

SDG&E CONSTRUCTION WATER SOURCING INVESTIGATION

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Acronyms and Abbreviations

AAC	All-American Canal
af	acre-feet
afy	acre-feet per year
CPUC	California Public Utilities Commission
CVWD	Coachella Valley Water District
DEH	County of San Diego Department of Environmental Health
DPH	California Department of Public Health
IID	Imperial Irrigation District
LPAs	local primacy agencies
mgd	million gallons per day
MWC	Pine Valley Mutual Water Company
MWD	Metropolitan Water District of Southern California
MWDOC	Municipal Water District of Orange County
PVCW	Palo Verde County Water District
PVID	Palo Verde Irrigation District
QSA	Quantification Settlement Agreement
RWQCB	Regional Water Quality Control Board
SDCWA	San Diego County Water Authority
SDG&E	San Diego Gas & Electric
SWRCB	State Water Resources Control Board
USDM	United States Drought Monitor
UWMP	Urban Water Management Plan
WSs	Small water systems
WWD	Winterhaven Water District

Water Supply Characteristics of the SDG&E Service Area

Section 1 Introduction

The objective of this water supply study is to identify water supply resources, including recycled water, surface water, groundwater and water from other potential water sources (including desalinated water), to support San Diego Gas & Electric (SDG&E) construction and operations activities throughout its service territory. This section provides an overview of the water supply framework within the SDG&E service territory (project area), including a geographical description of the commercially available water sources and suppliers within the project area boundaries as well as an overview of the regulations related to the sale, distribution and use of these commercially available water supplies. Based on available information, this section also describes private water supplies that exist within the SDG&E service area.

This water supply study is being completed in the midst of an historic drought throughout California, and is intended to provide a framework for SDG&E going forward to easily identify and utilize the most appropriate water source(s) to support new infrastructure construction projects and ongoing operations and maintenance needs, while balancing the regional needs to conserve and properly manage all water resources. Although the primary purpose of this plan is to identify water supply resources within SDG&E's service territory, it should be noted that other water use reduction options will be considered. This includes, but is not limited to, the use of palliatives, project design alternatives and new construction techniques. Forward strategies resulting from this study may include:

- Selecting appropriate water sources closest to planned project area(s) to minimize transportation costs, traffic circulation effects and any associated emissions;
- Selecting multiple water sources to contribute to cumulative linear project needs;
- Substituting recycled water for some or all potable water in construction uses (e.g., dust control, soil compaction, concrete mixing, etc.) whenever feasible;
- Reducing use of potable water supplies that are heavily dependent upon groundwater extraction from groundwater basins at risk of overdraft; and/or
- Implementing alternative strategies to reduce total construction water use.

1.1 Study Area

The study area for this analysis comprises the SDG&E service area because SDG&E construction and/or operations activities would largely be confined to that area. In some cases, it may be appropriate to consider water supplies from outside the service area; however, availability of water supplies outside of the SDG&E service area is not addressed in this analysis. The SDG&E service area spans a 4,100-square-mile area covering almost all of San Diego County and the extreme, southern portion of Orange County, including the communities of San Clemente and San Juan Capistrano, the area roughly south of State Route 73 in the western portion of Orange County (California Energy

Commission 2011). Small areas adjacent to the eastern San Diego County border are not part of the SDG&E service territory. There are two Regional Water Quality Control Boards (RWQCBs) – San Diego (Region 9) and Colorado River (Region 7) – within SDG&E’s service territory which are tasked with setting and enforcing water quality standards for their regions. Two county water districts, the San Diego County Water Authority (SDCWA) and the Municipal Water District of Orange County (MWDOC) acquire wholesale water and sell it to individual water districts within the service area. Local water districts, agencies, or companies within the project area either purchase wholesale water from the water authorities or extract it from groundwater sources and sell it to their customers, including the residents and businesses within their respective district boundaries. Figure 1 shows the RWQCB boundaries, major watersheds and hydrologic units within the SDG&E service area.

Section 2 Water Resources

2.1 Overview

Regional water supply within the portions of Orange County that fall within the study area and the western portion of San Diego County largely begins with the Metropolitan Water District of Southern California (MWD). MWD manages and coordinates the delivery of imported water supplies from the Colorado River and Northern California through the State Water Project within six Southern California counties—Ventura, Los Angeles, Orange, Riverside, San Bernardino, and San Diego. Regional water authorities or districts, which are public agencies established under the County Water Authority Act (California State Water Code, Chapter 45, Section 2), acquire wholesale water from MWD. SDCWA and MWDOC also focus on planning and appropriate investments in water supply and storage development, water use efficiency, public information, legislative advocacy, water education, and emergency preparedness.

SDCWA and MWDOC sell the wholesale water that they acquire from MWD to the local water districts, agencies, and companies who in turn sell and distribute the water to their customers (residential, commercial, industrial, agricultural, municipal etc.) within their local district boundaries, and in the cases of SDCWA and MWDOC, they are generally not involved in selling retail water directly to individual customers. The major water districts and agencies within the SDG&E service area are shown in Figure 2, and their water supply characteristics are detailed in the Water Supply Matrix (Appendix A).

The remainder of the SDG&E service area including the mountains and deserts of eastern San Diego County (as opposed to the western coastal region), relies almost entirely on groundwater sources (County of San Diego 2010), which are usually contained within fractured rock aquifers or alluvial groundwater basins. These groundwater resources are not managed and sold by regional or county-level water districts like the water supplies in the western region of the project area. Instead, they are managed by the local water districts, companies, or community service districts that have been formed by the communities that overlie these groundwater resources. These resources are discussed in Section 2.5 below.

2.2 San Diego County Water Authority

Member Agencies

The SDCWA service area covers the majority of the western region of the study area and is the primary wholesale water supplier for 24 member agencies throughout San Diego County, including 6 cities, 5 water districts, 3 irrigation districts, 8 municipal water districts, 1 public utility (Fallbrook Public Utility District), and 1 federal agency (the Camp Pendleton Marine Corps Base). All of SDCWA's member agencies are located within the SDG&E service area. The member agencies each draw upon a variety of water supply resources, including surface water, groundwater, recycled water and/or desalination supplies. The member agencies own a number of their own water supplies, which usually comprise local supplies as opposed to imported supplies, including water coming from surface or groundwater sources or recycled water. While SDCWA owns some of the

regional water storage and conveyance facilities, the member agencies own and operate their own local water storage and conveyance facilities (reservoirs or tanks) and pipelines.

For example, the Sweetwater Authority, one of the member agencies of SDCWA, obtains about 30 percent of its water from imported water delivered by SDCWA, with the remaining 70 percent of its water (during periods of normal rainfall) being supplied by local groundwater supplies, including the Sweetwater River and the San Diego Groundwater Formation, and desalination (Sweetwater Authority 2011). It owns two dams on the Sweetwater River as well as the resulting reservoirs—the Loveland (25,387 acre-foot capacity) and Sweetwater (28,079 acre-foot capacity) Reservoirs. It also owns the National City Wells that draw approximately 2,200 acre-feet (af) of freshwater per year from the San Diego Formation groundwater basin, along with the Reynolds Groundwater Desalination Facility in Chula Vista, which uses reverse osmosis technology to turn brackish water drawn from four alluvial wells on the Sweetwater River Basin Alluvial Aquifer and five deep wells on the San Diego Formation into a potable water supply. Details relating to each member agencies in the SDCWA service area, including availability of recycled water resources for these agencies, are provided in Appendix A.

SDCWA's Water Resources

In 2014, SDCWA had a total water supply of 667,000 af. The majority of this water came from imported sources, with over 50 percent coming from the Colorado River and approximately 20 percent from the Bay-Delta, which is located at the convergence of the San Joaquin and Sacramento rivers in Northern California (SDCWA 2015). Imported water is either purchased from MWD or is obtained through agreements with the Imperial Irrigation District ([IID](#)).

Local water sources, which account for approximately 20 percent of SDCWA's water supply, are described below.

- *Surface water* is the region's largest source of local water and comprises runoff from rainwater that is collected in 25 reservoirs (listed below with the owner agency) within the watersheds of the seven major stream systems in the County. Perennial stream systems and lakes are depicted in Figure 3. Surface water provides approximately 7 percent of the region's water supply needs. As of March 2015, the reservoirs contained 239,405 af of water, or just over 40% of total capacity. As part of a \$3.1 billion Capital Improvement Program to improve the region's water infrastructure, SDCWA has been increasing local water storage to approximately 745,000 af, including creation of the Olivehain Reservoir, improvements to Lake Hodges, and the San Vicente Dam Raise. The 25 reservoirs have a combined storage capacity of 586,582 af and include the following, with capacity listed:
 - Barrett (City of San Diego) – 34,806 af
 - Beck (Rainbow Municipal Water District) – 625 af
 - Dixon (City of Escondido) – 2,606 af
 - El Capitan (City of San Diego) – 112,807 af
 - Hodges (City of San Diego) – 30,251 af
 - Cuyamaca (Helix Water District) – 8,195 af
 - Henshaw (Vista Irrigation District) – 51,774 af

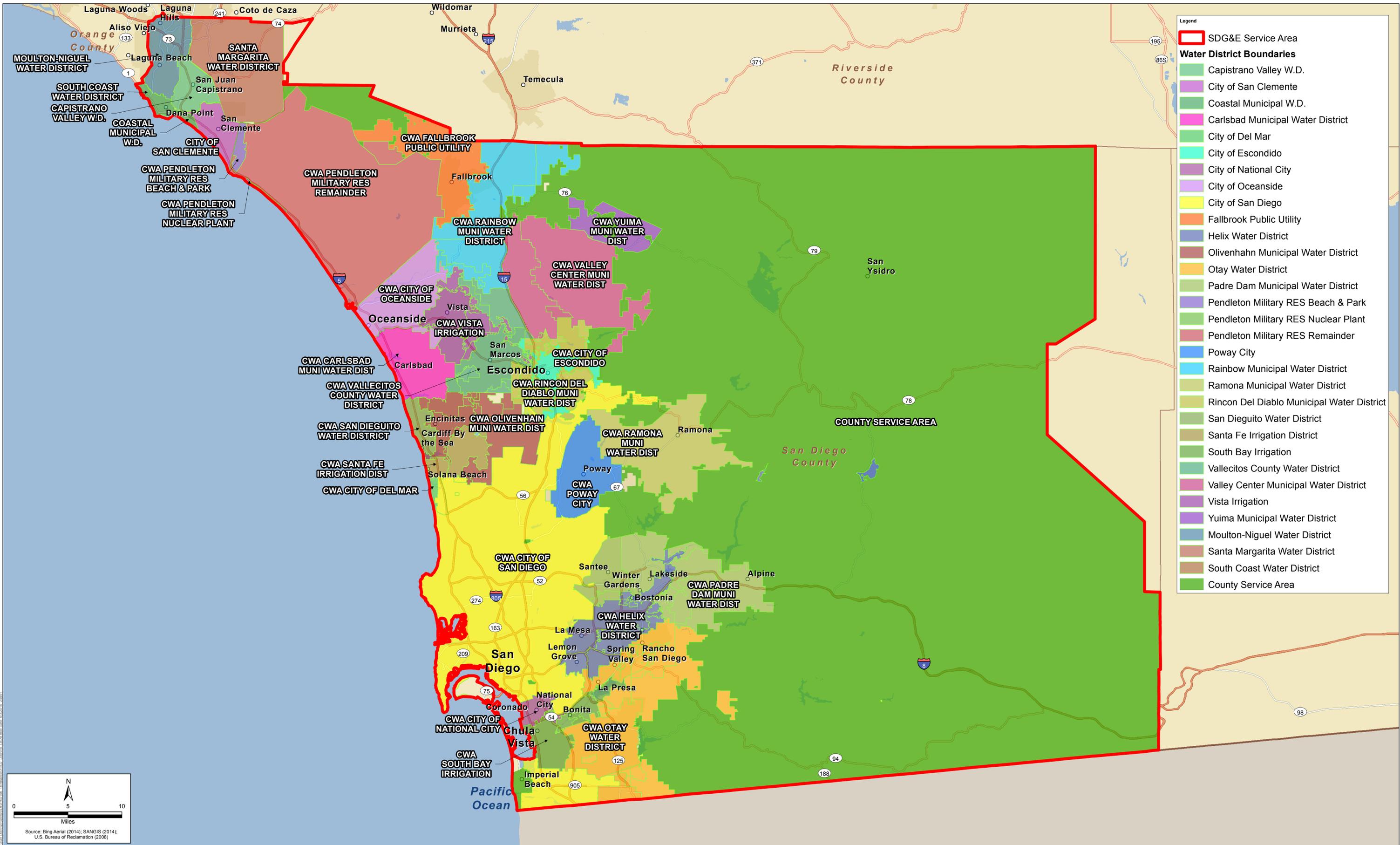


Figure 2
Water Districts in SDG&E Service Area
SDG&E Construction Water Supply Matrix



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Figure 3
Perennial Stream Systems and Surface Water Bodies
SDG&E Construction Water Supply Matrix

- Jennings (Helix Water District) – 9,790 af
- Poway (City of Poway) – 3,330 af
- Ramona (Ramona Municipal District) – 12,000 af
- Wohlford (City of Escondido) – 6,506 af
- Loveland (Sweetwater Authority) – 25,400 af
- Lower Otay Reservoir (City of San Diego) – 49,898 af
- Maerke (Carlsbad Municipal Water District) – 600 af
- Miramar (City of San Diego) – 6,682 af
- Morena (City of San Diego) – 50,694 af
- Morro Hill (Rainbow Municipal Water District) – 465 af
- Murray (City of San Diego) – 4,684 af
- Olivenhain (San Diego County Water Authority) – 24,789 af
- Red Mountain (Fallbrook Public Utility District) – 1,335 af
- San Dieguito (San Dieguito Water District, Santa Fe Irrigation District) – 883 af
- San Vicente (City of San Diego) – 89,312 af
- Sutherland (City of San Diego) – 29,508 af
- Sweetwater (Sweetwater Authority) – 28,079 af
- Turner (Valley Center Municipal Water District) – 1,612 af
- *Groundwater* is drawn from approximately 20 groundwater basins, or aquifers, throughout the County; however, supplies from these sources are limited because of lack of storage capacity in local aquifers, availability of groundwater recharge, and degraded water quality (Figure 4).
- *Recycled water* supplies approximately 30,000 acre-feet per year (afy) of water for groundwater recharge and filling lakes, ponds, and ornamental fountains; to irrigate parks, campgrounds, golf courses, freeway medians, community greenbelts, school athletic fields, food crops, and nursery stock; and for dust control at construction sites. SDCWA is expanding recycled water capabilities and plans to provide approximately 43,000 afy of recycled water by 2020. Availability of recycled water is dependent on the capacity of the water reclamation plants and the conveyance infrastructure, i.e., pipelines dedicated to conveyance of recycled water. The City of San Diego, for example, has two water reclamation plants capable of processing approximately 45 million gallons per day of wastewater and, as of 2010, the City of San Diego had 91 miles of pipeline in its recycled water system, which funnel recycled wastewater to parks, medians, and golf courses throughout the city (City of San Diego 2011). However, while the North City Reclamation Plant has a design capacity of 33,600 acre-feet per year (afy) , its operating capacity is 13,440 afy, with only about 6,720 to 7,840 afy of that amount actually being used (including that which is sold to the Poway and Olivenhain water districts), with the excess being discharged back into the ocean. Similarly, South Bay Reclamation Plant has a design capacity of 16,800 afy, but, because of limited pipe connections, only 7,840 afy is produced. Otay Water District has rights to 6,720 afy of this 7,840 afy produced, leaving only 1,120 afy for other uses, including use by SDG&E for construction and operations via the filling station constructed in 2012. However, the production

amount can be increased if more sewage flows in and as needed. Figure 6 shows the location of reclamation facilities in the SDG&E service area and the details of each water district's recycled water supplies; processes for obtaining access to the water is provided in the Water Supply Matrix.

