



## **5.17 Water Supply**





## **5.17 WATER SUPPLY**

### **5.17.1 PURPOSE**

This section identifies existing water supply, water consumption, and distribution infrastructure within the Study Area and provides an analysis of potential impacts associated with implementation of the General Plan Update. Potential impacts are identified and mitigation measures to address potentially significant impacts are recommended, as necessary.

This section is based upon information from the *Water Supply Assessment for City of Rancho Santa Margarita General Plan Update* (Water Supply Assessment), prepared by Albert A. Webb Associates and dated November 7, 2018; refer to [Appendix G, Water Supply Assessment](#).

### **5.17.2 EXISTING REGULATORY SETTING**

#### **FEDERAL REGULATIONS**

##### **Federal Safe Drinking Water Act of 1974**

The Safe Drinking Water Act (SDWA) authorizes the U.S. Environmental Protection Agency (EPA) to establish national health-based standards for drinking water to protect against both naturally-occurring and man-made contaminants that may be found in drinking water. The EPA, States, and water systems then work together to make sure that these standards are met. Originally, SDWA focused primarily on treatment as the means of providing safe drinking water at the tap. The 1996 amendments greatly enhanced the existing law by recognizing source water protection, operator training, funding for water system improvements, and public information as important components of safe drinking water. This approach ensures the quality of drinking water by protecting it from source to tap. SDWA applies to every public water system in the United States.

#### **STATE REGULATIONS**

##### **State of California Water Recycling Act**

Enacted in 1991, the Water Recycling Act established water recycling as a State priority. The Water Recycling Act encourages municipal wastewater treatment districts to implement recycling programs to reduce local water demands.

##### **California Code of Regulations, Title 22, Division 4, Chapter 3, Water Recycling Criteria**

California regulates the wastewater treatment process and use of recycled water pursuant to California Code of Regulations (CCR) Title 22, Division 4, Chapter 3, *Water Recycling Criteria*. According to these regulations, recycled water to be used for irrigation of public areas must be filtered and disinfected to tertiary standards.



## Senate Bills 221 and 610

Senate Bills (SB) 221 and 610 were signed into law in 2001 and took effect January 1, 2002. The two bills amended State law to better link information on water supply availability to certain land use decisions by cities and counties. The two companion bills provide a regulatory forum that requires more collaborative planning between local water suppliers and cities and counties. SB 221 and 610 reports are generated and adopted by the public water supplier (PWS). SB 610 requires a detailed report regarding water availability and planning for additional water suppliers that is included with the environmental document for specified projects. All projects that meet any of the following criteria require the water availability assessment:

- A proposed residential development of more than 500 dwelling units;
- A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space;
- A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space;
- A proposed hotel and/or motel having more than 500 rooms;
- A proposed industrial, manufacturing, or processing plant or an industrial park planned to house more than 1,000 persons, occupying more than 60 acres of land, or having more than 650,000 square feet of floor area;
- A mixed-use project that includes one or more of the projects specified in this subdivision; or
- A project that would demand an amount of water equivalent to or greater than the amount of water required by a 500-dwelling unit project.

Unlike SB 610, SB 221 principally applies to the Subdivision Map Act. The primary effect of SB 221 is to condition every tentative map for an applicable subdivision on the applicant verifying that the PWS has sufficient water supply available to serve it. Under SB 221, approval by a city or county of certain residential subdivisions requires a written verification of sufficient water supply. SB 221 applies to any subdivision, defined as:

- A proposed residential development of more than 500 dwelling units (if the PWS has more than 5,000 service connections); or
- Any proposed development that increases connections by 10 percent or more (if the PWS has fewer than 5,000 connections).

In accordance with SB 610, a Water Supply Assessment was prepared to evaluate the proposed project's impacts on existing and future water supply; refer to [Appendix G](#).



## Assembly Bill 3030

Assembly Bill 3030 (AB 3030) is the Groundwater Management Act (Section 10750 et seq. of the California Water Code). AB 3030 provides local water agencies with procedures to develop a groundwater management plan, so those agencies can manage their groundwater resources efficiently and safely while protecting the quality of supplies. Under AB 3030, the development of a groundwater management plan by a local water agency is voluntary. Once a plan is adopted, the rules and regulations contained therein must also be adopted to implement the program outlined in the plan.

### Sustainable Groundwater Management Act

The Sustainable Groundwater Management Act (Water Code Section 10720 et seq.) was enacted in 2014. The Act, and related amendments to California law, require that all groundwater basins designated as high- or medium-priority in the California Department of Water Resources' (DWR) California Statewide Groundwater Elevation Monitoring (CASGEM) program and that are subject to critical overdraft conditions must be managed under a new Groundwater Sustainability Plan (GSP), or a coordinated set of GSPs, by January 31, 2020. High- and medium-priority basins that are not subject to critical overdraft conditions must be managed under a GSP by January 31, 2022. Where GSPs are required, one or more local groundwater sustainability agencies (GSAs) must be formed to cover the basin and prepare and implement applicable GSPs. The Act does not apply to basins that are managed under a court-approved adjudication, or to low- or very-low-priority basins.

A GSA has the authority to require registration of groundwater wells, measure and manage extractions, require reports and assess fees, and to request revisions of basin boundaries, including establishing new subbasins. The preparation of a GSP by a GSA is exempt from the California Environmental Quality Act (CEQA). Each GSP must include a physical description of the covered basin, such as groundwater levels, groundwater quality, subsidence, information on groundwater-surface water interaction, data on historical and projected water demands and supplies, monitoring and management provisions, and a description of how the plan would affect other plans, including city and county general plans.

The Act defines groundwater as "water beneath the surface of the earth within the zone below the water table in which the soil is completely saturated with water but does not include water that flows in known and definite channels." A groundwater extraction facility is defined as "a device or method for extracting groundwater from within a basin" Water Code Section 10721(g-h). GSPs are reviewed by the DWR to ensure that, over a period of 20 years, "sustainable groundwater management" is achieved. As defined by the Act, sustainable groundwater management means that groundwater uses within basins managed by a GSP would not cause any of the following "undesirable results":

- Chronic lowering of groundwater levels (not including overdraft during a drought, if a basin is otherwise managed);
- Significant and unreasonable reductions in groundwater storage;



- Significant and unreasonable seawater intrusion;
- Significant and unreasonable degradation of water quality;
- Significant and unreasonable land subsidence; and
- Surface water depletions that have significant and unreasonable adverse impacts on beneficial uses (Water Code Section 10721(w)).

### **Urban Water Management Planning Act**

The Urban Water Management Planning Act (UWMP) Act was passed in 1983 and codified as Water Code Sections 10610 through 10657. Since its adoption in 1983, the UWMP Act has been amended on several occasions. Some of the more notable amendments include an amendment in 2004, which required additional discussion of transfer and exchange opportunities, non-implemented demand management measures, and planned water supply projects. Also, in 2005, another amendment required water use projections (required by Water Code Section 10631) to include projected water use for single-family and multi-family residential housing needed for lower income households. In addition, Government Code Section 65589.7 was amended to require local governments to provide the adopted housing element to water and sewer providers. The UWMP Act requires "every urban water supplier providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually, to prepare and adopt, in accordance with prescribed requirements, an urban water management plan." Urban water suppliers must file these plans with the DWR every five years describing and evaluating reasonable and practical efficient water uses, reclamation, and conservation activities. As required by the *Memorandum of Understanding Regarding Urban Water Conservation in California* and Assembly Bill 11 (Filante, 1991), the 2005 UWMP Act, incorporated water conservation initiatives, and a Water Shortage Contingency Plan.

