the intensities specified by the Land Use Element, and incorporate best practices to prevent pollution of water resources and sustain natural habitats.

Storm Drainage Policy 14.2

Improve the existing storm drainage system by correcting identified deficiencies.

Storm Drainage Policy 14.3

Levy Drainage Fees for subdivided and developed land to finance drainage improvements. Periodically review and adjust for inflation, construction costs, and changes in land development intensities and timing.

Storm Drainage Policy 14.4

Require new development to create a mechanism to finance and fund ongoing maintenance of stormwater facilities.

Storm Drainage Policy 14.5

Require new development to prepare drainage studies and improvement plans that demonstrate no net increase in stormwater runoff and compliance with adopted stormwater plans.

Storm Drainage Policy 14.6

Require new development to minimize alterations to natural land-forms and the amount of impervious surfaces to minimize erosion, while encouraging implementation of low impact development measures and the maximum use of natural drainage ways, consistent with sound engineering and best management practices.

Storm Drainage Policy 14.7

Require new development and redevelopment to minimize storm water runoff and contaminants entering drainage facilities by incorporating low impact development measures and other on-site design features such as bio-swales, retention ponds, and cisterns for storage and infiltration, treatment of flows, and appropriate best management practices (BMPs) consistent with the National Pollution Discharge Elimination System (NPDES).

GOAL 5: Reduction in the generation and disposal of solid waste.

Solid Waste and Recycling Policy 15.1

Regularly review and update the city's mandatory recycling ordinance to reflect changes and new technologies regarding appropriate recyclable materials acceptable in the city's recycling program.

Solid Waste and Recycling Policy 15.2

Support 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 Policy 15.3

Regularly review and update the city's participation in the Countywide Integrated Waste Management Plan, including the Source Reduction and Recycling Element to promote increased recycling, composting, source reduction, and education efforts throughout the community, as well as new diversion technologies designed to reduce the amount of solid waste sent to landfills.

Solid Waste and Recycling Policy 15.4

Continue to support the residential, commercial, industrial and construction/demolition recycling programs to minimize the solid waste stream to landfills.

Solid Waste and Recycling Policy 15.5

Encourage and consider requiring non-residential uses and businesses to participate in the city's recycling program.

Solid Waste and Recycling Policy 15.6

Encourage, and consider requiring, recycling and reuse of construction wastes, including recycling materials generated by the demolition and remodeling of buildings.

Solid Waste and Recycling Policy 15.7

Continue to coordinate with approved services providers and businesses to recycle universal waste (electronic components, batteries, fluorescent lights, etc.) and to provide convenient collection and drop off locations in a manner that ensures safe and responsible collection, processing and disposal.

Solid Waste and Recycling Policy 15.8

Encourage and promote the use of recycled materials in residential and non-residential applications, including construction and building materials, office supplies, and equipment.

Continue the city's purchase of recycled materials and supplies outlined in the Recycled Products Purchasing Policy.

City of Escondido Municipal Code

Municipal Code Chapter 6, Article 18B, Public Facility Development Fee, requires that all new residential or nonresidential development pay a fee for the purpose of ensuring that the City's established public/drainage facility standards are met with respect to the additional needs created by such development. The amount of the applicable public facility fee due is determined by the fees then in effect, as established by City Council resolution, and the number and type of dwelling units in a proposed residential development project and/or the number of square feet and type of nonresidential development.

Chapter 22, Wastewaters, Stormwaters, and Related Matters, of the Municipal Code addresses stormwater management and discharge control, harmful waters and wastes, sewer service charges, private sewage disposal systems, sewer connection fees, sewer connection laterals, and industrial wastewaters and brine collection systems. Chapter 22 provides specific measures aimed at long-term management and operation of the city's stormwater and sewer infrastructure systems and protection of stormwater quality.

Chapter, 31, Water, of the Municipal Code addresses water management, including conservation, reclamation, regulation of waste discharge to the sewerage system and other water-related issues. Chapter 31 also addresses the construction, repair, destruction and reconstruction of wells within the city for the purposes of groundwater protection and general public health and safety.