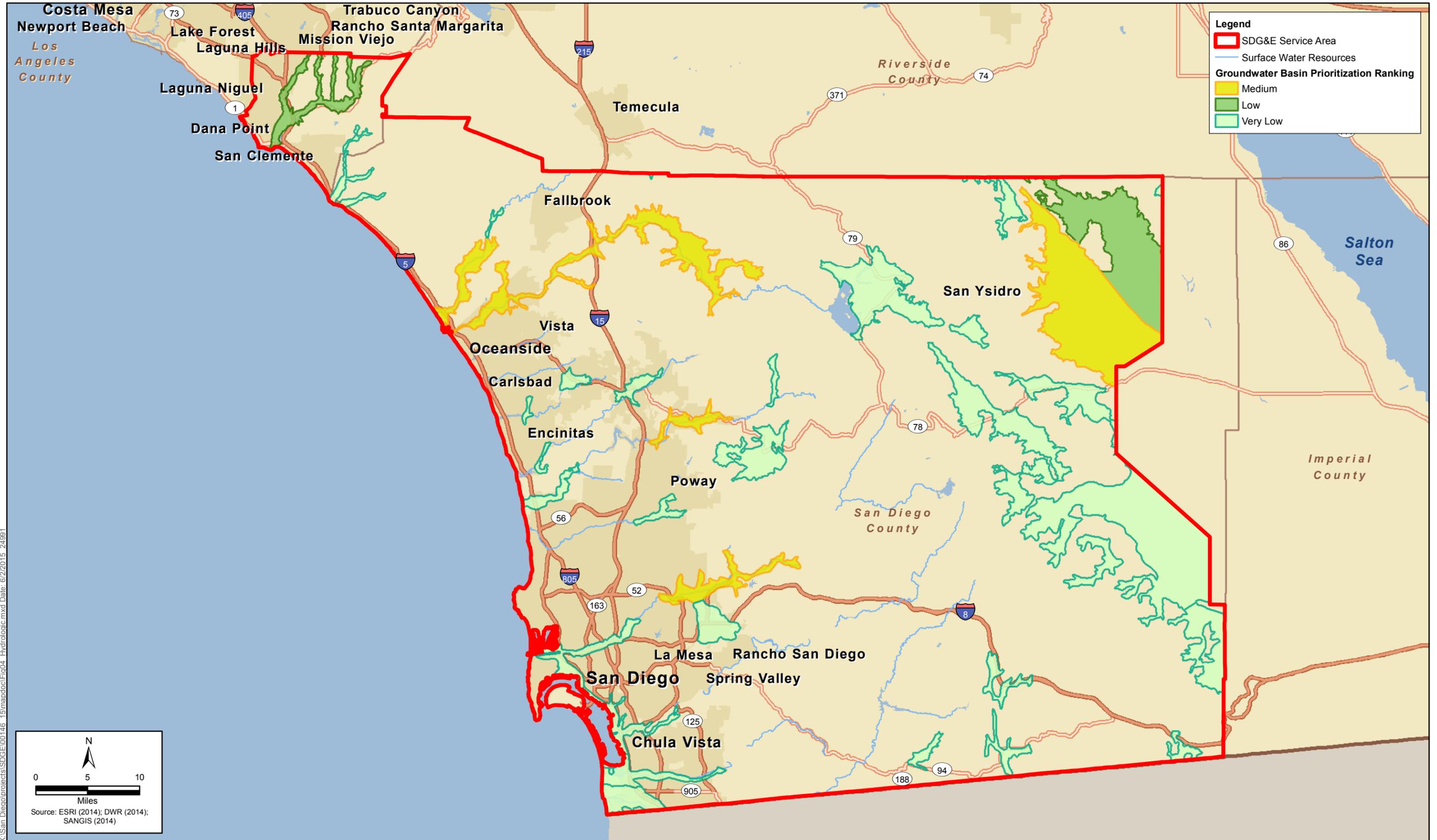
- *Conservation* entails encouraging the region's population to use the existing water supply more efficiently, and is achieved through SDCWA's Watersmart program. Conservation accounts for 11 percent, or approximately 73,000 afy, of SDWCA's annual water supply. The Watersmart program provides public outreach, such as landscape training and waterchecks, and financial incentives, including discounts for artificial turf and rebates for rain barrels and high efficiency washing machines and toilets, to encourage San Diegan residents, businesses, and the public sector to reduce their water consumption.
- *Desalination* uses reverse osmosis technology to remove water molecules from seawater and turn it into potable water. This water source will be available to SDCWA customers with the completion of the Carlsbad Desalination Project in late 2015 (Figure 6), and is anticipated to account for approximately 7 percent of the region's water demand, or up to 56,000 af of desalinated seawater per year. The plant will be owned by Poseidon Water, with water purchased by SDCWA. Water from the Carlsbad Desalination facility will be conveyed to SDCWA's Second Aqueduct connection facility in San Marcos via a 10-mile, 54-inch water delivery pipeline.

In addition, the Camp Pendleton Desalination Project is currently in the planning phase and is being led by SDCWA, with participation from U.S. Marine Corps Base Camp Pendleton. Early feasibility studies suggest potential for a seawater desalination plant that could produce 112,000–168,000 afy. SDCWA is currently conducting further technical studies at the proposed facility site.

SDCWA is also participating in a binational feasibility study of a large-scale seawater desalination plant that would be constructed in Rosarito Beach in Baja California, Mexico. The objective of this study is to evaluate the potential for constructing a seawater desalination plant with a capacity of up to 84,000 afy. The water supply from this project could be made available to U.S. and Mexican water users, augmenting Colorado River supplies. One such user is the Otay Water District, which is in the process of getting final permitting and an environmental impact review approved to construct a new pipeline system to receive water from the proposed desalination plant. The Otay Water District plans to purchase desalinated water from the plant once it is completed, and has an agreement in principal to buy approximately 1 kilometer of water per second. Funding for the first phase of this project was shared among SDCWA, MWD, Central Arizona Water Conservation District, and Southern Nevada Water Authority.

2.3 Municipal Water District of Orange County

Like SDCWA, water supply in Orange County relies heavily on imported water, which constitutes approximately 50 percent of the water used throughout Orange County. The imported water is purchased from MWD, which acquires it from Northern California (through the State Water Project) and the Colorado River. The remainder of Orange County's water supply comes from a vast underground aquifer located below north and central Orange County, as well as from recycled wastewater produced by several local water agencies, and several small groundwater basins



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Figure 4
Hydrologic Features and Groundwater Basins in SDG&E Service Area
SDG&E Construction Water Supply Matrix



Small Supplier (<200)

- 1000 TRAILS OAKZANITA SPRINGS
- 17701 SAN PASQUAL VALLEY RD
- 37349 GREAT SOUTHERN OVERLAND STAGE ROUTE
- 524 JEB STUART RD
- AGUA CALIENTE COUNTY PARK
- AL BAHR SHRINE CAMP
- ALPINE AMERICAN LEGION
- ALPINE OAKS ESTATES
- ALPINE RANGER STATION
- ARYA BONSAI
- AUERBACH FARMS
- BALLENA VISTA FARM
- BANNER SMALL WATER CO.
- BAR 2 RANCH
- BARRETT HONOR CAMP
- BARRETT JUNCTION CAFE
- BARRETT LAKE MOBILEHOME PARK
- BARRETT VALLEY WATER CO.
- BUTTERFIELD RANCH
- CALEXICO LODGE
- CALVARY CHAPEL JULIAN
- CAMERON CORNERS WATER SYS
- CAMERON FIRE STATION
- CAMP CEDAR GLEN
- CAMP CUYAMACA
- CAMP DENVER FOX
- CAMP MORENA
- CAMP OLIVER
- CAMP STEVENS
- CAMP WINACKA
- CAMPO ALTERNATIVE SCHOOL
- CAMPO ELEMENTARY SCHOOL
- CANEBRAKE COUNTY WATER DIST.
- CLOVER FLAT ELEMENTARY SCHOOL
- COLEMAN CREEK VILLAGE
- COUNTY LINE BBQ AND CAFÉ
- CROCKER FAMILY TRUST
- CUYAMACA FOREST MW CO.
- CUYAMACA WATER DISTRICT
- CLEVELAND NATIONAL FOREST
- DALEY RANCH
- DE ANZA SPRINGS RESORT
- DEL DIOS MUTUAL WATER CO.
- DESCANSO FIRE STATION
- DESCANSO JUNCTION
- DIAMOND JACK'S RV RANCH
- DUDLEY'S BAKERY
- EL CAPITAN RESERVOIR REC. AREA
- EL MONTE COUNTY PARK
- ERRECA'S ASSOCIATES
- FALLBROOK KAMP RETREAT
- FEATHERSTONE CANYON CHR. CAMP
- FREEDOM RANCH
- FRY CREEK / OBSERVATORY
- GUATAY MUTUAL BENEFIT CORP.
- H & J WATER CO.
- HARRISON PARK MUTUAL WATER CO.
- HARRISON PARK MW CO. 2
- HEAVENLY OAKS
- HIGH LAND EAST TRAILER PARK
- HODGES RESERVOIR REC. AREA
- INDIAN HILLS CAMP
- JACUMBA VALLEY RANCH
- JESS MARTIN COUNTY PARK
- JULIAN OAKS YOUTH MINISTRIES
- KQ RANCH CAMPING RESORT
- LAKE HENSHAW WATER CO.
- LAKE MORENA COUNTY PARK
- LAKE MORENA TRAILER RESORT
- LAKE MORENA VIEWS MW CO.
- LAKE WOHLFORD RESORT
- LAKEVIEW SPRING
- LAZY H MUTUAL WATER CO.
- LITTLE ACRES M/H PARK
- LIVE OAK SPRINGS WATER COMPANY
- LOS TULES MUTUAL WATER CO.
- LOUIS A. STELZER COUNTY PARK
- LUX INN
- MANZANITA DINER
- MATAGUAY SCOUT RESERVATION
- MOLINARI WATER SYSTEM
- MOM'S PIE HOUSE
- MOUNT LAGUNA IMPROVEMENT ASSN.
- MOUNTAIN EMPIRE HIGH SCHOOL
- MOUNTAIN EMPIRE RV PARK/CPGND
- MT LAGUNA WATER SYSTEM
- MUIR INDUSTRIES
- NARCONON FRESH START
- NORTH PEAK MUTUAL WATER CO.
- OAK GROVE COMPLEX
- OAK KNOLL VILLAGE
- OAKOASIS OPEN SPACE PRESERVE
- OAKVALE PARK
- OUTDOOR WORLD RV PARK
- PALOMAR OBSERVATORY
- PAUMA VALLEY WATER CO.
- PHOENIX HOUSE
- PINE VALLEY BIBLE CONF. CENTER
- PINECREST
- PINEZANITA TRAILER RANCH
- POTRERO COUNTY PARK
- POTRERO ELEMENTARY SCHOOL
- POTRERO GENERAL STORE
- QUESTHAVEN MUNI WATER DIST.
- QUIET OAKS MH PARK
- R.L. HUNT WATER COMPANY
- RANCHO CORRIDO RV RESORT
- RANCHO CORTE MADERA
- RANCHO ESTATES MUTUAL WATER CO.
- RANCHO SANTA TERESA MW CO.
- RD'S LOG CABIN
- REY RIVER RANCH CORP
- RICHARDSON BEARDSLEY PARK INC.
- ROUGH ACRES RANCH
- SACRED MOUNTAIN INN
- SANTA MARGARITA COUNTY PRESERV
- SANTA YSABEL TRAILER PARK
- SCHOEPE SCOUT RES. LOST VALLEY
- SET FREE MINISTRIES
- SHADY OAKS TRAILER RANCH
- SKYLINE RANCH RV PARK & CMPGRD
- SOUTH BAY ROD AND GUN CLUB
- SPENCER VALLEY SCHOOL
- STUART WATER CO.
- SUMMIT ESTATES MUT WTR CO.
- SUNRISE ESTATES MW CO.
- SUNSHINE SUMMIT GENERAL STORE
- SUTHERLAND RESERVOIR REC. AREA
- SYCAMORE CANYON / GOODAN RANCH
- T.C. WORTHY CASH & CARRY INC.
- TECATE VISTA MUTUAL WATER CO.
- THOUSAND TRAILS PIO PICO
- TWIN LAKES RESORT
- WARNER SPRINGS RANCH
- WARNER UNIFIED SCHOOL DIST.
- WEST CUCA MUTUAL WATER CO.

Legend

- SDG&E Service Area
- ▲ Large Supplier
- ⊕ Small Supplier (<200)

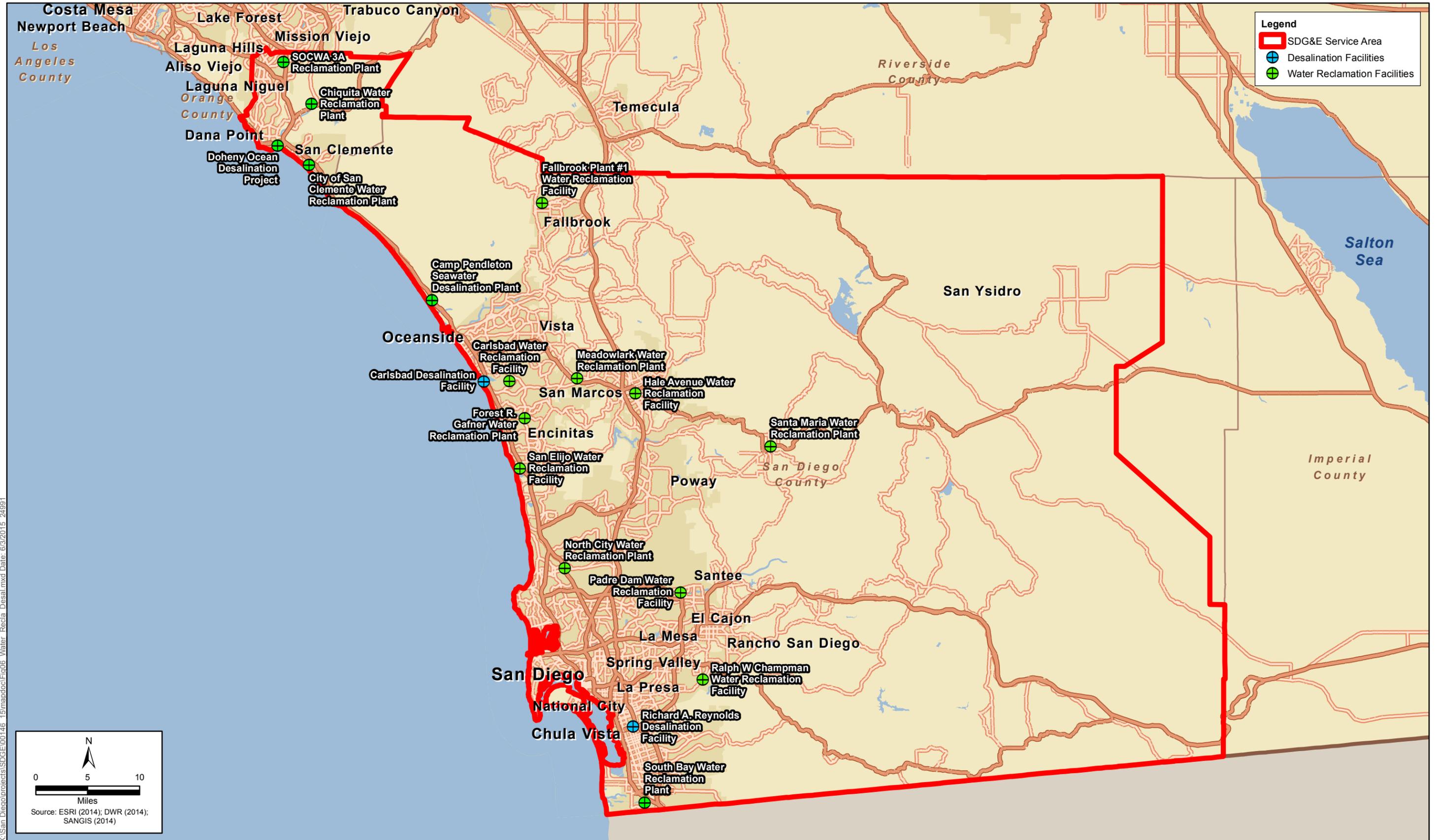
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Source: Bing Aerial (2014); SANGIS (2014); U.S. Bureau of Reclamation (2008)

Figure 5
Groundwater Suppliers in SDG&E Service Area
SDG&E Construction Water Supply Matrix





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Figure 6
Water Reclamation and Desalination Plants in SDG&E Service Area
SDG&E Construction Water Supply Matrix

(MWDOC 2015). The large groundwater basin that underlies the northern half of Orange County provides about 75 percent of that area's needs and is managed by the Orange County Water District.

South Orange County, which includes the SDG&E service area, is almost 100 percent dependent on imported water, and the imported water supply is managed by MWDOC. MWDOC is a wholesale water supplier and resource planning agency that serves all of Orange County (except Anaheim, Fullerton, and Santa Ana) through 28 retail water agencies, four of which fall within the SDG&E service area, including the City of San Clemente, South Coast Water District, San Juan Capistrano, and Santa Margarita Water District.

Based on its 2010 Urban Water Management Plan (UWMP), MWDOC projects available water supplies to be approximately 526,487 af of water to its member agencies by 2015, with 225,697 af of this coming from imported water supplied by MWD. The remainder is supplied from local sources, which are detailed below.

- *Groundwater* is estimated to provide 243,000 af of MWDOC's local water supply. Groundwater is available from four basins in Orange County, including Lower Santa Ana River Groundwater Basin, San Juan Basin, La Habra Basin, and Main San Gabriel Basin. As noted above, groundwater supplies largely serve northern Orange County, and would generally not be a water supply source for areas within the SDG&E service area.
- *Surface water* accounts for a very small percentage of the total water supply for MWDOC member agencies. The 2010 UWMP projected that in 2015, surface water would supply approximately 6,100 afy of water, or 1 percent of the total water supply for the region.
- *Recycled water* is an important source of local water supply in Orange County and currently provides about 40,000 afy for landscaping water supply as well as an increasing amount being used for commercial needs. The percentage of recycled water from the total water supply for each of the four water districts in the SDG&E service area is as follows (see Figure 6 for location of water reclamation facilities in South Orange County):
 - San Clemente: 5 percent
 - San Juan Capistrano: 0 percent
 - Santa Margarita: 16 percent
 - South Coast Water District: 11 percent

2.4 Imperial County Water Supplies

East of SDG&E's service area lies Imperial County, which receives most of its water supply from the Imperial Irrigation District (IID). The IID depends solely on the Colorado River for surface water supply and does not provide any groundwater or recycled water supply. Rainfall is less than three inches per year and does not contribute to IID water delivery, although at times it does increase or reduce agricultural water demand (IID 2015). Groundwater within the district's service boundaries is of poor quality and is generally unsuitable for domestic or irrigation purposes. There are no plans to use and treat the brackish groundwater in Imperial County as a long-term recycled water supply.

IID delivers its annual entitlement of 3.1 million af of raw Colorado River water for irrigation and for non-potable residential and industrial use. Agriculture is the most highly water consumptive use in Imperial County and makes up approximately 97 percent of the water IID transports (IID 2015). IID

supplies more than 2.3 million afy for primarily agricultural purposes to over 500,000 acres of irrigated farmland (IID 2010). The remaining 3 percent of IID's water deliveries supply seven municipalities, one private water company and two community water systems as well as a variety of industrial uses and rural homes or businesses. The communities of Imperial, Westmorland, El Centro, Brawley, Calexico, Holtville, Calipatria, Niland, Seeley, and Heber are amongst those serviced by IID (Plourd 2015). As on-farm conservation efficiency measures are implemented, the ratio between water delivered for agricultural uses and non-agricultural uses would change.

Water purchased from IID is generally restricted to projects located within the district's service boundaries. According to the terms of IID's 1932 federal water contract, only lands that are within the All-American Canal (AAC) Service Area Boundary that have been included within the legal boundary of IID are eligible to receive water. Lands outside of the AAC Service Area Boundary can receive water from IID only if IID agrees to sell or lease conserved water pursuant to a water conservation and transfer agreement. While these supplies are subject to even more constraints and approvals under the terms of the Quantification Settlement Agreement (QSA) and various other related contracts, IID's Board of Directors has on record indicated that they are not in favor of any additional or new water transfers, which in and of themselves are complicated and tied to other existing contractual obligations (Plourd 2015).