### **Water Conservation Act of 2009**

Water Code Sections 10800, et seq. creates a framework for future planning and actions by urban (and agricultural) water suppliers to reduce California's water use. The law requires urban water suppliers to reduce Statewide per capita water consumption by 20 percent by 2020. Additionally, the State is required to make incremental progress towards this goal by reducing per capita water use by at least 10 percent by 2015. Each urban retail water supplier was required to develop water use targets and an interim water use target by July 1, 2011. Each urban retail water supplier was required, by July 2011, to include in their water management plan the baseline daily per capita water use, water use target, interim water use target, and compliance daily per capita water use.

### **Efficiency Standards**

CCR Title 24 contains the California Building Standards, including the California Plumbing Code (Part 5), which promotes water conservation. CCR Title 20 addresses Public Utilities and Energy and includes appliance efficiency standards that promote water



conservation. In addition, several California laws listed below require water-efficient plumbing fixtures in structures:

- CCR Title 20 Section 1604(g) establishes efficiency standards that give the maximum flow rate of all new showerheads, lavatory faucets, sink faucets, and tub spout diverters;
- CCR Title 20 Section 1606 prohibits the sale of fixtures that do not comply with established efficiency regulations;
- CCR Title 24 Sections 25352(i) and (j) address pipe insulation requirements, which can reduce water used before hot water reaches equipment or fixtures. Insulation of water-heating systems is also required; and
- Health and Safety Code Section 17921.3 requires low-flush toilets and urinals in virtually all buildings.

## **LOCAL REGULATIONS AND PLANS**

### **Trabuco Canyon Water District Urban Water Management Plan**

The Trabuco Canyon Water District (TCWD) *2015 Urban Water Management Plan* (2015 UWMP) was prepared to comply with the UWMP Act and provides a long-range planning document for water supply and reliability, a source of information for Water Supply Assessments, a source of data for development of a regional water plan, a reference source document for the City of Rancho Santa Margarita and County of Orange to update their general plans, a planning document for property owners and developers considering new projects, and a key component to assist in preparation of Integrated Regional Water Management Plans. In addition, TCWD's 2015 UWMP also addresses Best Management Practices (BMPs) with methods for conservation, water shortage contingency planning, water quality, and reliability.

### **Trabuco Canyon Water District Water Conservation Ordinance**

TCWD's Water Conservation Ordinance was adopted to establish a water conservation and supply shortage program in order to reduce water consumption within TCWD through conservation, allow for effective water supply planning, assure reasonable and beneficial use of water, prevent waste of water at all times, and maximize the efficient use of water within TCWD to avoid and minimize the effect(s) and hardship of water shortage(s) to the greatest extent possible. The ordinance establishes permanent water conservation standards intended to alter behavior related to water use efficiency for non-shortage conditions and further establishes three levels of water supply shortage response actions to be implemented during times of declared water shortage or declared water shortage emergencies, with increasing restrictions on water use in response to worsening drought or emergency conditions and decreasing supplies.



## **Santa Margarita Water District Urban Water Management Plan**

The Santa Margarita Water District's (SMWD) *2015 Urban Water Management Plan*, dated June 2016 and prepared by Arcadis, was prepared consistent with the UWMP Act and provides the DWR with information on the present and future water resources and demands and provide an assessment of SMWD's water resource needs. This document provides water supply planning for a 25-year planning period in five-year increments, identifying water supplies for existing and future demands.

SMWD recently updated its 2015 water demand and water supply projections with more detailed and current information in a *2018 Water Supply Verification (2018 WSV) for The Ranch Plan: Planning Areas Nos. 5 and 8*. The 2018 WSV generally discusses demand and supply projections, not project-specific projections. Therefore, the Water Supply Assessment prepared for the General Plan Update utilizes the 2018 WSV for SMWD's current water demand and water supply projections.

## **Santa Margarita Water District Water Conservation Ordinance**

The SMWD Water Conservation Ordinance protects the health, safety and welfare of its customers, maximizes the beneficial use of the SMWD's water supplies, and ensures that there would be sufficient water supplies to meet the basic needs of human consumption, sanitation and fire protection. The ordinance contains provisions for a staged water conservation program that would encourage reduced water consumption within SMWD through conservation, enable effective water supply planning, assure reasonable and beneficial use of water, prevent waste of water, and maximize the efficient use of water within the SMWD.

## **City of Rancho Santa Margarita Municipal Code**

*Rancho Santa Margarita Municipal Code (Municipal Code) Chapter 5.08, Well Water Conservation*, prohibits any person, firm, co-partnership, corporation, or association of individuals, either as owner, tenant, manager, agent or employee, to cause, permit, or suffer any water well or wells to be operated or used in such manner as to cause, suffer or permit the water from such well or wells to unnecessarily flow or be pumped therefrom or to go to waste.

Municipal Code Section 9.05.120, *Landscape Water Efficiency*, implements water efficiency standards. For applicable landscape installation or rehabilitation projects, the estimated applied water use allowed shall not exceed the maximum applied water allowance (based on evapotranspiration adjustment factor and the size of the landscaped area); or otherwise shall be shown to be equivalently water efficient in a manner acceptable to the City. Irrigation of all landscaped areas shall be conducted in a manner conforming to the rules and requirements and shall be subject to penalties and incentives for water conservation and waste prevention, as determined and implemented by the local water purveyor or as mutually agreed by the local water purveyor and the City. Prior to installation, a landscape documentation package shall be submitted to the City for review and approval of a Landscape Permit and all landscape projects subject to the provisions of Municipal Code Section 9.05.120, *Landscape Water Efficiency*.



## 5.17.3 EXISTING ENVIRONMENTAL SETTING

### WATER

The City of Rancho Santa Margarita is served by two water districts, TCWD and SMWD. Exhibit 5.17-1, *Water District Service Areas*, shows the boundaries of the districts. As shown on Exhibit 5.17-1, TCWD serves the eastern portion of Rancho Santa Margarita, including Robinson Ranch, Trabuco Highlands, Dove Canyon, Rancho Cielo, Walden Communities, and the Northeast Future Planned Community. The remaining portions of the City are served by SMWD.

### Trabuco Canyon Water District

#### WATER SUPPLY

As detailed in TCWD's 2015 UWMP, TCWD provides potable water service to over 4,000 municipal connections in the County serving the cities of Rancho Santa Margarita, Lake Forest, and Mission Viejo, as well as Trabuco Canyon and other areas of unincorporated Orange County. TCWD's major facilities include the Robinson Ranch Reservoir, Dove Lake, and the Trabuco Creek Wells Facility which includes Rose Canyon Well and Lang Well. TCWD delivers potable water through its pressurized water system consisting of approximately 66 miles of pipelines. TCWD's system is interconnected with adjacent agencies including SMWD and Irvine Ranch Water District (IRWD) to provide reliability.