City of Escondido Water Master Plan

The City's Water Master Plan was adopted in June 2012. It documents the existing water system facilities and demands, and identifies required improvements for buildout in the city's service area (year 2035). The Master Plan identifies existing deficiencies in the system, confirms facility sizing, and recommends a future CIP based on the updated water supply assessment, demand analyses, and hydraulic modeling. The Master Plan is aimed at ensuring continued reliable water service through buildout of the city in accordance with the City's General Plan (Escondido 2012b).

City of Escondido Wastewater Master Plan

The City's Wastewater Master Plan was adopted in June 2012. It documents the city's existing wastewater system facilities and flows, and identifies required improvements for buildout of the City's Sphere of Influence (SOI), which is anticipated to occur by 2035. The SOI is the projected ultimate sewer service area and encompasses approximately 44,000 acres.

Within the city boundary, the sewer area is near buildout; the developed areas to the east that are within the city boundary but not currently connected to the city's wastewater collection system are on septic systems. The Master Plan was prepared to identify existing deficiencies in the system, confirm facility sizing, and recommend a future capital improvement program

(CIP) based on updated wastewater flow generation analyses and hydraulic modeling. The Master Plan is intended to ensure continued reliable wastewater service through buildout of the city in accordance with the General Plan (Escondido 2012a).

2.13.3. Thresholds for Determination of Significance

City of Escondido Environmental Quality Regulations (Zoning Code Article 47) and Appendix G of the CEQA Guidelines as amended contain analysis guidelines related to the assessment of utilities and service systems. A project would result in a significant impact if it would:

1. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.
2. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
3. Require, or result in, the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
4. Have insufficient water supplies available to serve the project from existing entitlements and resources, or require new or expanded entitlements.
5. Result in a determination by the wastewater treatment provider which serves, or may serve, the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.
6. Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs.

2.13.4. Analysis of Project Effects and Determination of Significance

Threshold 1: Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board or require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Wastewater Treatment

Upon connection to the City's sewer infrastructure, which is anticipated to occur after the HARRF expansion, the project would be required to comply with the wastewater treatment requirements of the San Diego RWQCB. The project would add a de minimis amount to the HARRF's existing capacity.

A wastewater system analysis was completed for the project by Dexter Wilson Engineering (2017a; **Appendix 2.13-2**). To estimate average sewage flow from the proposed development, average dry weather generation factors established by the City in gallons per day (gpd) were used. As shown in **Table 2.13-3**, the project is anticipated to generate 110,840 gallons per day

(gpd) of wastewater, which would increase the current wastewater flow at the HARRF. Typical wastewater flows at the HARRF are 15.6 mgd. The project would therefore increase wastewater flows treated at the HARRF by approximately 0.6 percent;[1] however, this increase would not exceed the permitted capacity of the HARRF (18.0 mgd). As such, the project would not exceed the wastewater treatment requirements of the City of Escondido or the San Diego RWQCB (Escondido 2016b). Existing wastewater treatment facilities would be adequate to serve the project's wastewater treatment needs.

Further, based on information regarding the project's flow and future expansion of the HARRF to a capacity of 27 mgd, the addition of wastewater from the project would remain well below the HARRF's anticipated capacity. The project would not impede the City's compliance with relevant General Plan policies, including Wastewater System Policy 13.1, regarding regular review and update of the Wastewater Master Plan (last updated in 2014), and Wastewater System Policy 13.2, ensuring that the HARRF and supporting infrastructure would provide sufficient capacity to meet normal and emergency demand for existing and future growth.