In addition to the water supplied by IID to the Imperial Valley, five other water districts supply water to other areas in Imperial County outside of the IID boundaries. These are the Palo Verde Irrigation District (PVID), the Palo Verde County Water District (PVCWD), the Bard Water District, the Winterhaven Water District (WWD), and the Coachella Valley Water District (CVWD).

Water supply in the community of Palo Verde is provided by the PVID and the PVCWD. PVID uses Colorado River water to supply approximately 9,000 acres of agricultural lands. Currently, parts of the area serviced by PVID are fallowed under an agreement with MWD and water is strictly limited for irrigation purposes. Remaining irrigated lands on the Palo Verde Mesa that are not served by the PVID are irrigated from deep wells developed by the landowners (PVID 2015).

PVCWD provides domestic water uses in Palo Verde to approximately 162 customers. The PVCWD has one groundwater well which extracts water from the ground basin, which is then treated at a plant before it is distributed to customers. The groundwater well extracts approximately 50 afy of fairly good quality water (IID 2009).

Bard Water District serves 175 landowners and supplies approximately 30,000 afy to 15,000 acres of agricultural land (IID 2009). The water is limited to irrigation purposes only and is taken from the Colorado River. Domestic water uses in the community of Bard are supplied from groundwater wells. Potable water is supplied by 100 gallon tanks which are filled periodically by private water companies.

WWD supplies water to approximately 1,000 people in the community Winterhaven. WWD holds a perfected right to divert 780 afy from the Colorado River (Imperial County 1993). Additionally, the WWD uses two wells, one of which is a standby well, to extract approximately 168 afy from the groundwater basin for domestic purposes (IID 2009).

A small portion of Imperial County in its northwestern corner is serviced by the CVWD. In total, CVWD has boundaries encompassing 640,000 acres and provides potable water to over 100,000 homes and businesses in Riverside and Imperial Counties. This water is sourced from wells drilled

into an aquifer with capacity estimated at 39.2 million af. The CVWD supplements its water portfolio by recycling more than 6,138 afy of wastewater (CVWD 2015).

2.5 Groundwater Dependent Water Suppliers

Water suppliers that fall outside of the service areas of SDCWA and MWDOC within SDG&E's service area are within San Diego County's backcountry, an area roughly including the area of San Diego County within and east of the Palomar and Cuyamaca mountains. These suppliers rely entirely on groundwater basins, the extraction and distribution of which is managed by numerous water districts. With the exception of recycled water provided by Pauma Valley Community District, there are no known recycled water supplies available in this region of the County.

Public water systems, which are defined by Section 116275 of the California Health and Safety Code as those that have more than 15 service connections and serve 25 or more residents at least 60 days of each year, are divided into two groups:

- Systems with more than 200 connections: these public water suppliers are regulated by the California Department of Public Health (DPH) (see Appendix B)
- Those with 200 or fewer connections: these public water systems are regulated by the County of San Diego Department of Environmental Health (DEH) (see Appendix C)

Under the provisions of Section 116330 of the California Health and Safety Code, primacy has been delegated to 31 local primacy agencies (LPAs) for the regulation of public water systems serving fewer than 200 service connections. LPAs regulate approximately 1,600 community water systems and 3,900 non-community water systems throughout California (State Water Resources Control Board 2014). Small water systems (SWSs) in the 23 counties not delegated primacy are regulated by DDW, which regulates all large water systems. The Small Water System Unit in conjunction with the DDW District Engineers, provides oversight over LPAs to insure consistency in the SWS regulatory program. The SWS Unit is the statewide contact regarding LPA issues, including (1) rule implementation and workload priorities, (2) data reporting, (3) small water program augmentation contracts, and (4) SWS regulatory issues.

Some of the more prominent water districts (i.e., providing more than 200 connections) are identified in Table 1, which largely comprise community service districts (see Appendix D). The locations of these water systems are identified on Figure 4. According to personal communications with a representative of DPH, public water suppliers with greater than 200 connections that have the ability to supply water for construction would include those that have enough source capacity to supply existing or new demands, which is not the case for the majority of the backcountry systems (Sterchi 2015). As noted in Table 1 below, Pine Valley Mutual Water Company is the only public water supplier that has recently had water supplies available for construction.

There are over 160 public water suppliers with less than 200 connections in the backcountry (see Figure 4). According to a representative from the DEH, to gain access to these water supplies for a construction project, a Source Capacity Assessment would have to be conducted with results reviewed and approved by DEH before these public water systems could consider selling water to SDG&E for future projects (McCullough 2015). This assessment would have to be completed by a professional geologist licensed in the state of California (preferably with a certification in hydrogeology).

Table 1. Large Groundwater Districts/Companies in San Diego County

Water District	Characteristics
Borrego Water District	Serves 2,015 residential and commercial customers an annual supply of 3,700 af of water from 12 wells. Manages the Borrego Valley Groundwater Basin, which has been in a state of overdraft for the last 60 years.
Descanso Community Service District	Provides potable water to approximately 315 residential connections located in southeastern San Diego County, south of the Cuyamaca Rancho State Park. Relies on groundwater pumped from three wells.
Jacumba Community Service District	Located in southeast San Diego County, just north of the U.S.-Mexico border, it pumps groundwater from two wells for approximately 230 residential connections within 423-acre service area.
Julian Community Services District	Provides water pumped from fractured rock aquifers from two wells within a 287-acre service area. It services approximately 269 residential connections.
Majestic Pines Community Services District	A public water agency serving the Julian communities of Whispering Pines, Kentwood I and Kentwood II. It relies entirely on groundwater pumped from three wells and filtered through three filtration plants to supply approximately 700 service connections in its 1,049-acre service area. In 2013, it pumped approximately 31 million gallons out of the fractured rock aquifers.
Pauma Valley Community Services District and Rancho Pauma Mutual Water Company	Pauma Valley is approximately 15 miles east of Interstate 15 and sits at the base of the Palomar Mountains, in an unincorporated area of North San Diego County. The Rancho Pauma Mutual Water Company provides water services to the Pauma Valley Country Club Estates (approximately 390 connections), which is drawn from groundwater sources using 12 wells—7 of which are potable and 5 of which are for irrigation purposes only.
Pine Valley Mutual Water Company	Potable water supply for the Pine Valley Mutual Water Company (MWC) is groundwater from 10 production wells throughout MWC's service area. All of the wells produce water from the fractured rock system of the Descanso hydrologic sub-area in the Sweetwater Hydrologic Unit. MWC currently has 691 metered customers (Pine Valley MWC 2015). Pine Valley's wells have traditionally experienced reliable recharge during wet seasons, and as stated on its website, it has sold excess water to various agencies (such as the California Department of Transportation and the U.S. Forest Service) for construction projects (Pine Valley MWC 2015).

2.6 Native American Reservations

There are 18 Native American Reservations that occupy approximately 193 square miles of area throughout San Diego County (University of San Diego 2015). Groundwater use on the Indian Reservations is not subject to San Diego County regulations (with the exception of proposed groundwater use under recent State of California Indian gaming compacts). Estimated water demand ranges from none on undeveloped lands (Capitan Grande, Cuyapaipe, and Inaja Cosmit Indian Reservations), to a minimal demand of 6 afy on the southeastern Campo Reservation, to over 500 afy on the Barona, Pala, and Rincon Indian Reservations. Barona Indian Reservation, with an estimated groundwater demand of greater than 500 afy, has historically exceeded the sustainable yield of its basin. Acquiring access to tribal groundwater resources would require coordination with the specific tribe and potentially federal permits. However, tribes retain the rights to the groundwater beneath their lands, and as such, this water is generally not considered to be of

potential benefit for groundwater users in the unincorporated portion of the County (County of San Diego 2010).

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Section 3 Water Supply Regulatory Framework

Water rights in California provide the right to reasonable and beneficial use of water, not the ownership of water. The Reasonable and Beneficial Use Doctrine (Article X, Section 2 of the California Constitution) requires that all uses of the state's water be both reasonable and beneficial regardless of the type of underlying water right. The doctrine places a significant limitation on water rights by prohibiting the waste, unreasonable use, unreasonable method of use, or unreasonable method of diversion of water. Administration and allocation of water rights are determined by the State Water Resources Control Board (SWRCB), as discussed below.

3.1 California Water Boards

Surface Waters

The State Water Resources Control Board (SWRCB) oversees the allocation of all of the state's *surface* water resources. For access to surface water supplies, an entity must request a permit for water rights from SWRCB. A water right is a legal entitlement authorizing water to be diverted from a specified source and put to beneficial, non-wasteful use. Water rights are property rights, but their holders do not own the water itself. They possess the right to use it. The exercise of some water rights requires a permit or license from SWRCB, whose objective is to ensure that the State's waters are put to the best possible use, and that the public interest is served. In making decisions, SWRCB must keep three major goals in mind:

- developing water resources in an orderly manner;
- preventing waste and unreasonable use of water; and
- protecting the environment.

Groundwater

The SWRCB regulates discharges to groundwater via land, and further protects groundwater quality through updates to groundwater basin plans and participation in integrated regional water management programs. The SWRCB also created and implements the Groundwater Ambient Monitoring and Assessment Program (GAMA) consistent with the Groundwater Quality Monitoring Act of 2001. However, the SWRCB does not administer a permit process or any other system of appropriating groundwater resources (Sax 2002).

Regional Water Quality Control Boards

SWRCB coordinates the state's nine RWQCBs, which serve as the frontline for state and federal water pollution control efforts. There are two RWQCBs that overlap with the SDG&E service area: the Colorado River RWQCB (Region #7) and the San Diego RWQCB (Region #9) (see Figure 1).

The RWQCBs each develop basin plans for the watersheds located within their region, govern requirements for and issue waste discharge permits, take enforcement action against dischargers who violate permits or otherwise harm water quality in groundwaters or surface waters, and

monitor water quality. In addition, as discussed below, the use of water recycled from municipal wastewater is regulated by the RWQCBs.

3.2 Recycled Water

Water recycling is the treatment and disinfection of municipal wastewater to provide a water supply suitable for non-drinking purposes or another direct beneficial use. The California Water Code states that recycled water is considered a valuable resource and that a primary interest in developing water recycling facilities is to supplement existing surface and groundwater supplies. The California Department of Public Health (CDPH) establishes uniform statewide recycling criteria, and water reclamation facilities and other purveyors of recycled water must meet these recycled water criteria outlined in Title 22 of the California Code of Regulations (Division 4, Chapter 3) for specific end uses. Generally, sewer drains carry wastewater from homes and businesses to the nearest treatment plant where the wastewater receives primary treatment and is then sent to a reclamation plant for secondary and tertiary treatment and disinfection before being distributed through a separate purple piping system as recycled water. Dual piping systems are typically used to supply both potable and recycled water to the user to prevent the mixing of the two water supplies.

RWQCBs, along with DPH, regulate the application and use of recycled water. Planning and implementing water recycling projects entail numerous interactions with these regulatory agencies prior to project approval. DPH establishes the statewide effluent bacteriological and treatment reliability standards for recycled water uses. Under Title 22, the standards are established for each general type of use based on the potential for human contact with recycled water.

The San Diego and Colorado River RWQCBs are charged with establishing and enforcing requirements for the application and use of recycled water within the SDG&E service territory. Permission to use recycled water is based on the ability to adequately treat municipal wastewater to the point that the recycled water (effluent) meets the requirements of existing Title 22 regulations. Permits are required from the RWQCBs for each water recycling operation (purveyors and/or distributors) as well as end uses of recycled water (users). As part of the permit application process, applicants are required to demonstrate that the proposed recycled water operation will not exceed the ground and surface water quality objectives in the basin management plan, and that it is in compliance with Title 22 requirements. Appendix E provides a copy of the San Diego RWQCB's Conditional Waiver # 2 for Discharges to Land of Recycled Water (both temporary and permanent uses) from Order R9-2014-0041, adopted on June 26, 2014.

San Diego County Department of Environmental Health

DEH regulates the use of recycled water through a delegation agreement with the DPH. The purpose is to protect the public from health risks associated with cross-connections of recycled water and drinking water supplies, as well as to prevent health risks from body contact with recycled water.

Land and Water Quality Division staff review recycled water use plans and conduct site inspections to ensure drinking water supplies are not contaminated with recycled water. Staff also monitor spray irrigation sites to ensure the recycled water irrigation does not present a risk to the public. Recycled water sites must also pass an initial cross-connection control shut down test and every four years thereafter.

Individual water districts in SDCWA and MWDOC may require permits to make connections to recycled water facilities. The City of San Diego, for example, per its Rules and Regulations for Recycled Water Use and Distribution (Appendix F), requires permits to make a connection to recycled water facilities.

3.3 Drought Conditions

As of April 7, 2015, the United States Drought Monitor (USDM) identified the majority of California as falling within an area experiencing moderate to exceptional drought. USDM uses the following classifications related to drought conditions:

- D0: Abnormally Dry: Going into drought; short-term dryness slowing planting, growth of crops or pastures. Coming out of drought—some lingering water deficits; pastures or crops not fully recovered
- D1: Moderate Drought: Some damage to crops and pastures; streams, reservoirs, or wells are low; some water shortages developing or imminent; voluntary water-use restrictions requested
- D2: Severe Drought: Crop or pasture losses likely; water shortages common; water restrictions imposed
- D3: Extreme Drought: Major crop/pasture losses; widespread water shortages common; water restrictions imposed
- D4: Exceptional Drought: Exceptional and widespread crop/pasture losses; shortages of water in reservoirs, streams, and wells creating water emergencies

As of April 1, 2015, the majority of the SDG&E service area fell within a category D3 drought zone.

Emergency Regulations to Achieve 25 Percent Conservation

On April 1, 2015, in response to the extreme or exceptional drought conditions throughout most of the state of California, Governor Brown issued Executive Order B-29-15, Emergency Regulations to Achieve 25 Percent Conservations, which mandates that water suppliers reduce potable water use by 25 percent through February 28, 2016 as compared to 2013 use. The Order required mandatory conservation for all residents for the first time in the state's history and directed the SWRCB to take immediate action to safeguard the state's remaining potable urban water supplies. The 270 day legislation takes effect June 1, 2015 and defines 31 measures in areas of saving water, increasing enforcement of water waste, investing in new technologies, and streamlining government response (i.e., prioritizing review and approval of water infrastructure projects and programs that increase local water supplies) that are intended to help meet the 25 percent reduction requirements. These measures include, among others:

- Replacing 50 million square feet of lawns and ornamental turf with drought-tolerant landscaping.
- Implementing statewide rebate programs to incentivize replacement of inefficient household devices.

- Imposing restrictions to require that commercial, industrial, and institutional properties, such as campuses, golf courses, and cemeteries, immediately implement water efficiency measures to reduce potable water use.
- Prohibiting irrigation with potable water of ornamental turf on public street medians and outside of newly constructed homes and buildings that is not delivered by drip or microspray systems.
- Developing rate structures and other pricing mechanisms to maximize water conservation.
- Requiring urban water suppliers to provide monthly information on water usage, conservation, and enforcement on a permanent basis.
- Identifying any illegal diversions or unreasonable use of water and bringing enforcement actions against illegal diverters or those engaging in wasteful water use.

On May 5, 2015 the SWRCB adopted the 25 percent mandatory water conservation regulation in accordance with the Governor's Jerry Brown's April 1 Executive Order. Several of the applicable requirements include:

- Urban potable water suppliers within the SDG&E service territory that serve more than 3,000 connections are now required to conserve potable water and reduce use between 16% and 36% (dependent on district and associated tier, 3 through 9) below baseline use (June 2012 - February 2013). The restrictions are in effect June 1st 2015 through the end of February 2016 (see Table 2 below).
- Smaller urban water suppliers within the SDG&E service territory (serving fewer than 3,000 connections) must reduce water use by 25 percent or restrict outdoor irrigation to no more than 2 days per week.
- Commercial, Industrial and Institutional properties that are not served by a water supplier or are self-supplied must reduce use by 25% or restrict outdoor irrigation to no more than 2 days per week.

Table 2. Required Reduced Use by Supplier

Supplier Name	Total Water Production (gallons)		Total Water Saved	% Saved	Jul-Sep 2014 R-GPCD	Tier	Conservation Standard
8%							
California-American Water Company San Diego District	2,795,094,888	2,578,195,144	216,899,744	8%	51.9	2	8%
12%							
Sweetwater Authority	5,185,495,337	4,886,767,783	298,727,554	6%	75.6	3	12%
16%							
Otay Water District	8,209,272,756	7,888,634,952	320,637,804	4%	93.0	4	16%
San Diego City of	47,355,303,598	46,452,597,390	902,706,208	2%	82.0	4	16%
20%							

Supplier Name	Total Water Production (gallons)		Total Water Saved	% Saved	Jul-Sep 2014 R-GPCD	Tier	Conservation Standard
Escondido City of	4,625,134,351	4,059,907,513	565,226,838	12%	106.7	5	20%
Helix Water District	8,454,736,636	8,067,103,778	387,632,858	5%	103.6	5	20%
Moulton Niguel Water District	7,135,207,799	6,864,125,480	271,082,319	4%	99.1	5	20%
Oceanside City of	6,988,111,948	6,765,555,423	222,556,525	3%	105.3	5	20%
24%							
El Centro City of	1,978,323,000	1,910,544,000	67,779,000	3%	119.5	6	24%
Lakeside Water District	1,064,566,388	977,942,044	86,624,343	8%	114.6	6	24%
Santa Margarita Water District	7,105,190,366	6,932,489,109	172,701,256	2%	126.8	6	24%
Vallecitos Water District	4,390,033,350	4,037,168,840	352,864,510	8%	116.1	6	24%
Vista Irrigation District	4,896,569,394	4,632,303,886	264,265,507	5%	111.1	6	24%
28%							
Padre Dam Municipal Water District	2,952,148,758	2,752,858,026	199,290,733	7%	132.6	7	28%
Ramona Municipal Water District	1,087,105,531	1,049,746,665	37,358,866	3%	165.9	7	28%
San Clemente City of	2,270,663,084	2,331,434,375	-60,771,291	-3%	157.7	7	28%
San Dieguito Water District	1,583,703,106	1,621,176,020	-37,472,914	-2%	148.3	7	28%
32%							
Carlsbad Municipal Water District	4,342,002,850	4,259,269,173	82,733,677	2%	188.5	8	32%
Poway City of	2,984,245,124	2,893,299,991	90,945,133	3%	201.7	8	32%
Rincon Del Diablo Municipal Water District	1,766,766,437	1,514,883,284	251,883,153	14%	179.2	8	32%
36%							
Fallbrook Public Utility District	3,340,661,415	3,012,268,347	328,393,068	10%	217.3	9	36%
Olivenhain Municipal Water District	5,326,497,766	5,149,755,952	176,741,814	3%	271.7	9	36%
Rainbow Municipal Water District	3,976,593,060	3,760,749,074	215,843,985	5%	243.0	9	36%
Santa Fe Irrigation District	2,820,156,121	2,869,480,251	-49,324,131	-2%	604.6	9	36%
Valley Center Municipal Water District	6,829,813,325	6,798,466,417	31,346,907	0%	291.2	9	36%

As mentioned, Governor Brown's Executive Order B-29-15, Emergency Regulations to Achieve 25 Percent Conservations, mandates that water suppliers reduce potable water use by 25 percent through February 28, 2016 as compared to 2013 use. Under the oversight of the SWRCB, urban potable water suppliers that serve more than 3,000 connections require a 16-36% reduction in usage while those that serve under 3,000 connections are required to reduce use by 25%, or consider local legislation that would limit water for irrigation purposes to two times per week. Suppliers that are able to ensure they have stored water resources that could meet the water demands of their clients for at least four years are only required to reduce usage by 4%. Providers are required to report their usage from August 2015 through November 2015 as compared to the same figures from August 2013 through November 2013. These reports will be provided to the California Department of Water Resources in December of 2015. A fee of \$500/day may be assessed to those suppliers determined by the state to not be in compliance with the Executive Order.