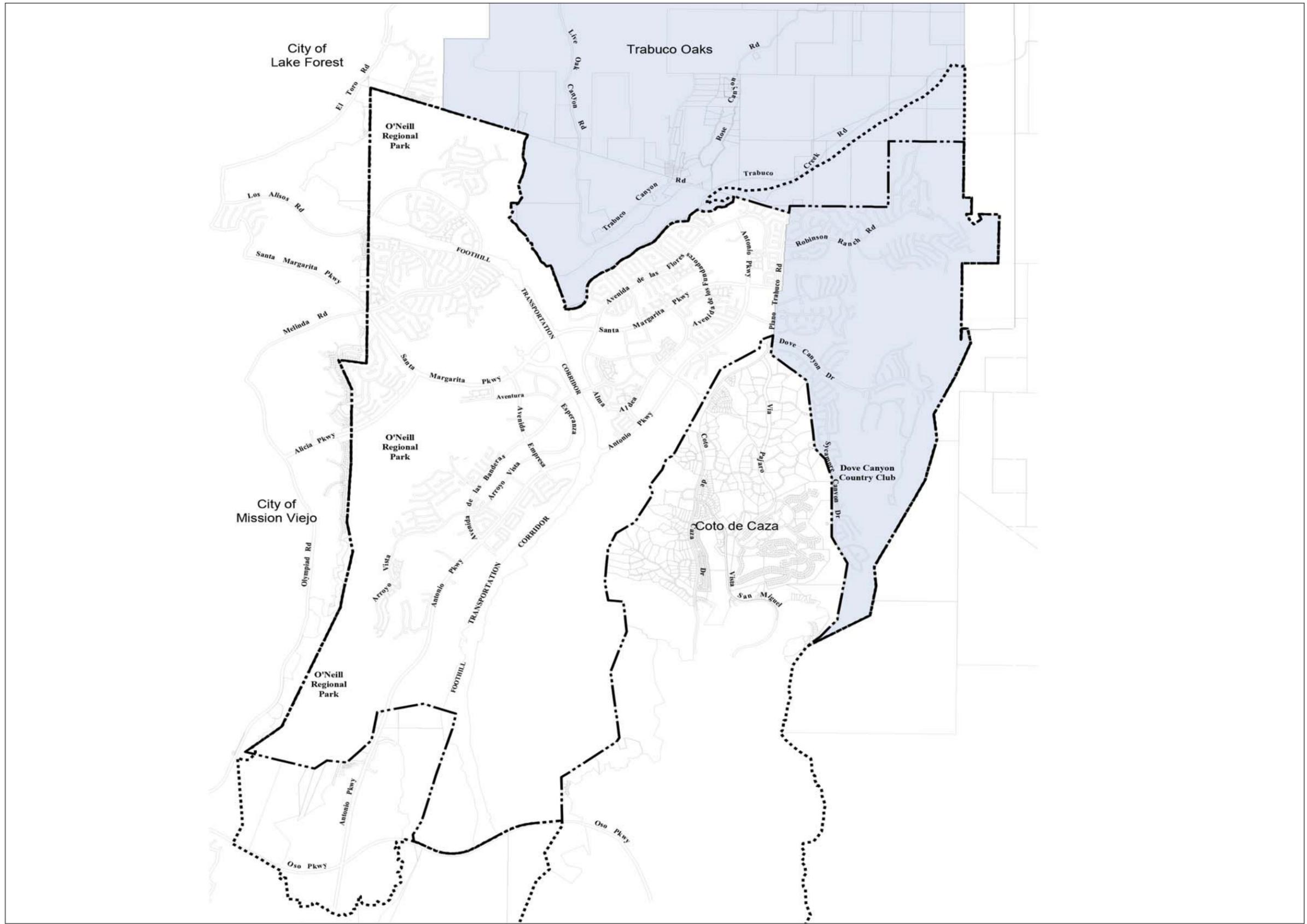
TCWD has a variety of water supply sources including imported water, groundwater, and recycled water. Table 5.17-1, *TCWD Current and Projected Water Supply*, summarizes each of these water supply sources, which are further described below.

**Table 5.17-1  
TCWD Current and Projected Water Supply**

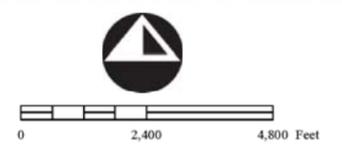
Water Supply Sources	2015	2020	2025	2030	2035	2040
Imported Water – Municipal Water District of Orange County <sup>1</sup>	2,900	2,725	3,340	3,530	3,550	3,550
Groundwater – San Juan Basin	0	230	230	230	230	230
Recycled Water	803	960	1,000	1,000	1,000	1,000
<b>Total</b>	<b>3,703</b>	<b>3,915</b>	<b>4,570</b>	<b>4,760</b>	<b>4,780</b>	<b>4,780</b>
Note: All units in acre-feet per year.						
1. Wholesale supplied volume.						
Source: Arcadis, <i>Trabuco Canyon Water District 2015 Urban Water Management Plan</i> , June 2016.						



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- LEGEND**
- Santa Margarita Water District
  - Trabuco Canyon Water District
  - City Boundary
  - Sphere of Influence



Sources: Orange County Local Area Formation Commission, 2013; Santa Margarita Water District and Trabuco Canyon Water District 2017.



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## Imported Water

As detailed in TCWD's 2015 UWMP, Metropolitan Water District (MWD) imports supplies to the region for Municipal Water District of Orange County (MWDOC) to wholesale to TCWD, among others. Imported water represents a majority of TCWD's water supply. MWD projects a highly reliable supply of water (over 100 percent of average annual demands) to its member agencies during average, dry year, and multiple dry years through 2040.

Currently, approximately 70 percent of TCWD's supply needs are met by water imported by MWD and purchased from MWDOC. Lake Mathews is located in western Riverside County and was constructed in the 1930s as the terminal reservoir for MWD's Colorado River Aqueduct. It also receives local runoff and has historically received about four percent from the State Water Project (SWP); as of recently, Lake Mathews is capable of receiving a greater quantity of SWP supply via MWD's Inland Feeder.

When TCWD purchases imported raw water, the supply is conveyed from Lake Mathews via the Lower Feeder to the Santiago Lateral. From the Santiago Lateral, water is conveyed to and through the V.B. Baker Aqueduct to TCWD's Dimension Water Treatment Plant (WTP). The Lower Feeder also provides water to MWD's Robert B. Diemer Treatment Plant in Yorba Linda. The treated water is conveyed through the Allen McCulloch Pipeline (AMP) to TCWD.

## Groundwater

TCWD owns two wells that pump from the San Juan Valley Groundwater Basin. This groundwater source is highly desirable in terms of water quality, cost, and utilization of local energy resources. The water pumped from these wells is valuable to TCWD's water supply, and it contributes to decreasing southern California's dependence on imported water supplies. However, because it is subject to interruption during drought conditions that occur occasionally in the region, TCWD cannot depend on groundwater as a reliable supply source during periods of drought and peak demands. For example, due to ongoing drought conditions, TCWD was unable to produce local groundwater during calendar years 2014 and 2015. However, TCWD is still projected to produce groundwater in the future albeit at lower rates.