Table 2.13-3. Projected Wastewater Flows

Land Use	Quantity	Generation Factor	Total Average Flow (gallons per day)
Residential	550 units	200 gpd/unit	110,000
Recreation Center	3,000 sq. ft.	200 gpd/1,000 sq. ft.	600
Fire Station	6,825 sq. ft. = 0.16 acres	1,500 gpd/acre	240
		Total	**110,840**

Source: Dexter Wilson Engineering 2017a, Table 2-2

Wastewater Facilities

Existing City-maintained wastewater facilities are present in the vicinity of the project site. The existing sewer system consists of an 8-inch gravity sewer that extends to the Rancho San Pasqual and Rancho Vistamonte communities and connects to a 12-inch gravity sewer line that extends from Rockwood Road south along the creek, under San Pasqual Valley Road (State Route 78), and south almost to Old Pasqual Road. At the southwest corner of the intersection of Old Pasqual Road and San Pasqual Road, the gravity sewer system discharges into Lift Station 13. This lift station pumps to an 8-inch force main that extends approximately 11,000 feet in San Pasqual Road from the lift station to the south and west. The force main transitions to a gravity sewer in San Pasqual Road just inside the City of Escondido boundary. From this point, a 10-inch gravity sewer flows west and connects to a 15-inch gravity sewer in Bear Valley Parkway then flows to the south.

To accommodate the project's wastewater, improvements to the existing off-site wastewater conveyance system would be required. According to the Dexter Wilson Engineering (2017a, page 3-6; **Appendix 2.13-2**) wastewater analysis, the existing 8-inch line in Rockwood Road does not have the capacity to adequately convey the wastewater from the project site. As such,

[1] 110,840 gpd/15,600,000gpd = 0.006 x 100 = 0.6%

a new 8-inch parallel sewer line would be required in Rockwood Road. This parallel sewer line would connect to an existing 12-inch line, which would transport wastewater flows from the existing and new lines to Lift Station 13.

Improvements to Lift Station 13 would also be required to correct an existing condition that reduces the flow capacity of the station (air bubble in the piping system). Removal of the air bubble may occur through installation of an air release valve or via replacement of the pump heads with higher capacity pump heads. If capacity of the lift station can be restored to its original capacity of 340 gallons per minute, wastewater flows generated by the project could be accommodated within the existing design parameters of the lift station. Potential impacts associated with construction activities and installation of the on-site piping system are included as part of the analysis within the relevant issue subsections included in this EIR, which includes air quality, biological resources, cultural resources, greenhouse gas emissions, hazards, noise, and traffic. All short-term construction-related impacts are mitigated to less than significant.

All wastewater conveyance improvements required to provide adequate wastewater treatment for the project would be constructed by the project developer. As the existing system does not currently have capacity to serve the project and would require construction of new infrastructure to meet the project's anticipated wastewater treatment demands, this impact is considered **potentially significant**. Implementation of mitigation measure **MM UTIL-1** would reduce the project's potential impact to a less than significant level.

As shown in **Table 2.13-4**, the project is anticipated to use approximately 606 AF of potable water per year. However, the project will rely on both potable and recycled water. The majority of the irrigated slope acreage (72.9 acres of the 81.1 acres) lies within the single-family, fire station, and recreation center lots. Therefore, to avoid double counting for irrigation, the recycled water demands were subtracted from the total project demands to determine the effective potable water demand utilized for facility sizing. As such, the total average day potable water demand is 361,749 gpd (405 AFY) (Dexter Wilson Engineering 2017b, page 2-3; **Appendix 2.13-2**).

As shown in **Table 2.13-2**, the City supplies approximately 21,862 AF per year, or 19.5 mgd, of water to its customers.[2] The additional demand of 361,749 gpd of treated water for the project would not result in the water treatment plant exceeding its existing capacity of 75 mgd. Therefore, the project would not require or result in the construction of new water treatment facilities or expansion of existing facilities. Impacts would be **less than significant**.

Mitigation Measures

MM UTIL-1 The project applicant shall ensure that adequate flow capacity will be provided through the following measures:

- Construct a parallel sewer line on Rockwood Road.
- Provide adequate pump capacity on Lift Station 13 through either the removal of air bubble or an increase in pump capacity.

[2] 21,862 AF per year/365 days = 59.9 AF per day. 59.9 AF per day x 325,851 gallons/AF = 19.5 mgd.