For smaller water systems and community service districts in the SDG&E service areas, achieving 25% reduction would likely require an increase in water rates. For example, in the Julian Community Services District, rates would have to be increased by 28% in order to cut water consumption by 25% in 2016. In this case, a 25% reduction in the supply of a small water system would, due to their size, leave them unable to provide adequate resources to their service area. As such, passing a local ordinance to limit water associated with agricultural use is more likely. The Julian Community Services District is considering a local ordinance to limit watering for agricultural purposes, where water can be used between the hours of 6:00 AM - 8:00 AM and 4:00 PM - 6:00 PM on Tuesdays and Saturdays. Each community is individually responsible for deciding how to best manage their respective groundwater supply. The reporting mechanism will also ensure compliance with the Executive Order. Management of water resources by local water districts, companies, or community service districts that have been formed by the communities that overlie these groundwater resources will otherwise be unaffected.

MWD will likely begin imposing water allocations in the region beginning July 1, 2015, and individual districts also will soon be developing water conservation requirements and enforcement measures. Conservation measures that water districts within the SDG&E service area have already begun imposing include, but are not limited to:

- Limiting the hours of irrigation
- Prohibiting the use of water for washing driveways, etc.
- Imposing fines on individuals who allow irrigation water to runoff into the storm drains
- Assigning one watering day per week per customer type (such as Monday for residential, Wednesday for businesses, etc.)
- Limiting watering time
- Time allotments for fixing leaks
- Restrictions on filling/refilling of ornamental ponds, pools, spas, etc.

Additional water conservation measures will likely be developed by the local water districts and companies over the next several months. So far, as specific restrictions of construction water have not been identified by most water districts, it does fall within the rights of the water districts to monitor use of water at a construction site and make determinations related to unreasonable or inefficient usage. In addition, more water districts will likely implement restrictions similar to those adopted by the Helix Water District related to a "Level 3" drought response, which includes, among

other constraints, potential restrictions related to the installation of temporary meters. This may affect SDG&E's ability to provide construction water from a fire hydrant, which, as noted in the Water Supply Matrix and discussed below, is the source most districts use for construction water supplies.

3.4 Groundwater

Jurisdiction of Small and State Water Systems in the Project Area

Small and community water systems with up to 200 service connections in San Diego County are regulated by the San Diego County DEH Land Use Program. Oversight of small water systems in Imperial County of the same size is conducted through the Imperial County DEH. In Orange County, support for small water systems under the same program was transferred to the SWRCB DDW.

As of 2008, there were 169 small water systems that the San Diego DEH regulated and monitored the reporting of water quality samples to ensure that they comply with the California Safe Drinking Water Act for supplying potable water (County of San Diego 2010). Similarly, the Imperial County DEH reported that there are 58 small water systems (Guillen 2015). In Orange County, there are approximately 13 small water systems (Pacifico 2015).

Water systems with over 200 service connections are regulated by the California Department of Public Health Division of Drinking Water & Environmental Management. The majority of these state-regulated systems purvey groundwater to residential users.

Larger water systems are regulated by the California Public Utilities Commission (CPUC). There are 113 investor-owned water utilities under the CPUC's jurisdiction providing water service to about 16 percent of California's residents. Approximately 95 percent of that total is served by 9 large water utilities each serving more than 10,000 connections (CPUC 2015). Live Oak Springs Water & Power Co. and California-American Water Company are regulated by the CPUC within the SDG&E territory.

Groundwater Extraction Regulations

In most areas of California, overlying land owners may extract percolating groundwater and put it to beneficial use without approval from SWRCB or a court. In several basins, however, groundwater use is subject to regulation in accordance with court decrees adjudicating the groundwater rights within the basins. In addition, if an entity wants to pump groundwater from one site to be used in an off-site area, this would be considered a groundwater extraction operation, which is regulated by individual counties.

Groundwater extraction in San Diego and western Imperial Counties is primarily regulated through County Ordinances which regulate well drilling, groundwater extraction, exportation, storage and transfer. Groundwater extraction in southern Orange County is primarily regulated through a well drilling ordinance implemented by the Orange County Health Officer and the City of San Clemente Public Works Department. Each of these agencies has the option of issuing extraction limit conditions and ongoing well and groundwater monitoring requirements consistent with the 2001 groundwater quality monitoring act (AB 599) and the 2014 Sustainable Groundwater Management Act (AB 3030). However, one exception in San Diego County occurs within the Santa Margarita

River Watershed (including the Santa Margarita, Temecula Valley and Cahuilla Valley groundwater basins). These groundwater basins are adjudicated as of 1966 and all groundwater extraction within the basins is regulated by a U.S. District Court appointee.

Groundwater extraction operations in San Diego County are regulated by Section 8050 (N.S.), and amended by Section 8581 (N.S.), of the San Diego County Zoning Ordinance and are defined as, “any property containing a well, spring box, or other device through which groundwater is collected or extracted for sale. Groundwater extraction operations include all appurtenant structures and facilities associated with the collection, extraction, storage, transfer and transportation of groundwater, whether or not such appurtenant structures and facilities are located on the same legal lot as that from which the groundwater is collected or extracted.” According to the County’s Zoning Code, groundwater extraction operations do not include the following actions:

- Incidental and occasional sale or transport of water in amounts up to 5,000 gallons per any consecutive 7-day period, except when in the residential zones and the S80 and S81 Ecological Resource Area zones.
- Water vending by machine, as allowed by Section 6156 ee.
- Wells serving public supply systems, as permitted by DEH or DPH, which distribute water through pipelines for domestic purposes.
- Wells providing water only to public agencies to protect the public welfare for emergency uses such as for fire suppression and during temporary drought conditions, and/or for otherwise exempt uses.

Groundwater extraction operations in Imperial County are regulated under Division 22 of the Title 9 Land Use Ordinance for the County of Imperial. A commission was established in 1996 to control groundwater exports via a permit process implemented consistent with Division 22. The commission also manages all groundwater projects including those that provide artificial recharge to existing mapped basins, extract groundwater for agricultural, residential, commercial or institutional developments and any projects that could result in overdraft of groundwater basins. The Imperial Irrigation District (IID) is exempt from the permit requirements of the ordinance and extracts groundwater under specific conditions outlined in the ordinance.

Groundwater extraction operations in south Orange County are regulated by the Orange County Health Officer under the County Well Ordinance 2607. A permit must be obtained prior to construction of any well in 29 of the 34 cities and the unincorporated portions of Orange County, The City of San Clemente Department of Public Works enforces a separate well ordinance under Title 13, Chapter 13 of the City of San Clemente Municipal Code. .

Section 4 Conclusions

As can be seen throughout the discussion above, two major regions emerge when it comes to defining SDG&E zones of construction or operations where similar water supply characteristics apply: the western coastal region of southern Orange and San Diego Counties and the eastern backcountry of San Diego and western Imperial County.

4.1 Coastal Portions of the SDG&E Service Area

Water availability for construction projects within the coastal area of the SDG&E service territory is fairly well-defined and can be evaluated on a case-by-case basis, taking into account the project type (e.g., traditional facility footprint or linear underground or overhead alignment), location (e.g., proximity to existing water supplies and major transportation corridors), and projected water usage and duration. Linear projects located within this portion of the SDG&E service territory, in particular, have the most potential to utilize multiple sources of water for construction by choosing those sources nearest each respective project segment. Projects in these areas also have the best potential to source at least some of the construction water need from recycled water purveyors (for discharge to land), thus potentially reducing the use of potable water for construction uses. However, a major limitation can be the water use policies of each district. As outlined in the water sourcing matrix and detail study sheets, many water districts will not allow potable or recycled water obtained from the district to be transported out of the district boundaries, thus limiting the effective area of use on linear projects and potentially complicating water sourcing for individual projects.

As detailed in the Water Supply Matrix, water districts may require approval of the water authority depending on the amount of potable water requested and the duration of construction. In addition, most of the water districts rely on connections to the nearest fire hydrants for the provision of construction water. Water usage tends to not include a cap if the project is within the service area of any of the SDCWA and MWDOC agencies.

Regarding the process, the applicant must apply for meter service via the water district's utility, administrative, or customer service divisions. Service requires the rental of a construction meter (various sizes based on water demand, such as 2-inch or 3-inch) to monitor and read water use during construction. Once the meter is installed, water can be drawn. Fees associated could include and may not be limited to a (1) deposit; (2) meter rental fee; (3) additional monthly fees; (4) variable unit cost for water used (recycled water unit costs are usually lower where available); (5) installation fee; (6) break-down fee; (7) meter read fee; or (8) a meter relocation fee. The specific locations of fire hydrants within the SDG&E service area are provided in a Google Earth (kmz) file that is provided as part of the report. In addition, the specific requirements of each water supplier within the SDG&E service area for connecting to fire hydrants (or other procedure for the supply of construction water) is listed in the Water Supply Matrix provided in an Excel spreadsheet.

4.2 Eastern Portions of the SDG&E Service Territory

As discussed above under Section 2.4, water availability for construction projects in the backcountry is not as well defined. When available, connections to fire hydrants may be an option. However, some of the groundwater basins in the backcountry are already in overdraft conditions, and those water districts may not be able to sell water to SDG&E for construction purposes, especially in the current drought conditions. As discussed above, the Pine Valley Mutual Water Company, which is located in Pine Valley, California, off Interstate 8, has traditionally had enough excess water to sell to agencies for construction projects. With that possible exception, and again depending on the water requirements for each individual construction project, water supplies in the backcountry will likely rely on a portfolio of sources.

Based on the results of this study, it appears that many large linear and traditional projects in the eastern portions of the SDG&E service territory with substantial water needs will continue to rely primarily on potable and/or recycled water supplies trucked to the project site from purveyors located in the coastal portions of the service territory (or in central Imperial County). These supplies could be enhanced with limited use of local water sources, and additionally demand for construction water could be reduced through use of palliatives, project design alternatives and/or new construction techniques.

Section 5 Resources

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Section 6 Water Supply Matrix

									Regulatory Constraint(s)				Geographical Constraint(s)			
County	Operating Agency	Contact (Name, Position)	Contact Information	Type(s) of Available Water	Type(s) of Available Water	Source(s) of Water	Projected Demand (2015)	Projected Supply (2015)	Water Acquisition/Permit Process	Accessibility Notes	2015 Water Rates	Additional Cost(s) [Application & Associated Fees]	Limits on Volume	Geographical Reference	Limits on Transportation	Feasible Source for Temporary Construction Projects?
Imperial	City of El Centro	Hector Munoz, Water Supervisor	(760) 337-4575	Potable water	Potable water	Imperial Irrigation District	11,198 AFY	11,198 AFY	Requires the application for and rental of a construction meter to monitor water usage associated with temporary construction projects	n/a	\$3,511,000 gallons *Rates set to increase \$0.12 each year; rate increases effective July 1 of subsequent year	Associated costs may include, but are not limited to, an application fee, deposit for construction meter, an installation fee, & a monthly surcharge (in addition to variable unit costs associated with usage)	Limits are subject to approval based on scale and magnitude of construction project and associated water use; need to authorize new projects based on current/existing demands and anticipated water use associated with new project	n/a	n/a	Y
Orange	City of San Clemente	Dave Rebersdorf, Assistant City Engineer	(949) 361-6130	Potable Recycled Groundwater	Potable Recycled Groundwater	MWD	15,775 AFY	10,650 AFY (8,150 AFY MWD 1,000 AFY San Clemente Sub-Basin 1,500 AFY Recycled Water)	Requires the application for and rental of a construction meter to monitor water usage associated with temporary construction projects	Potable water would be accessed through local fire hydrants; hydrants are located throughout the service area. Recycled water is available within the northeast service region area. Truck hauling for recycled is in the planning phases and will be available in the future. Groundwater is available in the south end of San Clemente.	\$2.15/HCF	Associated costs may include, but are not limited to, an application fee, deposit for construction meter, an installation fee, & a monthly surcharge (in addition to variable unit costs associated with usage)	Limits are subject to water district and MWD approval based on scale and magnitude of construction project and associated water use (both projected volume and water use type – e.g. grading, etc.); need to authorize new projects based on current/existing demands and anticipated water use associated with new project	n/a	n/a	Y
Orange	City of San Juan Capistrano	Eric Baumann, Assistant Director, Utilities, Department of Public Works	(949) 487-4312	Potable water Groundwater Recycled water	Potable water Groundwater Recycled water	MWDOC San Juan Basin	9,400 AFY	9,400 AFY (2,000 AFY from MWDOC; 1,950 AFY Recycled)	Requires the application for and rental of a construction meter to monitor water usage associated with temporary construction projects	n/a	Potable: \$5.15/HCF Recycled: \$4.20/HCF	Associated costs may include, but are not limited to, an application fee, deposit for construction meter, an installation fee, & a monthly surcharge (in addition to variable unit costs associated with usage)	Limits are subject to City and MWDOC approval based on scale and magnitude of construction project and associated water use (both projected volume and water use type – e.g. grading, etc.); need to authorize new projects based on current/existing demands and anticipated water use associated with new project	n/a	n/a	Y
Orange	Santa Margarita Water District	Jaime Aguilar, Engineer	(949) 459-6582	Reclaimed water only	Reclaimed water only	MWD San Juan Basin Recycled	28,467 AFY	36,006 AFY (19,067 AFY MWD; 9,400 AFY Baker Treatment Plant; 100 AFY San Juan Basin; 7,439 AFY Recycled)	Encroachment permit to be processed at the Engineering division. Permit fee of \$500.	Reclaimed water resources would be accessed by truck hauling from the Chiquita Reclamation Plant, or from connecting to a reclaimed water service pipe.	\$2.88/HCF	Associated costs may include, but are not limited to, an application fee, deposit for construction meter, an installation fee, & a monthly surcharge (in addition to variable unit costs associated with usage)	Limits are dependent on the seasonal change. Limits on volume are stricter during summer months, while the months of October through April have available water.	n/a	n/a	Y
Orange	South Coast Water District	Joe McDivitt, Operations Manager	(949) 499-3122	Potable water Groundwater Recycled water	Potable water Groundwater Recycled water	MWDOC San Juan Basin	8,208 AFY	8,208 AFY (5,805 AFY from MWDOC; 1,100 AFY Recycled)	Requires the application for and rental of a construction meter to monitor water usage associated with temporary construction projects	n/a	Potable: \$4.13/HCF Recycled: \$3.72/HCF	Associated costs may include, but are not limited to, an application fee, deposit for construction meter, an installation fee, & a monthly surcharge (in addition to variable unit costs associated with usage)	Limits are subject to water district and MWDOC approval based on scale and magnitude of construction project and associated water use (both projected volume and water use type – e.g. grading, etc.); need to authorize new projects based on current/existing demands and anticipated water use associated with new project	n/a	n/a	Y
San Diego	California Department of Environmental Health	Jamelle McCullough, Environmental Health & Safety Specialist	(858) 694-3113	Potable water Groundwater	Potable water Groundwater	Various	n/a	n/a	For any public water system (with under 200 service connections) that might consider selling water to SDG&E for future projects, a Source Capacity Assessment would have to be conducted with results reviewed & approved by DEH; this assessment would determine the throughput on the service system & whether it has enough capacity to serve the proposed construction project; The Source capacity Assessment would have to be completed by a professional geologist licensed in the state of California (preferably with a certification in Hydrogeology)	Refer to Appendix C for more information on water systems with under 200 service connections; water access provided through a combination of hydrants and pumps	n/a	n/a	Contingent upon Source Capacity Assessment; Limits are subject to water system and DEH approval based on scale and magnitude of construction project and associated water use	n/a	n/a	Y/N
San Diego	Carlsbad Municipal Water District	Mario Remillard, Meter & Customer Service Supervisor	(619) 258-4704	Potable water Recycled water	Potable water Recycled water	SDCWA	21,600 AFY	n/a	Requires the application for and rental of a construction meter to monitor water usage associated with temporary construction projects	Potable and recycled water would be accessed through local fire hydrants; hydrants are located throughout the Carlsbad service area; recycled water is only available at certain hydrants; Carlsbad estimates that Carlsbad has up to 7-9 MGD available for temporary construction projects; previous water use on temporary construction projects for the months of February and March (2015) was approximately 5.6 million gallons/month	Potable: \$4.05/HCF Recycled: \$3.53/HCF	\$890 deposit for construction meter \$103 meter rental fee \$225.52 monthly surcharge *Additional fees may apply (in addition to variable unit costs associated with usage)	Limits are subject to water district and SDCWA approval based on scale and magnitude of construction project and associated water use (both projected volume and water use type – e.g. grading, etc.); need to authorize new projects based on current/existing demands and anticipated water use associated with new project	n/a	Water can be hauled and used at any location	Y
San Diego	City of Oceanside	Mabel Uyeda, Civil Engineer	(760) 435-5819	Potable water Groundwater Recycled water	Potable water Groundwater Recycled water	SDCWA Mission Groundwater Basin	35,564 AFY	35,564 AFY (32,728 AFY Potable; 933 AFY Recycled)	Requires the application for and rental of a construction meter to monitor water usage associated with temporary construction projects; - Potential permits may be required depending on how much earth would be excavated; may be subject to stormwater management practices; may also need grading permit depending on amount of soil disturbance; City does not allow for hoses to be pulled across a roadway; City does not allow construction meters on private hydrants	Potable water can be accessed at the closest hydrant; requires blowoff valve; attaches to temporary construction meter; applicant needs own backflow device to protect water supply from potential contaminants; access points are located throughout the City; City does not have extensive recycled water infrastructure	\$4.10/HCF	\$1,015 deposit for construction meter (3-inch diameter) \$64 service charge for installation and removal of meter \$261.01 fixed monthly service charge \$55 meter relocation fee (if necessary) *Additional fees may apply (in addition to variable unit costs associated with usage)	Limits are subject to water district and SDCWA approval based on scale and magnitude of construction project and associated water use (both projected volume and water use type – e.g. grading, etc.); need to authorize new projects based on current/existing demands and anticipated water use associated with new project	n/a	Water not to be transported/used outside of water district service area	Y
San Diego	City of Poway	Tom Howard, Deputy Director, Department of Public Works Sheila Cobian, City Clerk	(858) 668-4750 (858) 668-4535	Potable water Recycled water	Potable water Recycled water	SDCWA City of San Diego	11,837 AFY	11,837 AFY (12,727 AFY from SDCWA; 550 AFY from City of San Diego)	Requires the application for and rental of a construction meter to monitor water usage associated with temporary construction projects	Metered water usage associated with temporary construction projects for the months of January, February and March of 2015 totaled 0 HCF, 675 HCF and 30 HCF, respectively	\$4.35/HCF	Associated costs may include, but are not limited to, an application fee, deposit for construction meter, an installation fee, & a monthly surcharge (in addition to variable unit costs associated with usage)	Limits are subject to City and SDCWA approval based on scale and magnitude of construction project and associated water use (both projected volume and water use type – e.g. grading, etc.); need to authorize new projects based on current/existing demands and anticipated water use associated with new project	n/a	n/a	Y
San Diego	Fallbrook Public Utility District	Jack Bebee, Assistant General Manager	(760) 728-1125	Potable water Groundwater Recycled water	Potable water Groundwater Recycled water	SDCWA Local wells	14,140 AFY	20,226 AFY (11,140 AFY from SDCWA; 611 AFY Recycled) *Supply projection contingent upon success of Santa Margarita River Project	Requires the application for and rental of a construction meter to monitor water usage associated with temporary construction projects	n/a	Potable: \$6.02/1,000 gallons Recycled: \$3.74/1,000 gallons	\$1,117 deposit for construction meter \$108 meter installation fee \$155.28 monthly operations charge \$108 meter relocation fee (if necessary) *Additional fees may apply (in addition to variable unit costs associated with usage)	Limits are subject to water district and SDCWA approval based on scale and magnitude of construction project and associated water use (both projected volume and water use type – e.g. grading, etc.); need to authorize new projects based on current/existing demands and anticipated water use associated with new project	n/a	n/a	Y
San Diego	Olivenhain Municipal Water District	Karen Ogawa, Engineer	(760) 632-4642	Potable water Recycled water	Potable water Recycled water	SDCWA City of San Diego San Elijo Joint Powers Authority Vallecitos Water District	24,318 AFY	24,318 AFY (19,998 AFY from SDCWA; 3,200 AFY Recycled from neighboring member agencies)	Requires the application for and rental of a construction meter to monitor water usage associated with temporary construction projects	Both potable and recycled water resources would be accessed through local fire hydrants, laterals, and/or whartheads; access points are located throughout the Olivenhain service area	\$5.72/HCF *Rates escalate based on drought ordinances/alert levels	Associated costs may include, but are not limited to, an application fee, deposit for construction meter, an installation fee, & a monthly surcharge (in addition to variable unit costs associated with usage)	Limits are subject to water district and SDCWA approval based on scale and magnitude of construction project and associated water use (both projected volume and water use type – e.g. grading, etc.); need to authorize new projects based on current/existing demands and anticipated water use associated with new project	n/a	Water not to be transported/used outside of water district service area	Y
San Diego	Padre Dam Municipal Water District	Courtney Mail, Development Engineer	(619) 258-4699	Potable water Recycled water	Potable water Recycled water	SDCWA	16,153 AFY	16,826 AFY (14,180 AFY from SDCWA)	Requires the application/rental of a construction meter to monitor/read water use during construction and associated deposit costs; meter is hooked up and applicants pay by usage; no other additional permits/associated costs; 'tailgate' approval process (hydrology/stormwater experts or whomever would be handling water are vetted/screened for appropriate background & certifications); may require transportation permit to haul water with the City of Santee	Potable and recycled water would be accessed through local fire hydrants; hydrants are located throughout the Padre Dam service area; there are also three filling stations within the Padre Dam service area near the City of Santee that could accommodate water trucks; considerably higher cost per unit than other retailers	Potable: \$13.72/HCF Recycled: \$10.91/HCF	Associated costs may include, but are not limited to, an application fee, deposit for construction meter, an installation fee, & a monthly surcharge (in addition to variable unit costs associated with usage)	Limits are subject to Padre Dam and SDCWA approval based on scale and magnitude of construction project and associated water use (both projected volume and water use type – e.g. grading, etc.); need to authorize new projects based on current/existing demands and anticipated water use associated with new project; other limits are as defined in Title 22 regarding discharge (NPDES)	n/a	Water not to be transported/used outside of water district service area	Y