The Rose Canyon and Lang Wells pump water from a maximum depth of about 40 feet from the Arroyo Trabuco aquifer that is part of the San Juan Basin. The Rose Canyon Well has been a TCWD-owned facility since the mid-1960s, and TCWD has owned the Lang Well since the early 1980s. These wells were originally privately owned and were dedicated to TCWD for the beneficial use of its customers. TCWD has utilized these two wells since their dedication.

Table 5.17-2, *TCWD Pumped Groundwater Volumes 2011-2015*, provides a summary of groundwater volume pumped by TCWD from 2011 through 2015.



**Table 5.17-2  
TCWD Pumped Groundwater Volumes 2011-2015**

Basin Name(s)	2011	2012	2013	2014	2015
San Juan Basin – Arroyo Trabuco Aquifer	476	365	44	0	0
<b>Total Groundwater Pumped</b>	<b>476</b>	<b>365</b>	<b>44</b>	<b>0</b>	<b>0</b>
Note: All units in acre-feet per year.					
Source: Arcadis, Trabuco Canyon Water District 2015 Urban Water Management Plan, June 2016.					

### Recycled Water

Recycled water is used to irrigate parks, golf courses, and greenbelts in Robinson Ranch, Trabuco Highlands, and Dove Canyon communities and offsets demand on imported potable water. TCWD’s recycled water distribution system consists of 5.1 miles of pipeline, two sets of booster pump stations with a total pumping capacity of 6,270 gallons per minute, and two open reservoirs with a combined capacity of 545 million gallons.

TCWD annually produces approximately 800 acre-feet of recycled water for their service area. This includes non-potable production from the Robinson Ranch treatment plant, urban runoff, and non-potable amounts pumped from Dove Lake. Projected recycled water use increases after 2015 but is then consistent through 2040.

### Transfer Opportunities

Interconnections with other agencies result in the ability to share water supplies during short term emergency situations or planned shutdowns of major imported systems. TCWD has the capability to transfer and exchange water to and from TCWD with neighboring districts, including SMWD and IRWD. Through various arrangements, water can be transferred/exchanged to and from these and other districts for short durations such as emergencies or water transmission line breaks.

### WATER DEMAND

Table 5.17-3, *TCWD Projected Water Demand*, presents TCWD’s current and projected water use from 2015 through 2040 as set forth in TCWD’s 2015 UWMP. Water use for the year 2015 was based on TCWD’s monthly billing records, and projected water use for years 2020 through 2040 is based on projections from the City and County’s current General Plan. Future increases in water demand are largely planned according to TCWD’s Master Plan and Sub-Area Master Plans and the Foothill/Trabuco Specific Plan, which includes the Northeast Future Planned Community.

**Table 5.17-3  
TCWD Projected Water Demand**

Water Uses	2015	2020	2025	2030	2035	2040
Potable and Raw Water	2,900	2,955	3,570	3,760	3,780	3,780
Recycled Water Demand	803	960	1,000	1,000	1,000	1,000
<b>Total Water Demand</b>	<b>3,703</b>	<b>3,915</b>	<b>4,570</b>	<b>4,760</b>	<b>4,780</b>	<b>4,780</b>
Source: Arcadis, Trabuco Canyon Water District 2015 Urban Water Management Plan, June 2016.						



## WATER SUPPLY RELIABILITY

TCWD's ability to reliably supply water to meet demands was assessed for normal, single dry, and multiple dry water year conditions in TCWD's 2015 UWMP. TCWD's source water consists of imported water, groundwater, and recycled water with most of the supply being imported water purchased from MWD through MWDOC. TCWD's water supply and demand during normal year, single dry year, and multiple dry year scenarios are described below.

### Normal Year

Table 5.17-4, *TCWD Water Supply and Demand – Normal Year*, details average water supply and demand during normal years. As shown, TCWD would be able to accommodate water demands during normal years through 2040.

**Table 5.17-4  
TCWD Water Supply and Demand – Normal Year**

Water Supply and Demand	2020	2025	2030	2035	2040
Supply Totals	3,915	4,570	4,760	4,780	4,780
Demand Totals	3,915	4,570	4,760	4,780	4,780
Difference	0	0	0	0	0
Notes: All units in acre-feet.					
Source: Arcadis, Trabuco Canyon Water District 2015 Urban Water Management Plan, June 2016.					

### Single Dry Year

Table 5.17-5, *TCWD Water Supply and Demand – Single Dry Year*, presents a comparison of projected single dry year water supply availability to the single dry year water demands projected for the next 25 years. As shown, TCWD can provide reliable water supplies under the single driest year hydrology through 2040.

**Table 5.17-5  
TCWD Water Supply and Demand – Single Dry Year**

Water Supply and Demand	2020	2025	2030	2035	2040
Supply Totals	4,267	4,981	5,188	5,210	5,210
Demand Totals	4,267	4,981	5,188	5,210	5,210
Difference	0	0	0	0	0
Source: Arcadis, Trabuco Canyon Water District 2015 Urban Water Management Plan, June 2016.					

### Multiple Dry Years

Typically for TCWD, after the first dry year in which demands increase, demands then decline due to raised consumer awareness of a dry period occurring. The third dry year typically reflects a decrease in demands over the second year. Table 5.17-6, *TCWD Water Supply and Demand – Multiple Dry Years*, presents a comparison of projected multiple dry year water supply availability over the next 25 years to the multiple dry year water demands. As shown, TCWD can provide reliable water supplies under multiple dry years through 2040.



**Table 5.17-6  
TCWD Water Supply and Demand – Multiple-Dry Years**

Water Supply and Demand		2020	2025	2030	2035	2040
First Year	Supply Totals	4,267	4,981	5,188	5,210	5,210
	Demand Totals	4,267	4,981	5,188	5,210	5,210
	Difference	0	0	0	0	0
Second Year	Supply Totals	4,267	4,981	5,188	5,210	5,210
	Demand Totals	4,267	4,981	5,188	5,210	5,210
	Difference	0	0	0	0	0
Third Year	Supply Totals	4,267	4,981	5,188	5,210	5,210
	Demand Totals	4,267	4,981	5,188	5,210	5,210
	Difference	0	0	0	0	0

Source: Arcadis, Trabuco Canyon Water District 2015 Urban Water Management Plan, June 2016.

### Santa Margarita Water District

SMWD's system consists of 1,525 miles of water (potable and recycled) and sewer lines, 31 potable water tank reservoirs, two emergency storage potable water reservoirs, seven recycled water tank reservoirs, and two open-air recycled water reservoirs. Nearly all SMWD's water supply is purchased from MWD, which delivers water to the region from northern California via the SWP and from the Colorado River via the Colorado River Aqueduct. Water from both sources is treated at the Diemer Filtration Plant in Yorba Linda or the Baker Treatment Plant in Irvine prior to delivery to SMWD.

Given that the majority of the City is served by SMWD and future development identified by the General Plan Update would likely occur within SMWD's service area, a Water Supply Assessment was prepared to determine whether existing and future water demands of SMWD's existing customers in addition to development assumed by the General Plan Update could be accommodated. SMWD's most recent Urban Water Management Plan was prepared in June 2016; however, as stated above, more current information pertaining to SMWD's existing and projected water supply and demand is available in the 2018 Water Supply Verification. Therefore, the Water Supply Assessment and following description of SMWD's existing water supply and demands utilizes information from the 2018 Water Supply Verification (rather than outdated information from its 2015 Urban Water Management Plan).