Timing/Implementation:	*Prior to the issuance of any certificate of occupancy*
Enforcement/Monitoring:	*City of Escondido Utilities, Engineering, and Planning Divisions*

Level of Significance After Mitigation

Implementation of mitigation measure **MM UTIL-1** would reduce the project's impact, as wastewater conveyance infrastructure would have adequate capacity to transport project wastewater flows. Therefore, impacts would be **less than significant** with mitigation incorporated.

Threshold 2: Would the project require, or result in, the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

As a part of project development, a drainage study was completed by Hunsaker & Associates (2017) to provide preliminary hydrology calculations for the project. This information was used to determine the adequacy of storm water facilities to serve the project. The drainage study is included in **Appendix 2.8-1**.

There are no existing storm drain features on-site. Site drainage is accomplished by two primary tributaries that flow in a southwesterly direction. The smaller of the two drainage courses, drainage area A, consists of approximately 402 acres. The larger of the two drainage courses, drainage area B, spans approximately 1,958 acres. Stormwater runoff upon project completion will remain the same as the existing conditions and will drain to the same two points of discharge.

The proposed drainage system would consist of improvements designed to control storm water runoff and drainage for the project site. Runoff from developed areas would drain into the basin system designed to slow peak flow and discharge to rates equal to or less than existing conditions. The basins would also provide water quality treatment (e.g., biofiltration prior to discharge into natural water courses), hydromodification management, and flood attenuation. Hydromodification management occurs through storage of storm water in the basins, with outlets that regulate the flow rate and duration of storm water released. Such measures also reduce the potential for erosion to occur.

Five detention basins are proposed for drainage area A to address peak flow mitigation. As shown in the drainage study, the reduction in flows will result in outflows equal to or less than the existing condition at the discharge locations (Hunsaker & Associates 2017; **Appendix 2.8-1**). Drainage area B proposes six detention basins throughout the area to address peak flow mitigation. The drainage study calculations show that the proposed development of this project will not increase peak flows for any point of discharge in drainage area B (Hunsaker & Associates 2017; **Appendix 2.8-1**).

As stated above, storm water runoff will drain to the same two points of discharge and will not result in new discharge to downstream water bodies or elsewhere within the watershed. The SHR project will therefore not require, or result in, the construction of new storm water

drainage facilities or expansion of existing facilities to accommodate the stormwater flows from the project site. Project impacts would be **less than significant**.

Threshold 3: Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

As a part of project development, a potable water and recycled water report was completed by Dexter Wilson Engineering (2017b) to illustrate the anticipated water and recycled water demand for the SHR project. This report is included in **Appendix 2.13-1**.

Based on information in the potable water and recycled water report, as well as regional and local water demand and supply information, and as shown in **Table 2.13-4**, the project is estimated to require an average of 540,444 gpd of potable water and 178,695 gpd of recycled water (Dexter Wilson Engineering 2017, pages 2-2 to 2-3; **Appendix 2.13-1**). It should be noted that the city's water demand rates, as identified in **Table 2.13-4** (e.g., 800 gpd per equivalent residential dwelling units), are greater than that anticipated to occur with the project. Therefore, potable water demand generated by the proposed uses would, in reality, be lower than that calculated for the project (to provide a conservative estimate).

Table 2.13-4. Projected Water Demand – Proposed Project

Water Demand by Use				
Land Use Designation	**Acres**	**Quantity, Units**	**Water Duty Factor**	**Total Average Water Demand, gpd**
Potable Water				
SF Res – Lot Size > 1 acre	--	92 edu	800 gpd/acre	101,344[1]
SF Res – Lot Size > 7,000 SF and < 1 acre	--	458 edu	800 gpd/acre	366,400[1]
Detention Basins	8.0	--	1,650 gpd/acre	13,200
Streetscapes	13.0	--	1,650 gpd/acre	21,450
Fire Station	1.9	--	2,300 gpd/acre	4,370
Recreational Center	7.9*	--	2,300 gpd/acre	18,170
Parks	1.2	--	1,650 gpd/acre	1,980
Irrigated Slopes**	8.2	--	1,650 gpd/acre	13,350
Total:				**540,444 gpd (606 AFY)**
Recycled Water				
Detention Basins	8.0	--	1,650 gpd/acre	13,200
Streetscapes	13.0	--	1,650 gpd/acre	21,450
Recreational Center	5.0	--	1,650 gpd/acre	8,250
Parks	1.2	--	1,650 gpd/acre	1,980
Irrigated Slopes	81.1	--	1,650 gpd/acre	133,815
Total:	**108.3**	**--**	**--**	**178,695 gpd (200 AFY)**