				Column pending dropdown menu for multiple entries		Regulatory Constraint(s)							Geographical Constraint(s)		Feasible Source for Temporary Construction Projects?	
County	Operating Agency	Contact (Name, Position)	Contact Information	Type(s) of Available Water	Type(s) of Available Water	Source(s) of Water	Projected Demand (2015)	Projected Supply (2015)	Water Acquisition/Permit Process	Accessibility Notes	2015 Water Rates	Additional Cost(s) [Application & Associated Fees]	Limits on Volume	Geographical Reference	Limits on Transportation	
San Diego	Santa Fe Irrigation District	Bill Hunter, District Engineer	(858) 414-9120	Potable water Surface water Recycled water	Potable water Surface water Recycled water	SDCWA	10, 506 AFY	11, 206 AFY (SDCWA 7, 438 AFY; Surface water 3, 268 AFY; Recycled water 500 AFY)	Requires the application for and rental of a construction meter to monitor water usage associated with temporary construction projects	Truck hauling rates are available and can be used to haul reclaimed water from the western parts of the district to the eastern parts.	Potable: \$4.39/HCF Recycled: \$3.19/HCF	Associated costs may include, but are not limited to, an application fee, deposit for construction meter, an installation fee, & a monthly surcharge (in addition to variable unit costs associated with usage)	Limits are subject to water district and SDCWA approval based on scale and magnitude of construction project and associated water use (both projected volume and water use type - e.g. grading, etc.); need to authorize new projects based on current/existing demands and anticipated water use associated with new project	n/a	n/a	Y
San Diego	Vallecitos Water District	Nick Koonce, Engineering Tech	(760) 752-7177	Potable	Potable	SDCWA	20,963 AFY	27,109 AFY (SDCWA)	Requires the application for and rental of a construction meter to monitor water usage associated with temporary construction projects	Truck hauling rates are available.	\$6.95/HCF	Associated costs may include, but are not limited to, an application fee, deposit for construction meter, an installation fee, & a monthly surcharge (in addition to variable unit costs associated with usage). Meter Deposit - \$1,250 (\$1,000 refundable) Fill Stations - \$65 per day charge. Total allowance of 10,000 gallons per day. No meter required. Will serve for admin fees for both meters and fill stations - \$172.52	Limits are subject to water district and SDCWA approval based on scale and magnitude of construction project and associated water use (both projected volume and water use type - e.g. grading, etc.); need to authorize new projects based on current/existing demands and anticipated water use associated with new project	n/a	n/a	Y
San Diego	Valley Center Municipal Water District	Patricia Garcia, GIS/Engineering Services Supervisor	(760) 735-4500	Potable	Potable	SDCWA	9,290 AFY	45,968 AFY (SDCWA)	Requires the application for and rental of a construction meter to monitor water usage associated with temporary construction projects. Apply through the District - Administrative Main office.	Truck hauling rates are available.	\$3.9970/HCF	Associated costs may include, but are not limited to, an application fee, deposit for construction meter, an installation fee, & a monthly surcharge (in addition to variable unit costs associated with usage). Meter Deposit - \$1,200 Fill Stations - \$240-\$475 per day charge.	Limits are subject to water district and SDCWA approval based on scale and magnitude of construction project and associated water use (both projected volume and water use type - e.g. grading, etc.); need to authorize new projects based on current/existing demands and anticipated water use associated with new project	n/a	n/a	Y
San Diego	Vista Irrigation District	Albert Ducasin, Engineering Dept Manager	(760) 597-3124	Potable Surface	Potable Surface	Surface SDCWA	21,491 AFY	5,411 AFY Surface (plus unknown SDCWA allocation)	Requires the application for and rental of a construction meter to monitor water usage associated with temporary construction projects	n/a	\$3.73 - \$4.27/HCF	Associated costs may include, but are not limited to, an application fee, deposit for construction meter, an installation fee, & a monthly surcharge (in addition to variable unit costs associated with usage). Deposit for meter - \$2,982	Limits are subject to water district and SDCWA approval based on scale and magnitude of construction project and associated water use (both projected volume and water use type - e.g. grading, etc.); need to authorize new projects based on current/existing demands and anticipated water use associated with new project	n/a	n/a	Y

Appendix A
Detail Sheets

SDG&E Construction Water Sourcing Investigation

Individual Supplier Info

Agency:	California Department of Environmental Health
Contact person:	Jamelle McCullough
Job title:	Environmental Health & Safety Specialist
Phone number:	858-694-3113
Date Contacted:	April 13, 2015

Overview

The Department of Environmental Health (DEH) Small Drinking Water Systems program's purpose is to protect public health by helping water system owners and operators to provide pure and safe drinking water by preventing waterborne diseases, identifying risks of bacteriological, chemical and/or radiological contamination, conducting inspections, providing technical assistance, and working in partnership with the small drinking water systems in San Diego County. The DEH has an agreement with the California Department of Public Health, Drinking Water Program for administration and enforcement of the Federal and State statutes and regulations for any water systems under 200 service connections.

Discussion of Water Availability

Availability:

Potable water is available for use associated with temporary construction projects; DEH is responsible for the oversight of 162 water systems with under 200 service connections; water systems are classified as follows:

Water System Classifications:

- A *Community water system* is a public water system that has 15 to 199 service connections used by year-long residents, or regularly serves at least 25 year-long residents. Water systems that have 200 or more service connections used by year-long residents are regulated by the State of California Department of Public Health. An example would be a community with residential homes served by a single water system.
- A *Non-Transient Non-Community water system* is a public water system that is not a Community water system and regularly serves at least the same 25 persons during 6 months per year. An example would be a school or workplace.
- A *Transient Non-Community water system* is a Non-Community public water system that does not provide water to the same 25 persons during 6 months per year. An example would be a campground or park.
- A *State Small Water System* is a public water system that has 5 to 14 residential service connections, and does not regularly serve potable water to more than 25 individuals for more than 60 days out of the year. An example would be a small residential community with 10 homes served by a single water supply.

Water Use:

N/A

By use category/sector (i.e., 80% Agricultural, 20% Residential, etc.) if known:

N/A

Types of Local Supply (*Recycled? Others? Available for Purchase?*)

Potable water & groundwater compose the mix of resources; no recycled water.

Costs:

N/A

Limits on Volume:

Contingent upon Source Capacity Assessment; Limits are subject to water system and DEH approval based on scale and magnitude of construction project and associated water use.

Access Options:

Provided through a combination of hydrants and pumps.

Access Locations:

Potable: Various

Recycled:

Permitting/ Acquisition Process and Costs:

For any public water system that might consider selling water to SDG&E for future projects, a Source Capacity Assessment would have to be conducted with results reviewed & approved by DEH; this assessment would determine the throughput on the service system & whether it has enough capacity to serve the proposed construction project; The Source capacity Assessment would have to be completed by a professional geologist licensed in the state of California (preferably with a certification in Hydrogeology)

Summary of Feasibility for Construction Water Source

May or may not be feasible.

SDG&E Construction Water Sourcing Investigation

Individual Supplier Info

Agency:	Camp Pendleton Marine Corps Base
Contact person:	Art Mendoza
Job title:	Water Treatment Operator
Phone number:	Cell: 760-212-5363
Date Contacted:	April 07, 2015

Overview

Overview

Camp Pendleton provides water to the Base through two drinking water systems:

Northern Water System

- Service Area: all areas north of Las Pulgas Road except the 43 Area and San Mateo Point housing.
- Water Source: groundwater from wells located in the San Onofre and San Mateo River basins.

Southern Water System

- Service Area: the 43 Area (Las Pulgas) and all areas south of Las Pulgas Road.
- Water Source: groundwater from wells located in the Las Pulgas and Santa Margarita River basins.

Discussion of Water Availability

Availability:

Unlike most of southern California, which relies on imported water supplies, nearly all of Camp Pendleton's drinking water comes from local groundwater sources. Wells located on Base supply water to all portions of Camp Pendleton except for San Mateo Point housing, which receives water from the South Coast Water District. Availability is unavailable.

Water Use:

N/A

By use category/sector (i.e., 80% Agricultural, 20% Residential, etc.) if known:

N/A

Types of Local Supply (*Recycled? Others? Available for Purchase?*)

- Potable available via groundwater. Recycled water is in planning phase.

Current and Projected Supplies:

N/A

Major Infrastructure (i.e., treatment plants):

North and South Water Systems

Costs:

N/A

Limits on Volume:

N/A

Access Options:

- Potable water resources would be accessed through local fire hydrants

Access Locations:

N/A

Permitting/Acquisition Process and Costs:

- Project by project basis. Requires the approval of a government representative through Base recommendations.

Summary of Feasibility for Construction Water Source

Feasibility would be evaluated on a project by project basis through the Water Resources Division. Typically the Backflow Register staff point of contact handles allocations; however, current staff position has not been filled.

SDG&E Construction Water Sourcing Investigation

Individual Supplier Info

Agency:	Carlsbad Municipal Water District
Contact person:	Mario Remillard
Job title:	Meter & Customer Services Supervisor
Phone number:	760-438-7153
Date Contacted:	April 06, 2015

Overview

The CMWD water service area covers approximately 85 percent of the City of Carlsbad and includes an area of about 32 square miles. Water service to the southeast corner of the City is provided by the Olivenhain Municipal Water District (OMWD). The Vallecitos Water District (VWD) provides service to the Meadowlark area along the eastern City limit. CMWD imports water through the Water Authority for their potable water needs. Water is supplied to the CMWD through four separate Water Authority treated water turnouts. The existing distribution system consists of 450 miles of pipeline and 17 major pressure zones that are supplied by gravity from over 50 major pressure regulating stations. CMWD operates and maintains one active pump station and four standby pump stations within the distribution system that are used for emergency purposes only. The CMWD water distribution system is flexible in that supply from the four aqueduct connections can be routed to different parts of the distribution system by making changes to several key valve settings. Currently the CMWD obtains 100 percent of its potable water supply from the Water Authority, of which it is one of 24 member agencies.

Discussion of Water Availability

Availability:

All (100%) potable & recycled water resources are purchased on an ad-hoc basis from the San Diego County Water Authority as needed/based on demand/contingent upon applications for planned construction; SDCWA approval dictates the availability of water supplies for local use on temporary construction projects; therefore, finite information regarding the available water supply is not currently available; however, Mario estimates that Carlsbad Municipal Water District has 7–9 million gallons/day available (total); he also stated that the metered readings for water associated with temporary use for the previous months (February & March 2015) was about 5.6 million gallons/month

Water Use:

Potable demand in 2020 estimated to be 21,600 AFY or 19.3 MGD

By use category/sector (i.e., 80% Agricultural, 20% Residential, etc.) if known:

N/A

Types of Local Supply (*Recycled? Others? Available for Purchase?*)

- 100% imported; majority potable; Recycled water is supplied to the CMWD from three sources and is distributed through a separate recycled water distribution system to developed areas within the CMWD service area. Recycled water is delivered to over 370 irrigation sites including golf courses, parks, median strips, common area landscaping in residential and commercial developments, and other landscaped areas; CMWD currently does not use any local groundwater and surface water supplies

Current and Projected Supplies:

N/A (Water Master Plan for City of Carlsbad refers to *Metropolitan Supply Capability and Potential Reserve or Replenishment* as prepared in its 2010 RUWMP)

Major Infrastructure (i.e., treatment plants):

N/A

Costs:*Potable:* \$4.05/unit (where one unit is equal to 100 cubic feet [1 HCF] or 748 gallons)*Recycled:* \$3.53/unit**Limits on Volume:**

- Limits are subject to water district and SDCWA approval based on scale and magnitude of construction project and associated water use (both projected volume and water use type—e.g., grading, etc.)

Access Options:

- Both potable & recycled water resources would be accessed through local fire hydrants; can be hauled and used at any location

Access Locations:

- Local fire hydrants for potable & recycled water are located throughout; recycled water is only available at certain hydrants within the service area

Permitting/Acquisition Process and Costs:

- Acquisition process & costs are the same for potable & recycled water; requires the application/rental of a 3" construction meter to monitor/read water use during construction; the costs include a \$103 rental fee, an \$890 deposit for the meter itself, a \$225.52 additional monthly rental fee, + the variable unit cost for water used

Summary of Feasibility for Construction Water Source

Feasible; likely dependent on construction project location.