### WATER SUPPLY

SMWD receives its water from three main sources: imported water from the MWDOC, groundwater from the San Juan Basin and recycled water. SMWD's main source of water supply is imported water from MWD through purchases from MWDOC. According to the Water Supply Assessment, imported water from MWDOC is projected to meet full-service demands based on findings by MWD in its 2015 UWMP for normal years, single dry year, and multiple dry years from 2020 through 2040. Therefore, SMWD is expected to be able to meet water demands of its customers in normal, single dry, and multiple dry years from present to 2040.

To meet future demands, ensure supply reliability, and to develop a more diverse water supply, SMWD is expanding its recycled water system to offset existing potable water



demand in the City, expanding non-potable groundwater supplies from Rancho Mission Viejo Mutual Water Company, and constructing seasonal storage for the non-potable water system (i.e., Trampas Canyon Reservoir). In addition, SMWD is developing new supply sources (i.e., potable groundwater from Cadiz, Inc.), new local groundwater basin recharge opportunities with the San Juan Basin Authority, developing Indirect Potable Reuse (IPR) projects within the San Juan Basin, and partnering with South Coast Water District for development of the Doheny Desalination project.

A summary of current and projected domestic and non-domestic water supplies available to SMWD in a normal year are identified in Table 5.17-7, SMWD Current and Projected Water Supplies. A discussion of SMWD's water supply sources are detailed below.

**Table 5.17-7  
SMWD Current and Projected Water Supplies**

Water Supply	2015	2017	2020	2025	2030	2035	2040
<b>Domestic Water Baseline Supply</b>							
Imported Water from MWDOC	26,910	22,795	29,202	29,202	29,202	29,202	29,202
Doheny Desalination	--	--	--	1,000	1,000	1,000	1,000
Cadiz Groundwater	--	--	5,000	5,000	5,000	5,000	5,000
San Juan Watershed IPR Project	--	--	--	4,565	6,560	6,560	6,560
<i>Subtotal (AFY)</i>	<i>26,910</i>	<i>22,795</i>	<i>34,202</i>	<i>39,767</i>	<i>41,762</i>	<i>41,762</i>	<i>41,762</i>
<b>Domestic Supplemental Supply<sup>1</sup></b>							
CVWD Exchange	--	--	4,250	4,250	4,250	0	0
GSWC Purchase <sup>2</sup>	--	--			1,613.4		
<b>Non-Domestic Water Baseline Supply</b>							
Recycled Water	7,495	8,833	8,598	10,110	11,075	11,774	11,774
Urban Return Flow Diversions		1,715	1,715	1,715	1,715	1,715	1,715
RMV MWC Lease	0	400	816	1,321	1,605	1,957	2,500
San Clemente WRP	0	0	605	605	605	605	605
<i>Subtotal (AFY)</i>	<i>7,495</i>	<i>10,948</i>	<i>11,734</i>	<i>13,751</i>	<i>15,000</i>	<i>16,051</i>	<i>16,594</i>
<b>Non-Domestic Supplemental Supply<sup>1</sup></b>							
Los Alisos WRP	0	0	1,500	1,500	1,500	0	0
<b>Total Baseline Supply (AFY)</b>	<b>34,405</b>	<b>33,743</b>	<b>45,936</b>	<b>53,518</b>	<b>56,762</b>	<b>57,813</b>	<b>58,356</b>
Notes: MWDOC = Municipal Water District of Orange County; IPR = Indirect Potable Reuse; AFY = acre-feet per year; CVWD = Cucamonga Valley Water District; GSWC = Golden State Water Company; WRP = water reclamation plant 1 Supplemental supply sources are shown in italics and not included in total. Total Baseline Supply is the sum of baseline domestic water and baseline non-domestic water supplies. 2 Original amount was 2,000 acre-feet, current amount available for purchase in the event MWD supply is unavailable is 1,613.4 acre-feet. Source: Albert A. Webb Associates, Water Supply Assessment for City of Rancho Santa Margarita General Plan Update, November 7, 2018; refer to Appendix G.							

## Imported Water

### Domestic Water Sources

As discussed previously, the primary source of water supply for SMWD has been treated imported water purchased from MWDOC via MWD. Imported water is expected to make



up a majority of SMWD's future supply as well. In 2017, SMWD's water supply was comprised of approximately 72 percent imported water and 28 percent non-potable water.

MWDOC has adopted a shortage allocation plan and accompanying allocation model that estimates firm demands on MWDOC. Assuming no mandatory restrictions are imposed, MWDOC utilizes its latest allocation model to estimate the minimum imported supplies available to each of its retail agencies for 2015 through 2018. Accordingly, SMWD's estimated minimum imported supplies available is 29,202 acre-feet per year. The water supplies available to the MWDOC service area are projected to meet full service demands based on the findings by MWD in its 2015 UWMP starting 2020 through 2040 during normal years, single dry year, and multiple dry years. As such, SMWD is also capable of meeting the water demands of its customers in normal, single dry, and multiple dry years from present to 2040. SMWD currently has no plans for increasing imported water supplies from MWDOC or projects to expand existing imported water facilities.

Additionally, SMWD has several future domestic water supply sources, including secured first priority rights to 5,000 acre-feet per year of domestic water supply from the Cadiz Valley Water Conservation, Recovery and Storage Project with an option to purchase an additional 10,000 acre-feet per year; the San Juan Watershed IPR Project; and the Doheny Ocean Desalination Project. These future water supply sources are expected to come online by 2021 at the earliest and would supplement SMWD's existing water supply sources.

Domestic supplemental water supply sources include agreements with the Cucamonga Valley Water District and Golden State Water Company.

### Non-Domestic Water Sources

Historically, SMWD has operated one groundwater well (Well 6) located in the southeast corner of the SMWD service area. This well has subsequently been abandoned and SMWD currently has no operating wells. However, SMWD holds water rights permits in Oso Creek, Trampas Canyon, and Cañada Gobernadora Canyon. SMWD is also required by the San Diego Regional Water Quality Control Board (Order No. 97-52) to capture additional flows at the Oso Creek Barrier to ensure effluent from Oso Water Reclamation Plant (WRP) would not degrade the San Juan Basin. Water flow in these areas recharge the San Juan Basin and allow SMWD to extract local groundwater for potable use.

Additionally, SMWD operates a recycled water production and distribution system that is supplied from the Chiquita WRP, Oso Creek WRP, and 3A WRP. SMWD also purchases recycled water on an as-needed and as-available basis from IRWD's Los Alisos WRP. SMWD is also developing an agreement with the City of San Clemente to receive recycled water from wastewater generated within the SMWD service area that is treated at the San Clemente WRP. SMWD's recycled water/non-domestic water demand is expected to increase significantly by 2025, and then gradually increase through 2040. SMWD will accommodate the increase in recycled water demand with an expansion of the Chiquita WRP, increase the production of recycled water from wastewater flows collected in the Oso Creek watershed, construction of the Trampas Reservoir, partnering



with the City of San Clemente, and expansions of supplementary non-domestic water supplies.

SMWD also collects and utilizes non-domestic water from urban return flow diversions at five basins: the Oso Creek Barrier, Cañada Gobernadora Multipurpose Basin, Dove Canyon Basin, Trabuco Basin, and Horno Water Quality Basin.