Source: Dexter Wilson Engineering 2017b, Tables 2-2 and 2-3
Notes: SF = square feet, EDU = equivalent dwelling units, gpd = gallons per day, one acre-foot (AF) = 325,851.427 gallons
* The recreational center net pad area is 4.9 acres and the total lot area is 7.9 acres. 7.9 acres is used to provide a conservative planning level analysis of water demands.
**Interior slopes and Zone 1 slopes not within SF, fire station, or recreational center lots.
[1] Refer to Appendix C of **Appendix 2.13-1** for calculations.

Escondido has a projected water demand of 24,903 AF by 2020 and 25,840 AF by 2030. **Table 2.13-3** shows the projected water supply for the city as identified in the UWMP. As indicated, the City anticipates that it will have adequate water supply to serve existing and future customers through 2040.

The City's UWMP includes the proposed project as a part of the water demand/supply analysis (Escondido 2016a). In addition, SDCWA includes the project as a part of its Regional Baseline Demand Forecast as indicated in its 2015 Urban Water Management Plan. While the Escondido UWMP indicates that the City will have an adequate water supply to service its customers through 2040, SDCWA's plan shows that there will be a shortage under the single dry year and multiple dry year scenarios by 2025 and 2028 respectively (see Tables 9-2 through 9-7 of the SDCWA UWMP). Dexter Wilson Engineering (2017c) prepared a Water Supply Assessment for the Safari Highlands Ranch project, as required by Senate Bill 610 (500 homes or more); the report is included in **Appendix 2.13-3**. The WSA indicates the following for the project (Dexter Wilson Engineering 2017c, page 18; **Appendix 2.13-3**):

> *In normal water years and single-dry water years, sufficient supplies will be available to meet demands.*
>
> *For the multiple-dry year scenario, in the first two years, supplies are anticipated to meet demands. For the third year in the multiple-dry year scenario, demands are anticipated to increase at a greater rate than regional local supply development, which may lead to a shortage in purchased water availability from the SDCWA. The potential shortage would be approximately 9% according to the SDCWA 2015 UWMP. The city's 2015 UWMP and SDCWA 2015 UWMP assume the shortfall would be met by implementing local conservation such that the third year demands would equal the available supply. As such, the city anticipates sufficient water will be available during the multiple-dry year scenario.*
>
> *The city's voluntary and mandatory water use restrictions are detailed in Chapter 7 of the city's 2015 UWMP, which describes the City's Water Shortage Contingency Plan and Water Conservation Plan. During the recent state-wide drought, the city water service area met its state mandated conservation standard of 12%.*

Based on the findings of the WSA, the City would have sufficient water supply to meet the increase in demand from the project under all three water demand scenarios (Dexter Wilson Engineering 2017c, page 18; **Appendix 2.13-3**); refer also to Threshold 1 for discussion of anticipated water demand and potential water supply deficiencies.

Water demand for the project would be reduced through the use of recycled water. It should be noted that recycled water for the project (estimated 178,695 gpd) would not come from potable water sources, and if potable water used was not treated and recycled (or sold to other agencies), it would otherwise be discharged to the Escondido Land Outfall and ultimately to the Pacific Ocean.

Additionally, as stated above, in January 2017, the Escondido City Council approved a CUP to allow the construction of a microfiltration reverse osmosis treatment facility to be owned and operated by the City. The project involves development of a new city facility to provide advanced treatment for recycled water produced at the City's HARRF for agricultural uses, with the capacity for future treatment for indirect potable reuse. The facility would be sized

for a total production capacity of 2 mgd. This facility represents the potential for additional recycled water supplies to be made available for public use, including the SHR project, in the future.