SDG&E Construction Water Sourcing Investigation

Individual Supplier Info

Agency:	City of Del Mar
Contact person:	Eric Minicilli
Job title:	Public Works Director
Phone number:	858-704-3680 (direct); 619-520-9657
Date Contacted:	April 02, 2015

Discussion of Water Availability

Types of Local Supply (*Recy? Others? Available for Purchase?*)

- Potable and Recycled (limited)

Availability:

Potable: Yes, water is available. No specific numbers can be given until late April when SD Water Authority determines allocation amounts. Currently 800 acre-feet of water is unused per year.

Recycled: Recycled water is available at the Del Mar Fairgrounds location only. Allocation is controlled by the San Elijo Water Reclamation District. Usage is 1010 acre-feet/year for dedicated Fairground use.

Costs:

Potable: \$50 per month for meter rental; \$4.22 per 750 gallons of water

Recycled: \$50 per month for meter rental; \$3.50 per 750 gallons of water

Limits on Volume:

Potable: None

Recycled: None

Access Options:

Potable: Meters on fire hydrants; pipes

Recycled: Meters on fire hydrants

Access Locations:

Potable: Wherever there are fire hydrants

Recycled: Del Mar Fairgrounds only. No recycled water infrastructure exists outside of this area.

Permitting/Acquisition Process and Costs:

Potable: Apply for meter rental through the Finance Department. Receive meter from Engineering.

Recycled: Contact San Elijo Water Reclamation District for application and approval.

Summary of Feasibility for Construction Water Source

Feasible; likely dependent on construction project location. Recycled water supply is limited to Del Mar Fairgrounds region.

SDG&E Construction Water Sourcing Investigation

Individual Supplier Info

Agency:	City of El Centro
Contact person:	Hector Munoz (via Jack Fleming, Associate Engineer)
Job title:	Water Supervisor
Phone number:	760-337-4575
Date Contacted:	

Overview

The City of El Centro is located in the County of Imperial, approximately 120 miles east of San Diego and covers an area of 11.019 square miles. The City of El Centro's sphere of influence is located within the Imperial Unit of the Imperial Irrigation District's Irrigation (IID) service area. The 699,092 acre Imperial Unit serves the Imperial Valley including the urban areas for the cities of El Centro, Calexico, Imperial and Brawley and approximately a quarter of Imperial County's unincorporated area. A significant portion (around 97%) of the water demand in the Imperial Region is for irrigation. The City provides potable water to homes and businesses by treating raw Colorado River water imported into the Imperial Valley and delivered to the city by the Imperial Irrigation District (IID).

Discussion of Water Availability

Availability:

- All potable water is purchased from the IID; No groundwater resources; Currently no recycled water

Water Use:

11,198 AFY (2015 projection)

By use category/sector (i.e., 80% Agricultural, 20% Residential, etc.) if known:

Residential use for 2015 estimated to be about 79% of total water use

Types of Local Supply (*Recycled? Others? Available for Purchase?*)

- 100% of water is purchased from the IID

Current and Projected Supplies:

11,198 AFY (2015 projection)—no recycled water

Major Infrastructure (i.e., treatment plants):

Water treatment plant with two distribution pump stations - it is used solely as a backup in the event that extra capacity becomes necessary or if the system's pressure is reduced significantly – pumping capacity of 12,000 gpm

Costs:

\$3.51/1,000 gallons

*Rate set to increase \$0.12 each subsequent year; rate increases effective July 1

Limits on Volume:

- Limits are subject to water district and IID approval based on scale and magnitude of construction project and associated water use (both projected volume and water use type—e.g., grading); need to authorize new projects based on current/existing demands and anticipated water use associated with new project

Access Options:

Potable: N/A

Recycled:

Access Locations:

Potable: N/A

Recycled:

Permitting/ Acquisition Process and Costs:

- Requires the application/rental of a construction meter to monitor/read water use during construction and associated deposit costs

Summary of Feasibility for Construction Water Source

Feasible; likely dependent on construction project size & location.

SDG&E Construction Water Sourcing Investigation

Individual Supplier Info

Agency:	City of Escondido
Contact person:	Chris McKinney
Job title:	Director of Utilities
Phone number:	619-756-2570; cmckinney@escondido.org
Date Contacted:	April 01, 2015

Overview

The City of Escondido encompasses 33.42 square miles and is located in San Diego County, about 18 miles inland and 30 miles northeast of the City of San Diego. The City is a member of the SDCWA and a part of MWD. Adjacent to the City's water service area are Vista Irrigation District and Vallecitos Water District to the west, Rincon and the City of San Diego to the south, and Valley Center Municipal Water District to the north and east.

The water supply to the City originates from two sources: local and imported water. Local water from the San Luis Rey River watershed is stored on a seasonal basis in Lake Henshaw and Lake Wohlford reservoirs. This water is delivered to the City via the Escondido Canal and associated pipelines. Imported water is brought into San Diego County by the SDCWA aqueducts. The City has two connections to the aqueduct system. The principal water storage and conveyance facilities serving the City include the Warner Basin aquifer, Lake Henshaw, the Warner Ranch Well Field, the Escondido Canal, Lake Wohlford, Dixon Lake, Bear Valley Pipeline, and Escondido/Vista Water Treatment Plant. A portion of the San Luis Rey River is also used for conveyance.

Discussion of Water Availability

Availability:

Imported water via SDCWA supplies approximately 82 percent of the City's average water demand. For 2015, the City's projected wholesale water supply from SDCWA is 23,786. For 2020 and 2025, the City's projected wholesale water supplies from SDCWA are 21,384 and 22,963 respectively. Since potable resources are purchased on from the SDCWA as needed/based on demand/contingent upon applications for planned construction, SDCWA approval dictates the availability of water supplies for local use on temporary construction projects. The City, in conjunction with Vista Irrigation District, also operates facilities supplying local water from the San Luis Rey River watershed. Local water is stored on a seasonal basis in Lake Henshaw and Lake Wohlford reservoirs. This water is delivered to the City via the Escondido Canal, the Bear Valley Hydroelectric plant, and associated pipelines. This local water is shared with Vista Irrigation District and supplies approximately 18 percent of the City's average water demand. The amount can reach as high as 30 percent (City of Escondido 2010). Additionally, recycled water is presently supplied to the City from their own treatment and disposal facility, the Hale Avenue Resource Recovery Facility (HARRF). The HARRF treats influent from the City and the City of San Diego's Rancho Bernardo Community and currently produces over 8 mgd of tertiary treated recycled water for landscape and industrial uses.

Water Use:

32,750 AFY (2015 projection)

By use category/sector (i.e., 80% Agricultural, 20% Residential, etc.) if known:

For the 2015 projection, approximately 60% would be delivered to Residential communities.

Types of Local Supply (*Recycled? Others? Available for Purchase?*)

The water supply to the City originates from two sources: local and imported water. Local water supplies approximately 18 percent of the City’s average water demand. The City of Escondido imports 70-90% of its water supply. The City also produces a small amount of recycled water at the HARRF.

Current and Projected Supplies:

23,786 AFY SDCWA (2015 projection)

4,964 AFY Local Supply (2015 projection)

4,800 AFY Recycled water (2015 projection)

33,550 AFY Total (2015 projection)

Major Infrastructure (i.e., treatment plants):

Escondido-Vista Water Treatment Plant

Hale Avenue Resource Recovery Facility (HARRF)

Costs:

Potable: \$6.31/ 1,000 gallons

Limits on Volume:

Limits are subject to water district and SDCWA approval based on scale and magnitude of construction project and associated water use (both projected volume and water use type—e.g., grading); need to authorize new projects based on current/existing demands and anticipated water use associated with new project

Access Options:

Potable: Meters on fire hydrants

Recycled: Meters on fire hydrants within recycled water service area

Access Locations:

Potable: Fire hydrants throughout city

Recycled: Fire hydrants within recycled water service area (parallel to and east of the 15 interstate)

Permitting/Acquisition Process and Costs:

- Application for construction meter and associated costs

Summary of Feasibility for Construction Water Source

Feasible; contingent upon magnitude and location of temporary construction projects

References

City of Escondido 2010. UWMP.

<https://www.escondido.org/Data/Sites/1/media/pdfs/Utilities/2010UrbanWaterManagementPlan.pdf>.

SDG&E Construction Water Sourcing Investigation

Individual Supplier Info

Agency:	City of National City (member of Sweetwater Authority)
Contact person:	Francisco (Jay) Montijo
Job title:	Senior Engineer Tech
Phone number:	Cell: 619-213-2087; Direct: 619-409-6756; jmontijo@sweetwater.org
Date Contacted:	April 03, 2015

Overview

Sweetwater's water system provides water service to a population of approximately 179,485 within the City of National City, a portion of the City of San Diego, and the South Bay Irrigation District, which consists of a portion of the City of Chula Vista, and the unincorporated portion of the County of San Diego known as Bonita. The Sweetwater service area covers 36.5 square miles and contains approximately 33,180 service connections.

Discussion of Water Availability

Availability:

Yes, water is available. All (100%) potable water resources are purchased on an ad-hoc basis from the San Diego County Water Authority as needed/based on demand/contingent upon applications for planned construction; SDCWA approval dictates the availability of water supplies for local use on temporary construction

Water Use:

25,296 AFY (2015 projection for all of Sweetwater, not just National City – National City estimate not available)

By use category/sector (i.e., 80% Agricultural, 20% Residential, etc.) if known:

Approximately 72% of 2015 projection would be delivered to Residential communities

Types of Local Supply (*Recycled? Others? Available for Purchase?*)

Historically, Sweetwater has obtained its water from four sources: imported treated and untreated water from the Water Authority; surface runoff from the Sweetwater River watershed, which is fully appropriated to Sweetwater; the National City well field, and a brackish groundwater desalination facility. In addition, the system has emergency water connections to three other water agencies including Otay Water District, the City of San Diego, and the California American Water Company.

Current and Projected Supplies:

12,200 AFY Local Supply (2015 projection for all of Sweetwater)

13,096 AFY Imported Supply (2015 projection for all of Sweetwater)

25,296 AFY Total (2015 projection for all of Sweetwater)

Major Infrastructure (i.e., treatment plants):

Robert A. Perdue Water Treatment Plant – treatment capacity of 30 mgd (Sweetwater Authority)

Costs:

\$5.85/unit (where one unit is equal to 100 cubic feet [1 HCF] or 748 gallons); equivalent cost of \$7.82 per 1,000 gallons

Limits on Volume:

Limits are subject to water district and SDCWA approval based on scale and magnitude of construction project and associated water use (both projected volume and water use type—e.g., grading)

Access Options:

Potable water resources would be accessed through local fire hydrants; water cannot leave service area

Access Locations:

Fire hydrants for potable water are located throughout the service area

Permitting/Acquisition Process and Costs:

Requires the application/rental of a construction meter to monitor/read water use during construction and associated deposit costs

Summary of Feasibility for Construction Water Source

Feasible; likely dependent on construction project size & location.

SDG&E Construction Water Sourcing Investigation

Individual Supplier Info

Agency:	City of Oceanside
Contact person:	Mabel Uyeda
Job title:	Assistant Engineer, Water Utilities Department
Phone number:	760-435-5819
Date Contacted:	April 09, 2015

Overview

The City of Oceanside is a public agency directly providing water for municipal purposes to more than 3,000 customers. The City is a full service city providing water and wastewater services through its Water Utilities department, under the purview of the City Council. The City is located 35 miles north of the City of San Diego, encompassing about 42 square miles. The city is bordered on the west by the Pacific Ocean, the north by Camp Pendleton Marine Base, the south by the City of Carlsbad, and on the east by the City of Vista and unincorporated County land. The City water supply system includes five connections with the San Diego County Water Authority (SDCWA) filtered and untreated imported water aqueducts. The City's water distribution system also includes 12 storage reservoirs located throughout the water system with at least one storage reservoir located in each of seven primary pressure zones. There are nine pump stations in the City's water distribution system. Four of the pump stations serve as the primary source of supply for its respective service zone. The other five pump stations are for emergency service or are on standby. PRS's are located throughout the City.

Discussion of Water Availability

Availability:

Finite information regarding the available water supply for use on temporary construction projects is not currently available. Total water use for 2015 is expected to be approximately 31,792 AFY. The City would not provide metered water use for construction projects for each of the previous three months.

Water Use:

Water Deliveries: 31,792 AFY (2015 projection)

Total Use: 35,564 AFY (2015 projection)

By use category/sector (i.e., 80% Agricultural, 20% Residential, etc.) if known:

About 92.5% Residential use (2015 projection)

Types of Local Supply (*Recycled? Others? Available for Purchase?*)

The City currently has two direct sources of potable water; the Metropolitan Water District of Southern California through the San Diego County Water Authority (SDCWA) and the Mission Groundwater Basin of the Lower San Luis Rey River Valley. Approximately 85% of the City's water is purchased from the SDCWA (27,501 AFY projection for 2015). Some recycled water is also available and is recycled at the San Luis Rey Wastewater Treatment Plant before delivery into the distribution system. However, the only user of recycled water is Oceanside Municipal Golf Course.

Current and Projected Supplies:

Potable: 32,728 AFY (2015 projection)

Recycled: 933 AFY (2015 projection)

Total: 35,564 AFY (2015 projection)

Major Infrastructure (i.e., treatment plants):

San Luis Rey Wastewater Treatment Plant (SLRWRP): The SLRWRP provides secondary treatment for most of the City service area. The rated secondary treatment capacity is 13.5 mgd on an average annual basis

La Salina Wastewater Treatment Plant: The La Salina WWTP has a rated secondary treatment capacity of 5.5 mgd.

The *Mission Basin Groundwater Purification Facility (MBGPF)* is a desalting treatment facility that treats brackish groundwater extracted from the Mission Basin via eight wells including four “on-site” wells located at the MBGPF site and four “off-site” wells, located in the eastern portion of the basin near North River Road west of College Blvd. The MBGPF was put into service in 1992 with a capacity of 2.0 mgd, and expanded to its current capacity of 6.37 MGD, or 7,130 acre-feet per year, in 2002.

Costs:

- Variable cost of \$4.10 per HCF
- Deposit for construction meter is \$1,015 (3-inch diameter); service charge for installation and removal of meter is \$64; fixed monthly service charge of \$261.01; \$55 for meter relocation (if necessary)

Limits on Volume:

- Limits are subject to water district and SDCWA approval based on scale and magnitude of construction project and associated water use (both projected volume and water use type—e.g., grading); need to authorize new projects based on current/existing demands and anticipated water use associated with new project

Access Options:

Potable: Potable water can be accessed at the closest hydrant; requires blowoff valve; attaches to temporary construction meter; applicant needs own backflow device to protect water supply from potential contaminants

Recycled: City does not have extensive recycled water infrastructure; working towards building that out

Access Locations:

- Various locations throughout the service area

Permitting/Acquisition Process and Costs:

- Potential permits may be required depending on how much earth would be excavated; may be subject to stormwater management practices; may also need grading permit depending on amount of soil disturbance; City does not allow for hoses to be pulled across a roadway; City does not allow

construction meters on private hydrants (Mabel estimates private hydrants may be less than 10% of hydrants); latter two could impact potential staging/construction locations

Summary of Feasibility for Construction Water Source

Feasible; likely dependent on construction project location & scale.

SDG&E Construction Water Sourcing Investigation

Individual Supplier Info

Agency:	City of Poway
Contact person:	Sheila Cobian (via Tom Howard, Deputy Director at the Department of Public Works)
Job title:	Deputy City Clerk
Phone number:	858-668-4750
Date Contacted:	April 03, 2015

Overview

The City of Poway encompasses 39 square miles and is located in San Diego County, 20 miles north of downtown San Diego and 125 miles south of Los Angeles. Poway borders the City of San Diego on two sides, including the communities of Scripps Ranch to the south and Sabre Springs, Rancho Peñasquitos and Rancho Bernardo to the west. The City of Escondido is just north of Poway, and the unincorporated community of Ramona is to the east. The City of Poway is the water supplier within its jurisdiction. The City of Poway imports nearly 100 percent of its water supply, largely from SDCWA, in the form of raw, untreated water. The water is delivered via pipeline from Lake Skinner in Riverside County and is then treated at the City's Lester J. Berglund Water Treatment Plant for distribution to Poway's customers. The distribution system includes eighteen storage reservoirs.

Discussion of Water Availability

Availability:

Poway imports about 100 percent of its water supply. The City's main water supply is raw water purchased from SDCWA, which is treated at the Lester J. Berglund Water Treatment Plant for distribution in the City's potable water system. Lake Poway captures a small amount of rain and surface runoff during rain events. Since this quantity of Lake Poway runoff is relatively minimal and not reliable (as well as off-set by naturally-occurring evaporation and seepage), it is not considered as a planned water supply source. Additionally, the City of Poway purchases a small quantity of recycled water from the City of San Diego for irrigation in the Poway Business Park. Since potable resources are purchased on from the San Diego County Water Authority as needed/based on demand/contingent upon applications for planned construction, SDCWA approval dictates the availability of water supplies for local use on temporary construction projects.

- The City of Poway also provided metered water use associated with temporary construction projects for January, February, and March of 2015 – 0 HCF, 675 HCF, and 30 HCF, respectively.

Water Use:

11,837 AFY (2015 projection)

By use category/sector (i.e., 80% Agricultural, 20% Residential, etc.) if known:

For the 2015 projection, approximately 73.9% would be delivered to Residential communities

Types of Local Supply (*Recycled? Others? Available for Purchase?*)

As mentioned, Poway imports about 100 percent of its water supply. Poway also purchases a small quantity of recycled water from the City of San Diego for irrigation in the Poway Business Park.