Further, SMWD has agreements with the Rancho Mission Viejo Mutual Water Company, Golden State Water Company, and San Clemente WRP, which would provide supplemental non-domestic water supply.

## WATER DEMAND

SMWD categorizes its water demand into six categories: single family, multi-family, commercial (including schools, fire stations, government offices, and light industrial), landscape, other (Lago Santa Margarita and Lake Mission Viejo), and water losses. SMWD currently provides domestic water through approximately 57,000 metered connections. The majority of the SMWD water demands are residential (72 percent in fiscal year 2017), water losses totaled 3.3 percent with the remaining potable demands being that of commercial, landscape and other users.

SMWD's actual domestic and non-domestic water use in 2017 was 22,241 acre-feet and 7,993 acre-feet, respectively. The current and projected future water demands are provided in Table 5.17-8, SMWD Current and Projected Water Demands.

**Table 5.17-8  
SMWD Current and Projected Water Demands**

Water Use	2015	2017	2020	2025	2030	2035	2040
	Actual		Projected				
Domestic Water Demand	26,910	22,241	23,384	24,266	25,044	25,262	25,262
Non-Domestic Water Demand	7,495	7,993	8,787	10,090	11,269	13,899	13,929
<b>Total</b>	<b>34,405</b>	<b>30,234</b>	<b>32,171</b>	<b>34,356</b>	<b>36,313</b>	<b>39,161</b>	<b>39,191</b>
Notes: All unites in acre-feet per year.							
Source: Albert A. Webb Associates, Water Supply Assessment for City of Rancho Santa Margarita General Plan Update, November 7, 2018; refer to <u>Appendix G</u> .							

SMWD currently expects total water demand to increase approximately 30 percent between 2017 and 2040; this includes a domestic water increase of 14 percent and a non-domestic water increase of 74 percent. As stated above, these projections are from a 2018 WSV, which is the most current source of information, beyond the SMWD's 2015 UWMP. The domestic and non-domestic demand projections shown in Table 5.17-8 are less than the demand projections made in the 2015 UWMP up until 2035. Beginning in 2035, SMWD projects more water demand (both domestic and non-domestic) than was projected in the 2015 UWMP (given the more recent information in the 2018 WSV). The difference in water demands between the UWMP and the 2018 WSV is an indication of the successful implementation of the water conservation measures implemented by SMWD customers beginning in 2015 that have had permanent impacts going forward.



## WATER SUPPLY RELIABILITY

Pursuant to Water Code Section 10910(c), the Water Supply Assessment compared current and projected water supply and water demand for normal, single dry, and multiple dry years; refer to Table 5.17-9, SMWD Water Supply and Demand.

**Table 5.17-9  
SMWD Current Water Supply and Demand**

Water Supply and Demand	Normal	Single Dry	Multiple Dry Year 1	Multiple Dry Year 2	Multiple Dry Year 3
Supply Total	33,743	35,110	35,110	35,110	35,110
Demand Total	30,234	31,443	30,389	31,443	32,955
<i>Difference</i>	+3,509	+3,667	+4,271	+3,667	+2,155

Source: Albert A. Webb Associates, Water Supply Assessment for City of Rancho Santa Margarita General Plan Update, November 7, 2018; refer to Appendix G.

As shown in Table 5.17-9, a surplus of SMWD’s current supplies would be expected during normal year, single dry year, and multiple dry year scenarios.

### Normal Year

Table 5.17-10, SMWD Water Supply and Demand – Normal Year, shows projected water supply and demand under normal year conditions. As shown, a supply surplus for the existing SMWD service area is forecasted through 2040 under normal year rainfall conditions.

**Table 5.17-10  
SMWD Water Supply and Demand – Normal Year**

Normal Water Supply and Demand	2020	2025	2030	2035	2040
Supply Total	46,636	52,933	56,442	57,493	58,036
Demand Total	32,171	35,307	37,264	40,112	40,142
<i>Difference</i>	+14,465	+17,626	+19,178	+17,381	+17,894

Notes: All units in acre-feet per year.  
Source: Albert A. Webb Associates, Water Supply Assessment for City of Rancho Santa Margarita General Plan Update, November 7, 2018; refer to Appendix G.

### Single Dry Year

Table 5.17-11, SMWD Water Supply and Demand – Single Dry Year, compiles supply and demand projections for a single dry water year. As shown, a water supply surplus is forecasted for SMWD under single dry year conditions.



**Table 5.17-11  
SMWD Water Supply and Demand – Single Dry Year**

Single Dry Year Water Supply and Demand	2020	2025	2030	2035	2040
Supply Total	43,711	50,008	53,517	54,568	55,111
Demand Total	33,458	36,719	38,755	41,716	41,748
<i>Difference</i>	+10,253	+13,289	+14,762	+12,852	+13,363
Notes: All units in acre-feet per year.					
Source: Albert A. Webb Associates, Water Supply Assessment for City of Rancho Santa Margarita General Plan Update, November 7, 2018; refer to Appendix G.					

**Multiple-Dry Year**

Table 5.17-12, *SMWD Water Supply and Demand – Multiple Dry Years*, shows water supply and demand projections under multiple dry year conditions through 2040. As shown, a water supply surplus for SMWD is projected in a multiple dry year rainfall period through 2040.

**Table 5.17-12  
SMWD Water Supply and Demand – Multiple Dry Years**

Multiple Dry Year Supply and Demand		2020	2025	2030	2035	2040
First Year	Supply Totals	43,711	50,008	53,517	54,568	55,111
	Demand Totals	32,814	36,013	38,009	40,914	40,945
	<i>Difference</i>	+10,897	+13,995	+15,508	+13,654	+14,166
Second Year	Supply Totals	43,711	50,008	53,517	54,568	55,111
	Demand Totals	33,458	36,719	38,755	41,716	41,748
	<i>Difference</i>	+10,253	+13,289	+14,762	+12,852	+13,363
Third Year	Supply	43,711	50,008	53,517	54,568	55,111
	Demand Totals	35,066	38,485	40,618	43,722	43,755
	<i>Difference</i>	+8,645	+11,523	+12,899	+10,846	+11,356
Notes: All units in acre-feet per year.						
Source: Albert A. Webb Associates, Water Supply Assessment for City of Rancho Santa Margarita General Plan Update, November 7, 2018; refer to Appendix G.						

**5.17.4 SIGNIFICANCE THRESHOLDS AND CRITERIA**

Appendix G of the CEQA Guidelines contains the Initial Study Environmental Checklist, which includes questions relating to water supply. The issues presented in the Initial Study Environmental Checklist have been utilized as thresholds of significance in this section. Accordingly, a project may create a significant environmental impact if it would:

- Have sufficient water supplies available to serve the project from existing entitlements and resources, or require new or expanded entitlements need; and/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.