Therefore, sufficient water supplies are available to serve the project from existing entitlements and resources, and no new or expanded entitlements are required. Impacts in this regard would be **less than significant**.

Threshold 4: Would the project result in a determination by the wastewater treatment provider which serves, or may serve, the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Refer also to Threshold 1. Anticipated wastewater flow from the project is estimated to be 110,840 gpd (Dexter Wilson Engineering 2017a, page 2-2; **Appendix 2.13-2**). This amount of wastewater would increase the current wastewater flow of 15.6 mgd by approximately 0.6 percent. This increase would not exceed the permitted 18.0 mgd capacity of the HARRF. Therefore, the City would have adequate wastewater capacity to serve the project, in addition to the City's existing commitments. As such, project impacts would be **less than significant**.

Threshold 5: Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Information from CalRecycle's (2016a) Disposal Rates Detail for residents (5.5 pounds per day) in Escondido was used to calculate the amount of solid waste potentially generated by the SHR project. Using the California Department of Finance (2016) average household size for Escondido of 3.2 persons per household and the project's total number of residential units (550), the project is anticipated to generate an estimated population of 1,760.

Based on the city's residential waste disposal rates and the project's estimated number of residents, approximately 1,766.6 tons of solid waste would be generated by the project per year at full buildout.[3] All solid waste generated by the project would be disposed of at one of the landfills used for collecting solid waste generated in the city. Using Escondido's total 2015 solid waste disposal of 150,682 tons, the estimated solid waste that could be generated by the project would represent an approximate 1.2 percent increase over the amount currently (2015) generated in the city.

Solid waste generated in Escondido was disposed of at 10 disposal sites in 2015. Sycamore Canyon Landfill accepted the majority of the city's solid waste (98.1 percent). The Sycamore Landfill has a maximum permitted daily throughput of 5,000 tons and a maximum permitted capacity of 71,233,171 cubic yards. The landfill is anticipated to cease operation in 2043 (CalRecycle 2016b). The project is estimated to produce 9,680 pounds per day of solid waste. This amount would not substantially increase the daily throughput beyond the permitted levels of the Sycamore Landfill. In addition, in compliance with AB 1826 Chesbro (Chapter 727, Statutes of 2014), organic waste generated by the commercial center would be diverted from landfill disposal in accordance with an organic waste recycling program. Organic waste is

[3] Annual solid waste: 1,760 persons x 5.5 lbs per day per person of solid waste x 365 days = 3,533,200 lbs per year/2,000 lbs = 1,766.6 tons per year.

defined as food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste. Diversion of organic waste from the project would reduce the amount of waste disposed in the Sycamore Landfill. Therefore, the project would be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs. Project impacts would be **less than significant**.

Threshold 6: Would the project comply with federal, state, and local statutes and regulations related to solid waste?

As stated above, the City is required to comply with the requirements of AB 939, which requires that municipalities divert at least 50 percent of their waste from being disposed of at a landfill. Solid waste generated during project construction can be reduced through recycling and diversion of certain materials, such as scrap metal and wood. The City is a participating jurisdiction in the San Diego County Countywide Integrated Waste Management Plan. The plan includes programs designed to improve the solid waste diversion rate by 50 percent by 2004. According to the latest information from CalRecycle (2014), the City met its annual population target of 5.5 pounds per day in 2014 (this is the most recent information available).

The City's Public Works Recycling & Waste Reduction Division provides information to city residents on the recycling and waste reduction programs in Escondido. The division operates a recycling hotline, promotes recycling through presentations in area schools, offers workshops on vermiculture, maintains the household hazardous waste program, contracts for trash collection services with Escondido Disposal, Inc., and promotes citywide cleanup events.

While the project would increase the amount of solid waste generated in the city, the project would be required to comply with the City's efforts in reducing solid waste, as well as solid waste regulations at the state level. As such, project impacts would be **less than significant**.

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