Current and Projected Supplies:

12,727 AFY from SDCWA (2015 projection)

550 AFY Recycled water from City of San Diego (2015 projection)

13,277 AFY Total (2015 projection)

Major Infrastructure (i.e., treatment plants):

Lester J. Berglund Water Treatment Plant

Costs:

\$4.35/HCF

Limits on Volume:

Limits are subject to water district and SDCWA approval based on scale and magnitude of construction project and associated water use (both projected volume and water use type – e.g. grading, etc.); need to authorize new projects based on current/existing demands and anticipated water use associated with new project

Access Options:

Potable: N/A

Recycled:

Access Locations

Potable: N/A

Recycled:

Permitting/ Acquisition Process and Costs

- Application for construction meter and associated costs

Summary of Feasibility for Construction Water Source

Feasible; contingent upon magnitude and location of temporary construction projects.

SDG&E Construction Water Sourcing Investigation

Individual Supplier Info

Agency:	City of San Clemente
Contact person:	Dave Rebensdorf
Job title:	Assistant City Engineer
Phone number:	949-361-6130
Date Contacted:	April 10, 2015

Overview

San Clemente spans 18.45 square miles of coastline and scenic foothills and is located in South Orange County bounded to the south by San Diego County and to the west by the Pacific Ocean. To the north and east, the cities of Dana Point and San Juan Capistrano and portions of unincorporated area of Orange County within Santa Margarita Water District's service area. San Clemente's water service area cover 14.7 square miles and excludes a small section in the northern portion of the City which is serviced by Santa Margarita Water District.

Discussion of Water Availability

Availability:

All (100%) potable resources are purchased on an ad-hoc basis from the San Diego County Water Authority as needed/based on demand/ contingent upon applications for planned construction; SDCWA approval dictates the availability of water supplies for local use on temporary construction projects; therefore, finite information regarding the available water supply is not currently available; whoever may be requesting the use of water resources is required to provide water usage and location specifics. If Drought Level is raised from Level 2 to Level 3, no new construction meters would be available.

Water Use:

15.775 AFY (2015 projection)

By use category/sector (i.e., 80% Agricultural, 20% Residential, etc.) if known:

For 2015 projection, about 90% of deliveries would serve the Residential community.

Types of Local Supply (*Recycled? Others? Available for Purchase?*)

The District relies on the Metropolitan Water District for 90% of its potable water supply. Limited groundwater supplies in the southern region of San Clemente provide 3-5% of the water supply and recycled water provide approximately 7%.

Current and Projected Supplies:

MWD: 8,150 AFY (Projected 2015)

San Clemente Sub-Basin: 1,000 AFY (Projected 2015)

Recycled Water: 1,500 AFY (Projected 2015)

Major Infrastructure (i.e., treatment plants):

The City's water system consists of 13 service zones defined by reservoirs and 20 subzones through pressure reducing stations. The City maintains approximately 206 miles of distribution system piping, 16 pumping stations, 56 pressure reducing stations, one filtration plant, 14 local and two regional reservoirs, and two wells (Well no.6 and no.8).

The City currently owns and operates a Water Reclamation Plant (WRP) with a capacity of 2.2 MGD with an anticipated recycled water expansion project slated for fiscal year 2012-13 to 4.4 MGD.

Costs:

Recycled: \$2.15/ unit (100 cubic ft.)

Limits on Volume:

No limit available at this time. Limits are subject to water district and SDCWA approval based on scale and magnitude of construction project and associated water use (both projected volume and water use type—e.g., grading); need to authorize new projects based on current/existing demands and anticipated water use associated with new project. If Drought Level is raised from Level 2 to Level 3, the number of construction meters available.

Access Options:

Potable water resources would be accessed by metering local fire hydrants. Water must be used within service area. Recycled water is available within the northeast service region area. Truck hauling for recycled is in the planning phases and will be available in the future. Groundwater is available in the south end of San Clemente.

Access Locations:

Potable can be found in various locations throughout the service area, with restrictions tied to hydrant locations. Recycled water is available in the Vista Hermosa and Pico (northeast region of city) area.

Permitting/ Acquisition Process and Costs:

Requires the application/rental of a construction meter to monitor/read water use during construction and associated deposit costs. Apply through the Utilities department (949) 366-1553.

Summary of Feasibility for Construction Water Source

Feasible; contingent upon magnitude and location of temporary construction projects.

SDG&E Construction Water Sourcing Investigation

Individual Supplier Info

Agency:	City of San Diego
Contact person:	Nelson Sellona
Job title:	Associate Civil Engineer
Phone number:	619-527-7679
Date Contacted:	April 08, 2015

Overview

The City's Public Utilities Department serves more than 1.3 million people populating more than 200 square miles of developed land. The service area is generally located within the south central portion of San Diego County, and is approximately 340 square miles. In addition to supplying approximately 274,000 metered service connections within its own incorporated boundaries, San Diego conveys and sells water to the City of Del Mar, Santa Fe and San Dieguito Irrigation Districts, and California American Water Company (Cal-Am), which, in turn, serves the Cities of Coronado and Imperial beach and portions of south San Diego. The city has agreements to sell surplus water to Otay Water District and exchange water to Ramona Municipal Water District. The city maintains several emergency connections to and from neighboring water agencies, including Santa Fe Irrigation District, Poway Municipal Water District, Otay water District, Cal-Am, and Sweetwater Authority.

Discussion of Water Availability

Availability:

The City currently uses imported water, local surface water, recycled water, and a small amount of groundwater as its supply sources. The city currently purchases most of its water from the SDCWA. Local surface water is collected as runoff from local watersheds in the City's reservoirs. Use of the local surface water by the City to meet water demand is affected by availability (rainfall) and water resource management policies. The city currently pumps a small amount of water from the San Diego River Valley Basin.

Water Use:

240,472 AFY (2015 projection)

By use category/sector (i.e., 80% Agricultural, 20% Residential, etc.) if known:

The projected residential consumption in 2015 is approximately 63% of total demand.

Types of Local Supply (*Recycled? Others? Available for Purchase?*)

The City purchases most of its water from the SDCWA. The City coordinates with the Otay Water District, the City of Poway, and the Olivenhain Municipal Water Districts to supply recycled water.

Current and Projected Supplies:

201,719 AFY from SDCWA (2015 projection)

218,660 AFY from Recycled (2015 projection)

16,950 AFY Total (2015 projection)

Major Infrastructure (i.e., treatment plants):

The City has nine local surface water reservoirs with more than 408,000 AF of capacity (see below, Table 2.2 City Owned Reservoirs). These reservoirs capture local rainwater and runoff to supply approximately 12 percent of the City's water.

The Department maintains and operates three water treatment plants with a combined total rated capacity of 294.2 million gallons per day (MGD). The Miramar Water Treatment Plant (WTP) has a design capacity of 140 mgd with the ability to increase to 215 mgd if permitting is approved. The Alvarado Water Treatment Plant has a design capacity of 200 mgd. The Otay Water Treatment Plant has a design capacity of 34.2 mgd.

The City also owns two water reclamation plants. The South Bay Water Reclamation Plant has a wastewater treatment capacity of 15 mgd and can produce 5 mgd of recycled water for irrigation and landscaping use. The North City Water Reclamation Plant has a design capacity of 30 mgd and can produce 12 mgd of recycled water.

Table 2 2. City Owned Reservoirs	
Reservoir	Capacity (AF)
Barrett	34,806
El Capitan	112,807
Hodges	30,251
Lower Otay	49,849
Miramar	6,682
Morena	50,694
Murray	4,684
San Vicente	89,312 ^(a)
Sutherland	29,508
Total Capacity	408,593

Source: City of San Diego Public Utilities Department, Water Operations Branch, System Operations Division

Notes:

^(a) San Vicente will be expanded to 242,000 AF by 2013. This additional storage is for SDCWA's regional emergency storage project

Costs:

\$4.62/100 cubic ft. for potable

\$0.80/100 cubic ft. for recycled

Limits on Volume:

No limit available at this time. Limits are subject to water district and SDCWA approval based on scale and magnitude of construction project and associated water use (both projected volume and water use type – e.g. grading, etc.); need to authorize new projects based on current/existing demands and anticipated water use associated with new project.

Access Options:

Potable:

Recycled: Both potable & recycled water resources would be accessed through local fire hydrants; some are connected to potable resources, others are connected to untreated water sources; water must be used within service area.

Access Locations:

Potable:

Recycled: Various locations throughout the service area (see Figure 6). Recycled water is available within the South Bay and North City service areas. Only one fill station is available in the South Bay area.

Permitting/Acquisition Process and Costs:

- Application for construction meter and associated costs

Summary of Feasibility for Construction Water Source

Feasible; contingent upon magnitude and location of temporary construction projects.

SDG&E Construction Water Sourcing Investigation

Individual Supplier Info

Agency:	City of San Juan Capistrano
Contact person:	Eric Bauman
Job title:	Assistant Director, Utilities, Department of Public Works
Phone number:	949-487-4312
Date Contacted:	April 13, 2015

Overview

The City provides domestic and non-domestic water service to residential, commercial and industrial customers within the City. The City also provides water service to small areas within the Cities of Dana Point and Mission Viejo. The City provides water to a population of 40,262 throughout its 14.0 square mile service area. The City receives its water from two main sources, the San Juan Basin, which is managed by the San Juan Basin Authority (SJBA) and imported water from the Municipal Water District of Orange County (MWDOC). Groundwater is pumped from 2 domestic wells located throughout the City, and imported water is treated at the Diemer Filtration Plant and is delivered to the City through two imported water connections.

Discussion of Water Availability

Availability:

The City purchases treated water from the Metropolitan Water District of Southern California (MWDOC) through their wholesaler, the Municipal Water District of Orange County (MWDOC). This imported water accounts for approximately ½ of the City's water supply. The remainder of our drinking water (potable) supply is generated from the City's Ground Water Recovery Plant (GWRP) and other wells. Although the City has a small amount of non-drinking water supply (non-potable) available for irrigation uses, the City currently has no major source of recycled water. These customers are served with a blend of non-potable well water and imported water.

Water Use:

9,400 AFY (2015 projection)

By use category/sector (i.e., 80% Agricultural, 20% Residential, etc.) if known:

For 2015 projection, about 64% would be used by the Residential community

Types of Local Supply (*Recycled? Others? Available for Purchase?*)

The City relies on a combination of imported water, local groundwater, and recycled water to meet its water needs. Approximately half of potable water comes from SDCWA. The other half is generated from the City's Ground Water Recovery Plant (GWRP) and other wells. Although the City has a small amount of non-drinking water supply (non-potable) available for irrigation uses, the City currently has no major source of recycled water.

Current and Projected Supplies:

2,000 AFY from MWDOC

5,450 AFY San Juan Basin (GWRP)

1,950 Recycled AFY

9,400 AFY Total

Major Infrastructure (i.e., treatment plants):

Ground Water Recovery Plant (GWRP): 5 mgd (with expansion up to 7 mgd)

Costs:

Potable: \$5.15/HCF

Recycled: \$4.20/HCF

Limits on Volume:

Limits are subject to water district and MWDOC approval based on scale and magnitude of construction project and associated water use (both projected volume and water use type—e.g., grading); need to authorize new projects based on current/existing demands and anticipated water use associated with new project.

Access Options:

Potable: N/A

Recycled:

Access Locations

Potable: N/A

Recycled:

Permitting/Acquisition Process and Costs:

- Application for construction meter and associated costs

Summary of Feasibility for Construction Water Source

Feasible; contingent upon magnitude and location of temporary construction projects.

SDG&E Construction Water Sourcing Investigation

Individual Supplier Info

Agency:	City of Santa Margarita Water District
Contact person:	Jaime Aguilar
Job title:	Engineer
Phone number:	949-459-6582
Date Contacted:	April 17, 2015

Overview

SMWD provides water to a population of more than 150,000 people throughout its 62,674 acre service area. SMWD receives its water from three main sources, the San Juan Basin, which is managed by the San Juan Basin Authority (SJBA), recycled water, and imported water from the Municipal Water District of Orange County (MWDOC). Groundwater is pumped from 1 active well located in the southeast corner of SMWD, and imported water is treated at the Diemer Filtration Plant and is delivered to SMWD through its imported water connections.

Discussion of Water Availability

Availability:

Only recycled water is available.

Water Use:

28,467 AFY (2015 projection)

By use category/sector (i.e., 80% Agricultural, 20% Residential, etc.) if known:

For 2015 projection, about 61.3% of deliveries would serve the Residential community.

Types of Local Supply (*Recycled? Others? Available for Purchase?*)

Approximately 82% imported water, 18% recycled water, and 0.2% local groundwater

Current and Projected Supplies:

MWD – 19,067 AFY (Projected 2015)

Baker Treatment Plant – 9,400 AFY (Projected 2015)

San Juan Basin – 100 AFY (Projected 2015)

Recycled Water – 7,439 AFY (Projected 2015)

Major Infrastructure (i.e., treatment plants):

SMWD's system consists of 1,209 miles of water and sewer lines, 29 domestic water reservoirs and 7 irrigation water reservoirs. Nearly all of SMWD's water supply is purchased from Metropolitan, which delivers water to the region from Northern

California via the State Water Project (SWP) and from the Colorado River via the Colorado River Aqueduct (CRA). Water from both sources is treated at the Diemer Filtration Plant in Yorba Linda prior to delivery to SMWD.

Costs:

Recycled: \$2.88/ unit (100 cubic ft.)

Limits on Volume:

Limits are dependent on the seasonal change. Limits on volume are stricter during summer months, while the months of October through April have available water.

Access Options:

Potable water resources would be accessed by truck hauling from the Chiquita Reclamation Plant, or from connecting to a recycled water service pipe.

Access Locations:

Recycled water can be obtained at filling station at the Chiquita Reclamation Plant.

Permitting/Acquisition Process and Costs:

Encroachment permit to be processed at the Engineering division. Permit fee of \$500.

Summary of Feasibility for Construction Water Source

Feasible; contingent upon magnitude and location of temporary construction projects.

SDG&E Construction Water Sourcing Investigation

Individual Supplier Info

Agency:	Fallbrook Public Utility District
Contact person:	Jack Bebee
Job title:	Assistant General Manager
Phone number:	760-728-1125
Date Contacted:	April 1, 2015

Overview

FPUD delivers water to some 35,000 people over a 28,000 square acre service area near Camp Pendleton. Almost half of the water is used by agriculture. Historically, water usage has remained the same in the FPUD's service area because the larger agricultural areas have been converted over the years to smaller residential areas. The District also produces about one and one-half million gallons of recycled water daily that is used to irrigate nurseries, playing fields, landscaped freeway medians and common areas.

Discussion of Water Availability

Availability:

FPUD purchases almost all of its water supply from SDCWA. It also recycles water at the Lake Skinner Filtration plant. Since potable resources are purchased on an ad-hoc basis from the San Diego County Water Authority as needed/based on demand/contingent upon applications for planned construction, SDCWA approval dictates the availability of water supplies for local use on temporary construction projects. Therefore, finite information regarding the available water supply is not currently available.

Water Use:

14,140 AFY (2015 projection)

By use category/sector (i.e., 80% Agricultural, 20% Residential, etc.) if known:

For 2015 projection, about 60% would be used by the Residential community

Types of Local Supply (*Recycled? Others? Available for Purchase?*)

The District relies on imported water supplied by the Water Authority, with in turn relies on Metropolitan for its water supply. Since virtually 100% of FPUD's potable water is supplied by the aforementioned agencies, their water supply plans and forecasts relate to this District. However, Fallbrook Public Utility District also has limited groundwater supplies and some recycled water.

Current and Projected Supplies:

11,140 AFY from SDCWA (2015 projection)

*3,100 AFY Groundwater: Santa Margarita River (2015 projection)

100 AFY Local Wells in Fallbrook(2015 projection)

*300 AFY Surface Diversions from Santa Margarita River at Lake Skinner (2015 projection)

611 AFY Recycled Water

20,226 AFY Total

**Contingent upon success of Santa Margarita River Project*

Major Infrastructure (i.e., treatment plants):

Lake Skinner Filtration plant

Costs:

Potable: \$6.02/1,000 gallons

Recycled: \$3.74/1,000 gallons

Limits on Volume:

Limits are subject to water district and SDCWA approval based on scale and magnitude of construction project and associated water use (both projected volume and water use type—e.g., grading); need to authorize new projects based on current/existing demands and anticipated water use associated with new project.

Access Options:

Potable: N/A

Recycled:

Access Locations:

Potable: N/A

Recycled:

Permitting/Acquisition Process and Costs:

- Application for construction meter and associated costs
- \$1,117 deposit plus \$108 installation; \$108 relocation; operations charge \$155.28 per month

Summary of Feasibility for Construction Water Source

Feasible; contingent upon magnitude and location of temporary construction projects.

SDG&E Construction Water Sourcing Investigation

Individual Supplier Info

Agency:	Helix Water District
Contact person:	Aneld Anub
Job title:	District Engineer
Phone number:	619-667-6273; Aneld.Anub@HelixWater.org
Date Contacted:	April 06, 2015

Overview

The Helix District's boundaries encompass a highly urbanized service area with a population of approximately 268,000 residents and 55,600 water service connections. Covering an area of nearly 50 square miles, Helix Water District serves the cities of La Mesa, Lemon Grove, El Cajon, as well as various unincorporated communities of San Diego County, including portions of Spring Valley and Lakeside.

Discussion of Water Availability

Availability:

The District's raw water supply consists of both imported and local water sources. Imported water is provided by the Authority and conveyed to the R.M. Levy Water Treatment Plant (Levt WTP) through the District's raw water aqueduct system.

Water Use:

33,211 AFY (2015 Projection)

By use category/sector (i.e., 80% Agricultural, 20% Residential, etc.) if known:

For 2015 Projection, about 77% of deliveries would serve the Residential community.

Types of Local Supply (*Recycled? Others? Available for Purchase?*)

The Helix Water District's water sources are a combination of imported and locally produced water. Imported water is provided by the Helix Water Authority, via the District's raw water transmission system. The imported water comprises about 83% of the District's normal supply.

Current and Projected Supplies:

These are the projected water supplies available to the Helix Water District (total 37,708 AFY):

- SDCWA (The Authority) 33,441 AFY (Projected 2015)
- Groundwater (Well 101) 150 AFY (Projected 2015)
- Local Runoff 4,117 AFY (Projected 2015)

Major Infrastructure (i.e., treatment plants):

R.M Levy Water Treatment Plant, Grossmont Reservoir, and 25 storage tanks for a total treated water storage capacity of 64 million gallons.