## 5.17.5 PROJECT IMPACTS AND MITIGATION MEASURES

### WATER SUPPLY AND DISTRIBUTION

- **IMPLEMENTATION OF THE GENERAL PLAN UPDATE WOULD HAVE SUFFICIENT WATER SUPPLIES AVAILABLE TO SERVE THE PROJECT FROM EXISTING ENTITLEMENTS AND RESOURCES, AND WOULD NOT REQUIRE OR RESULT IN THE CONSTRUCTION OF NEW WATER TREATMENT FACILITIES OR EXPANSION OF EXISTING FACILITIES, THE CONSTRUCTION OF WHICH COULD CAUSE SIGNIFICANT ENVIRONMENTAL EFFECTS.**

**Impact Analysis:** The General Plan Update anticipates additional development beyond existing conditions, potentially resulting in an increase in the City's population, and thus, an overall increase in total water demand. As discussed above, the SMWD and TCWD provide water services to the City. However, most of the City's business park and commercial-designated lands, as well as a majority of the City's residential areas, are located within SMWD's service area. As such, it can be assumed that these areas of expected reuse and redevelopment under the proposed project, would predominantly be provided by SMWD. As such, a Water Supply Assessment was prepared for the SMWD to analyze whether water demand generated by the proposed project would be adequately accommodated by existing SMWD water supplies.

The General Plan Update projects a net growth of 528 residential units and 3,085,014 square feet of non-residential uses. In order to calculate the expected water consumption associated with the net growth, SMWD's current standard domestic water demand factors shown in Table 5.17-13, Domestic Water Demand Factors, were utilized in the Water Supply Assessment.

**Table 5.17-13  
Domestic Water Demand Factors**

Land Use	Units	Demand Factor (gpd/unit)
Conventional Single Family Detached Residential	DU	450
High-Density Single Family Detached Residential	DU	450
Multi-Family Residential	DU	175
Age Qualified Residential	DU	300
Affordable Housing	DU	175
Parkland	Acres	200
School	Student	12.5
Urban Activity Center	1,000 square feet	225
Neighborhood Center	1,000 square feet	225
Business Park	1,000 square feet	225
Notes: DU = dwelling units; gpd = gallons per day		
Source: Albert A. Webb Associates, Water Supply Assessment for City of Rancho Santa Margarita General Plan Update, November 7, 2018; refer to Appendix G.		

The estimated domestic water demand of the City's anticipated net growth associated with the General Plan Update are shown in Table 5.17-14, Estimated Project Water Demand.



**Table 5.17-14  
Estimated Project Water Demand**

Land Use	Estimated Dwelling Units	Estimated Non-Residential Square Feet	Water Demand Factor (gpd/unit)	Water Demand (AFY)
Low Density Residential	236	--	450 per dwelling unit	124
Low-Medium Density Residential	23	--		12
Medium Density Residential	133	--		70
High Density Residential	136	--		71
<i>Subtotal – Residential Uses</i>				277
General Commercial	--	446,826	225 per 1,000 square feet	117
Neighborhood Commercial	--	15,507		4
Business Park	--	1,860,899		488
<i>Subtotal – Commercial/Business Uses</i>				609
Community Facility	--	248,859	225 per 1,000 square feet	65
<i>Subtotal – Community Facility Uses</i>				65
Parks	--	3,089	200 per acre	0.02
Open Space	--	--		--
Open Space Golf	--	2,668		0.01
Regional Open Space	--	507,166	Zero water consumption is assumed.	--
<i>Subtotal – Open Space Uses</i>				0.03
Water	--	--	--	--
<b>TOTAL</b>	<b>528</b>	<b>3,085,014</b>	<b>--</b>	<b>951</b>

Notes: gpd = gallons per day      AFY = acre-feet per year  
 Source: Albert A. Webb Associates, Water Supply Assessment for City of Rancho Santa Margarita General Plan Update, November 7, 2018; refer to Appendix G.

As detailed in Table 5.17-14, the proposed project's domestic water demand is estimated to be approximately 951 acre-feet per year over existing conditions. SMWD conservatively assumes additional growth in accordance with the General Plan Update would be constructed no earlier than 2020 and be completed by 2025 although buildout is projected to occur through 2040. This analysis is conservative in assuming greater water demand in a shorter period of time rather than spread out across a 20-year buildout period.

Concurrent with preparation of the Water Supply Assessment is the preparation of a Recycled Water Master Plan for the City, specifically located in SMWD's Improvement District No. 4A (ID 4A). With the forthcoming ID 4A Recycled Water Master Plan, SMWD is expecting to convert the majority of water demand relative to irrigation meters within ID 4A from potable to recycled water supply. Currently, 1,000 acre-feet per year of existing recycled water supply is estimated for this purpose.

The conversion of potable water to recycled water under the Recycled Water Master Plan for ID 4A is represented in the Water Supply Assessment as an additional demand for recycled water and an equal decrease in the potable water demand, beginning in 2025, as shown in Table 5.17-15, *Water Demand With Project*.



**Table 5.17-15  
Water Demand With Project**

Water Demand Type	2017 <sup>1</sup>	2020	2025	2030	2035	2040
	Actual	Projected <sup>1</sup>				
<b>Domestic Water</b>						
Project (Net Growth)	0	0	951	951	951	951
Other District Service Area	22,241	23,384	24,266	25,044	25,262	25,262
Domestic Water Demand to Be Met with Recycled Water <sup>2</sup>	0	0	(1,000)	(1,000)	(1,000)	(1,000)
<i>Domestic Water Subtotal</i>	<i>22,241</i>	<i>23,384</i>	<i>24,217</i>	<i>24,995</i>	<i>25,213</i>	<i>25,213</i>
<b>Non-Domestic Water</b>						
Project (Net Growth) <sup>2</sup>	0	0	0	0	0	0
ID 4A Recycled Water Master Plan	0	0	1,000	1,000	1,000	1,000
Other District Service Area	7,993	8,787	10,090	11,269	13,899	13,929
<i>Non-Domestic Water Subtotal</i>	<i>7,993</i>	<i>8,787</i>	<i>11,090</i>	<i>12,269</i>	<i>14,899</i>	<i>14,929</i>
<b>Total Water Demand with Project</b>	<b>30,234</b>	<b>32,171</b>	<b>35,307</b>	<b>37,264</b>	<b>40,112</b>	<b>40,142</b>
Notes: All units in acre-feet per year.						
1 With implementation of the proposed ID 4A Recycled Water Master Plan, a conversion of potable water demand to recycled water demand of 1,000 acre-feet per year would take place.						
2 Non-domestic water use by the proposed project is assumed to be zero in the Water Supply Assessment.						
Source: Albert A. Webb Associates, <i>Water Supply Assessment for City of Rancho Santa Margarita General Plan Update</i> , November 7, 2018; refer to Appendix G.						

Table 5.17-16, *SMWD Water Supply and Project Demand Comparison*, compares total water demand with the project for years 2020 through 2040 to SMWD's projected water supply in normal year, single dry year, and multiple dry years. As shown, SMWD would have adequate water supplies to accommodate the General Plan Update's net water demand (951 acre-feet per year) in addition to existing and future demands from 2020 through 2040 for normal, single dry, and multiple dry years.

**Table 5.17-16  
SMWD Water Supply and Demand Comparison – Normal Year**

Water Supply and Project Demand	2020	2025	2030	2035	2040
<b>Normal Year Supply Total</b>	46,636	52,933	56,442	57,493	58,036
Water Demand with Project	32,171	35,307	37,264	40,112	40,142
<i>Difference</i>	<i>+14,465</i>	<i>+17,626</i>	<i>+19,178</i>	<i>+17,381</i>	<i>+17,894</i>
<b>Single Dry Year Supply Total</b>	43,711	50,008	53,517	54,568	55,111
Water Demand with Project	32,171	35,307	37,264	40,112	40,142
<i>Difference</i>	<i>+11,540</i>	<i>+14,701</i>	<i>+16,253</i>	<i>+14,456</i>	<i>+14,969</i>
<b>Multiple Dry Year Supply Total</b>					
First Year Supply	43,711	50,008	53,517	54,568	55,111
Water Demand with Project	32,171	35,307	37,264	40,112	40,142
<i>Difference</i>	<i>+11,540</i>	<i>+14,701</i>	<i>+16,253</i>	<i>+14,456</i>	<i>+14,969</i>
Second Year Supply	43,711	50,008	53,517	54,568	55,111
Water Demand with Project	32,171	35,307	37,264	40,112	40,142
<i>Difference</i>	<i>+11,540</i>	<i>+14,701</i>	<i>+16,253</i>	<i>+14,456</i>	<i>+14,969</i>
Third Year Supply	43,711	50,008	53,517	54,568	55,111
Water Demand with Project	32,171	35,307	37,264	40,112	40,142
<i>Difference</i>	<i>+11,540</i>	<i>+14,701</i>	<i>+16,253</i>	<i>+14,456</i>	<i>+14,969</i>
Notes: All units in acre-feet per year.					



Further, the General Plan Update includes policies intended to ensure that water supplies and infrastructure are available to meet the needs of current and future development within the City. Specifically, Land Use Element Policy 5.1 requires consultation with the SMWD and TCWD as well as regional water suppliers and distributors to ensure that high quality water is available and deliverable to the community. Land Use Element Policy 5.2 would ensure development proposals are reviewed in cooperation with SMWD and TCWD to confirm that adequate water supply, treatment, and distribution capacity are available to serve the proposed development without negatively impacting the existing community. Land Use Element Policy 5.3 encourages the City to consult with local and regional water suppliers to ensure adequate water reserves exist in case of natural disaster. Implementation of these policies would not result in significant impacts to water supplies and distribution. Additionally, where applicable, in compliance with SB 221 and SB 610 requirements, future development would be required to demonstrate adequate water supply with either a signed Water Availability Form, "Will-Serve" letter, or Water Supply Assessment from SMWD or TCWD. The City would enforce all existing laws and regulations pertaining to water conservation.

All water infrastructure construction activities associated with future development would be subject to compliance with the existing local, State, and Federal laws, ordinances, and regulations, which would ensure impacts are reduced to less than significant levels. In particular, future development would be subject to compliance with SMWD and TCWD's *Design Criteria and Standard Drawings for Water and Sewer Facilities* and the most recently adopted edition of the Uniform Building Code. This framework establishes planning and design requirements for the water distribution systems. The City would continue to coordinate with both water districts to ensure adequate water distribution facilities are available to serve future development.

As such, growth anticipated by the General Plan Update would not require or result in the construction of new water treatment facilities or expansion of existing facilities, and SMWD would have sufficient water supplies to serve the project from existing entitlements and resources. Compliance with the abovementioned regulatory framework would reduce potential water supply and infrastructure impacts to less than significant levels.

## **Proposed General Plan Update Goals and Policies:**

### **LAND USE ELEMENT**

**Goal 5:** Consult with local and regional water suppliers to ensure that an adequate and safe water supply is available and that delivery and treatment capacity are adequate to meet the community's needs.

**Policy 5.1:** Consult with Santa Margarita Water District and Trabuco Canyon Water District as well as regional water suppliers and distributors to ensure that high quality water is available and deliverable to the community.

**Policy 5.2:** In cooperation with the Santa Margarita and Trabuco Canyon Water Districts, review development proposals to ensure that adequate water supply, treatment, and distribution capacity are available to meet the



needs of proposed development without negatively impacting the existing community.

**Policy 5.3:** Consult with local and regional water suppliers to ensure adequate water reserves exist in case of natural disaster.

**Mitigation Measures:** No mitigation is required.

**Level of Significance:** Less Than Significant Impact.

### 5.17.6 CUMULATIVE IMPACTS

- **FUTURE DEVELOPMENT ASSOCIATED WITH IMPLEMENTATION OF THE GENERAL PLAN UPDATE AND OTHER CUMULATIVE DEVELOPMENT WOULD NOT RESULT IN CUMULATIVELY CONSIDERABLE IMPACTS TO WATER RESOURCES INCLUDING INCREASED DEMAND FOR WATER SUPPLIES AND INFRASTRUCTURE.**

**Impact Analysis:** Cumulative water impacts are analyzed in terms of impacts to SMWD and TCWD water supplies and facilities. As noted above, approximately 70 percent of TCWD's potable supply and virtually all SMWD's potable supply needs are met by water imported by MWD and purchased from MWDOC. The remainder of TCWD's potable supply includes groundwater pumped from the San Juan Basin. Recycled water is also an important non-potable component of both water districts' supply portfolios.

Potential impacts to water supply associated with implementation of the General Plan Update, along with potential development within cities served by SMWD and TCWD, may result in cumulative impacts on water supplies. It is required that every urban water supplier assess the reliability to provide water service to its customers under normal, dry, and multiple dry water years. As indicated above, the TCWD 2015 UWMP and Water Supply Assessment prepared for SMWD identify that both district's water supplies would be capable of meeting demands under normal, single dry, and multiple dry years through 2040 including the General Plan Update anticipated water demands; refer to [Table 5.17-16](#).

Future development projects accommodated through General Plan Update implementation would be evaluated by the City on a project-by-project basis to determine impacts to water supplies and infrastructure. The continued assessment of individual projects for impacts to the water supply system would assure projects would only be approved if adequate water supplies exist at the time of their implementation. All future development would be subject to all applicable Federal, State, and local laws, ordinances, and regulations in place for water supply and infrastructure. Additionally, water infrastructure would be subject to the planning and design requirements outlined in the TCWD and SMWD's *Design Criteria and Standard Drawings for Water and Sewer Facilities* and the most recently adopted edition of the Uniform Building Code.

Further, new development would be required to pay all applicable connection fees and ongoing user fees related to the provision of water services. Connection fees are used in part to defray the cost of any necessary facility upgrades, as determined by TCWD and SMWD. Payment of required connection fees and ongoing user fees and compliance



with all applicable laws, ordinances, and regulations would ensure impacts regarding water supply, distribution, and infrastructure are less than significant. Therefore, implementation of the General Plan Update would not result in cumulatively considerable water supply and infrastructure impacts.

**Proposed General Plan Update Goals and Policies:** Refer to the General Plan Update goals and policies cited above.

**Mitigation Measures:** No mitigation is required.

**Level of Significance:** Less Than Significant Impact.

### **5.17.7 SIGNIFICANT UNAVOIDABLE IMPACTS**

Impacts related to water supplies and facilities associated with implementation of the General Plan Update would be less than significant. Therefore, no significant unavoidable water supplies and facilities impacts would occur as a result of the General Plan Update.

### **5.17.8 SOURCES CITED**

Albert A. Webb Associates, *Water Supply Assessment for City of Rancho Santa Margarita General Plan Update*, November 7, 2018.

Arcadis, *Santa Margarita Water District 2015 Urban Water Management Plan*, June 2016.

Arcadis, *Trabuco Canyon Water District 2015 Urban Water Management Plan*, June 2016.



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