Costs:

For potable water, a deposit of \$2,420 for meter, \$151 for installation, \$4.14 per 748 gallons of water; \$79 for final meter read and removal.

Limits on Volume:

No limit available at this time. Limits are subject to water district and SDCWA approval based on scale and magnitude of construction project and associated water use (both projected volume and water use

type—e.g., grading); need to authorize new projects based on current/existing demands and anticipated water use associated with new project.

Access Options:

Potable:

Recycled: Potable water resources would be accessed through local fire hydrants. Water must be used within service area.

Access Locations:

Potable:

Recycled: Various locations throughout the service area. No recycled water is available.

Permitting/Acquisition Process and Costs:

- Application for construction meter through the Administrative Office – Customer Service and associated costs

Summary of Feasibility for Construction Water Source

Feasible; contingent upon magnitude and location of temporary construction projects. No recycled water available.

SDG&E Construction Water Sourcing Investigation

Individual Supplier Info

Agency:	Lakeside Water District
Contact person:	Brett Sanders
Job title:	General Manager
Phone number:	619-443-3805
Date Contacted:	April 06, 2015

Overview

The Lakeside Water District currently supplies approximately 4,008 AFY of potable water to its customers. Lakeside's service area spans approximately 20 square miles of the unincorporated community of Lakeside, including Eucalyptus Hills, Moreno Valley and Muth Valley.

Discussion of Water Availability

Availability:

The potable water supply is currently 81% imported from the SDCWA and 19% produced from local wells. The Lakeside Water District's well production decreased from 27% to 19% in the last five years.

Water Use:

6,752 AFY (2015 projection)

By use category/sector (i.e., 80% Agricultural, 20% Residential, etc.) if known:

For 2015 projection, about 95% of deliveries would serve the Residential community.

Types of Local Supply (*Recycled? Others? Available for Purchase?*)

As mentioned, the District's potable water supply is currently 81% imported from the SDCWA and 19% produced from local wells. No recycled water is available.

Current and Projected Supplies:

16,080 AFY from SDCWA (2015 projection)

Major Infrastructure (i.e., treatment plants):

Lakeside's water distribution system is a Grade 4 system including 120 miles of water mains, reservoir tanks with a total storage capacity of 12.7 million gallons and 11 pumping stations.

Lakeside water district also has the Vine Street Well Field which produces a total of 950 ac-ft. per year or about 19% of Lakeside's usage.

Costs:

\$7.64/748 gallons

Limits on Volume:

Approximately 200,000 gallons per day out of a construction meter is available. This is the equivalent to 267 units per day.

Access Options:

Potable: Potable water resources would be accessed through local fire hydrants or at the District office. Water cannot be hauled out of district boundaries.

Recycled: No recycled water available.

Access Locations:

Potable: Typically the water is used at the location of the project. Hydrants are available throughout the district. SDG&E currently has a construction meter account and is using water for their substation upgrade at Lake Jennings Park Road.

Permitting/Acquisition Process and Costs:

- Application for construction meter and associated costs.
- The process to get a construction meter is to fill out an applications and pay a \$700.00 deposit. The cost is \$60.00 to set and remove the meter, and a \$60.00 per month customer service fee.

Summary of Feasibility for Construction Water Source

Feasible; contingent upon magnitude and location of temporary construction projects.

SDG&E Construction Water Sourcing Investigation

Individual Supplier Info

Agency:	Olivenhain Municipal Water District
Contact person:	Karen Ogawa
Job title:	Engineer
Phone number:	760-632-4642
Date Contacted:	April 10, 2015

Overview

OMWD is a public agency providing water, wastewater services, recycled water, hydroelectricity, and operation of the Elfin Forest Recreational Reserve. OMWD includes portions of the cities of Encinitas, Carlsbad, San Diego, Solana Beach, and San Marcos, including the communities of Olivenhain, Leucadia, Elfin Forest, Rancho Santa Fe, Fairbanks Ranch, Santa Fe Valley and 4S Ranch. All customers in OMWD's service area are metered. OMWD currently covers an area of approximately 30,542 acres (over 48 square miles), and currently serves a population of over 65,000 persons. OMWD provides potable water service to customers through a distribution system that currently includes approximately 425 miles of potable water pipelines, 18 closed storage reservoirs, one covered in-ground reservoir, four pump stations, and a 450 kW hydroelectric generation station.

Discussion of Water Availability

Availability:

All of the water supply delivered by OMWD for potable use is purchased from SDCWA as either treated or raw water. CWA water can be delivered to OMWD through five service connections, all from CWA's Second San Diego Aqueduct. Four are treated water connections and one is a raw water connection.

- Potable water resources are estimated by Karen to be 4,200 Equivalent Dwelling Units (EDU) [2011], where one EDU represents a single-family residence with a typical 3/4-inch meter and a maximum flow capacity of 27 gallons per minute; recycled estimate not available

Water Use:

Potable: 21,118 AFY (2015 projection)

Recycled: 3,200 AFY (2015 projection)

Total: 24,318 AFY (2015 projection)

By use category/sector (i.e., 80% Agricultural, 20% Residential, etc.) if known:

For the fiscal year ended June 30, 2010, approximately 75 percent of water delivered was for domestic users, 15 percent for irrigation purposes, 5 percent for agricultural users, and 6% for commercial purposes. (Numbers used are rounded up to the nearest whole number.)

Types of Local Supply (*Recycled? Others? Available for Purchase?*)

- All of the water supply delivered by OMWD for potable use is purchased from SDCWA as either treated or raw water; some of this water is recycled; the remainder of the recycled water supply is purchased and imported from the City of San Diego, the San Elijo Joint Powers Authority, and Vallecitos Water District

Current and Projected Supplies:

19,998 AFY via SDCWA purchases (2015 projection)

3,200 AFY Recycled (2015 projection)

1,120 Desalinated (2015 projection)

24,318 AFY Total (2015 projection)

Major Infrastructure (i.e., treatment plants):

David C. McCollom Water Treatment Plant (DCMWTP) can accommodate flows up to 34 mgd

The *4S Ranch Water Reclamation Facility* is a 2.0 million gallon per day (MGD) water reclamation facility

Costs:

- The base rate for construction water is \$5.72/unit (where one unit is equal to 100 cubic feet [1 HCF] or 748 gallons); rates escalate based on drought ordinances/alert levels; associated construction application costs/deposits would apply
- More information available here:
https://www.olivenhain.com/files/docs/finance_billing/rates&rules.pdf

Limits on Volume:

- Limits are subject to water district and SDCWA approval based on scale and magnitude of construction project and associated water use (both projected volume and water use type—e.g., grading)

Access Options:

- Both potable & recycled water resources would be accessed through local fire hydrants, laterals, and/or wharfheads

Access Locations:

- Located throughout the service area

Permitting/Acquisition Process and Costs:

- Requires the application/rental of a construction meter to monitor/read water use during construction and associated deposit costs

Summary of Feasibility for Construction Water Source

Feasible; likely dependent on construction project location.

SDG&E Construction Water Sourcing Investigation

Individual Supplier Info

Agency:	Otay Water District
Contact person:	Dan Martin
Job title:	Engineering Manager
Phone number:	619-670-2243; dan.martin@otaywater.gov
Date Contacted:	April 02, 2015

Overview

The Otay Ranch Water District serves a wide spectrum of communities including southern El Cajon, La Mesa, Rancho San Diego, Jamul, Spring Valley, Bonita, eastern City of Chula Vista, East Lake, Otay Ranch and Otay Mesa areas.

Discussion of Water Availability

Availability:

The Otay Ranch Water District imports both raw water and treated water through separate pipelines for delivery. Existing potable water supply sources available include the Water Authority, Helix WD, and the City of San Diego.

Water Use:

44,883 AFY (2015 Projection)

By use category/sector (i.e., 80% Agricultural, 20% Residential, etc.) if known:

For 2015 projection, about 60% of deliveries would serve the Residential community.

Types of Local Supply (*Recycled? Others? Available for Purchase?*)

The Otay Water District's water sources are a combination of imported and recycled water. Imported water is provided by the SDCWA. The imported water is projected to comprise about 91 percent of the District's water supply in 2015. Recycled water is projected to comprise about 9 percent.

Current and Projected Supplies:

These are the projected water supplies available to the Otay Water District (total 44,883 AFY):

- SDCWA (Water Authority) 40,483 AFY (Projected 2015)
- Recycled Water 4,400 AFY (Projected 2015)

Major Infrastructure (i.e., treatment plants):

Ralph W. Chapman Water Recycling Facility, capacity of 1.3 mgd

Costs:

Requires the application/rental of a construction meter to monitor/read water use during construction and associated deposit costs. Commercial rates for potable and recycled follow a tiered schedule per unit sold.

Limits on Volume:

No limit available at this time. Limits are subject to water district and SDCWA approval based on scale and magnitude of construction project and associated water use (both projected volume and water use

type—e.g., grading); need to authorize new projects based on current/existing demands and anticipated water use associated with new project.

Access Options:

Potable and recycled water resources would be accessed through local fire hydrants (public/ private). Water must be used within service area. Truck hauling rates are available.

Access Locations

Potable water can be found in various locations throughout the service area. Recycled water is available and limited to the Chula Vista area only. Recycled water cannot be taken across watershed boundaries.

Permitting/ Acquisition Process and Costs

Requires the application/rental of a construction meter to monitor/read water use during construction and associated deposit costs

Summary of Feasibility for Construction Water Source

Feasible; contingent upon magnitude and location of temporary construction projects. No recycled water available.

SDG&E Construction Water Sourcing Investigation

Individual Supplier Info

Agency:	Padre Dam Municipal Water District
Contact person:	Courtney Mail
Job title:	Development Engineer
Phone number:	619-258-4640
Date Contacted:	April 03, 2015

Overview

Padre Dam's 85 square mile service area is located approximately 20 miles east of downtown San Diego, California. The District's population of 91,670 (2010) resides in the City of Santee, the City of El Cajon, and the unincorporated communities of Blossom Valley, Crest, Harbison Canyon and Alpine. The service area is split into the western service area and eastern service area. The western service area covers most of the Santee Valley and encompasses the City of Santee. Within the western service area, Padre Dam provides potable water service, wastewater collection and treatment, recycled water production and delivery, and park and recreation services. Padre Dam provides potable water service in the eastern service area. The eastern distribution system includes nine pumping stations, 16 pressure zones and 16 pressure reduction stations.

Discussion of Water Availability

Availability:

All (100%) potable water resources are purchased on an ad-hoc basis from the San Diego County Water Authority as needed/based on demand/contingent upon applications for planned construction; SDCWA approval dictates the availability of water supplies for local use on temporary construction projects; therefore, finite information regarding the available water supply is not currently available; Courtney estimated that 10% or less of available water supply would consist of recycled water

Water Use:

16,153 AFY (2015 projection)

By use category/sector (i.e., 80% Agricultural, 20% Residential, etc.) if known:

Approximately 63% of 2015 projection would be delivered to the Residential community

Types of Local Supply (*Recycled? Others? Available for Purchase?*)

- 100% imported; majority potable (approximately 90%); water is also recycled at local treatment facility

Current and Projected Supplies:

14,180 AFY from SDCWA (2015 projection)

2,016 AFY via Water Recycling Facility

16,826 AFY Total

Major Infrastructure (i.e., treatment plants):

Local treatment facility

Costs:

Potable: \$13.72/unit (where one unit is equal to 100 cubic feet [1 HCF] or 748 gallons)

Recycled: \$10.91/unit

Limits on Volume:

- Limits are subject to water district and SDCWA approval based on scale and magnitude of construction project and associated water use (both projected volume and water use type—e.g., grading); only other limits are as defined in Title 22 regarding discharge limits (NPDES)

Access Options:

- Both potable & recycled water resources could be accessed through local fire hydrants; there are also three filling stations within the Padre Dam service area near the City of Santee that could accommodate water trucks; for both hydrant/filling station use, water must be used within the service area – cannot leave boundaries

Access Locations:

- Various locations throughout the service area

Permitting/Acquisition Process and Costs:

- Requires the application/rental of a construction meter to monitor/read water use during construction and associated deposit costs; ‘tailgate’ approval process (hydrology/stormwater experts or whomever would be handling water are vetted/screened for appropriate background & certifications); may require transportation permit to haul water with the City of Santee

Summary of Feasibility for Construction Water Source

Feasible; likely dependent on construction project location; considerably higher cost per unit than other retailers.

SDG&E Construction Water Sourcing Investigation

Individual Supplier Info

Agency:	Rainbow Municipal Water District
Contact person:	Sherry Rebueno
Job title:	Acting District Engineer
Phone number:	760-728-1178 x199
Date Contacted:	April 03, 2015

Overview

RMWD serves the unincorporated communities of Rainbow, Bonsall, and a portion of Fallbrook and Vista covering approximately 51,200 acres. The northern part of RMWD is located north of San Luis Rey River straddling Interstate 15 (I-15) while the southern part is located west of I-15 straddling the San Luis Rey River. RMWD is currently, a single sourced water retailer which depends upon imported water purchased from the SDCWA as one of 24 member agencies of the SDCWA. RMWD receives SDCWA water through nine aqueduct connections. The water supplied to RMWD by the SDCWA is treated prior to delivery to RMWD.

Discussion of Water Availability

Availability:

RMWD imports about 100 percent of its water supply. Future water needs are determined by SDCWA water demand models based on SANDAG population projections and the SDCWA, in their 2010UWMP, commits to provide 21,537 AFY in 2015 and 21,070 AFY in 2020.

Water Use:

21,537 AFY (2015 projection)

By use category/sector (i.e., 80% Agricultural, 20% Residential, etc.) if known:

The projected residential consumption in 2015 is approximately 37% of total demand.

Types of Local Supply (*Recycled? Others? Available for Purchase?*)

As mentioned, RMWD imports about 100 percent of its water supply. No recycled water is available.

Current and Projected Supplies:

21,537 AFY from SDCWA (2015 projection)

21,537 AFY Total (2015 projection)

Major Infrastructure (i.e., treatment plants):

N/A

Costs:

\$3.15/100 cubic ft.

Limits on Volume:

Limits are subject to water district and SDCWA approval based on scale and magnitude of construction project and associated water use (both projected volume and water use type—e.g., grading); need to authorize new projects based on current/existing demands and anticipated water use associated with new project

Access Options:

Potable: Potable water resources would be accessed through local fire hydrants or at the District office. Truck hauling is available on a case-by-case basis.

Recycled

Access Locations:

Potable: Available at the District office (3707 Old Hwy 395, Fallbrook, CA 92028)

Recycled:

Permitting/Acquisition Process and Costs:

- Application for construction meter and associated costs

Summary of Feasibility for Construction Water Source

Feasible; contingent upon magnitude and location of temporary construction projects.

SDG&E Construction Water Sourcing Investigation

Individual Supplier Info

Agency:	Ramona Municipal Water District
Contact person:	Ricardo Soto; rsoto@rmwd.org
Job title:	Engineer
Phone number:	760-788-2260
Date Contacted:	April 06, 2015

Overview

The District provides water for urban and agricultural uses to unincorporated areas in the central area of San Diego County, including the census designated places of Ramona and San Diego Country Estates. The District's service area covers a total of 45,796-acres (72-square miles) and is the eastern boundary of the Water Authority and Metropolitan. The District encompasses the Santa Maria Valley, San Vicente Valley and surrounding hillsides.

Discussion of Water Availability

Availability:

- All (100%) potable & recycled water resources are purchased on an ad-hoc basis from the San Diego County Water Authority as needed/based on demand/contingent upon applications for planned construction; SDCWA approval dictates the availability of water supplies for local use on temporary construction projects; therefore, finite information regarding the available water supply is not currently available; whoever may be requesting the use of water resources is required to provide water usage and location specifics

Water Use:

11,213 AFY (2015 projection)

By use category/sector (i.e., 80% Agricultural, 20% Residential, etc.) if known:

For 2015 projection, about 64% of deliveries would serve the Residential community

Types of Local Supply (*Recycled? Others? Available for Purchase?*)

The District purchases treated and untreated water from the Water Authority; 100% imported; The District also has two surface storage reservoirs available for use, Lake Ramona and Lake Sutherland - Lake Ramona is owned by the District and is filled with untreated water purchased from the Water Authority, Lake Sutherland is owned by the City of San Diego

Current and Projected Supplies:

11,213 AFY via SDCWA (2015 projection)

815 AFY Recycled Water (2015 projection)

12,028 AFY Total (2015 projection)

Major Infrastructure (i.e., treatment plants):

Santa Maria Water Reclamation Plant (SMWRP)

San Vicente Water Reclamation Plant (SVWRP)

Costs:

- \$5.39/unit (where one unit is equal to 100 cubic feet [1 HCF] or 748 gallons)

Limits on Volume:

- Limits are subject to water district and SDCWA approval based on scale and magnitude of construction project and associated water use (both projected volume and water use type—e.g., grading); need to authorize new projects based on current/existing demands and anticipated water use associated with new project

Access Options:

- Both potable & recycled water resources would be accessed through local fire hydrants; some are connected to potable resources, others are connected to untreated water sources; water must be used within service area

Access Locations:

- Various locations throughout the service area; Ricardo estimates that about 25% of the service area would be able to provide access to recycled water

Permitting/Acquisition Process and Costs:

- Requires the application/rental of a construction meter to monitor/read water use during construction and associated deposit costs; meter is hooked up and applicants pay by usage; no other additional permits/associated costs

Summary of Feasibility for Construction Water Source

Feasible; likely dependent on construction project size & location.

SDG&E Construction Water Sourcing Investigation

Individual Supplier Info

Agency:	Rincon del Diablo Municipal Water District
Contact person:	Randy Whitman
Job title:	Engineer
Phone number:	760-745-5522
Date Contacted:	April 06, 2015

Overview

The District is located in northern San Diego County approximately 25 miles north of the City of San Diego. Rincon is a special district providing water and fire protection service within specific boundaries. The District's boundary lines cross into various city and county communities that receive services provided by the District or neighboring agencies. The District's customers are located within the cities of Escondido, San Marcos, and San Diego, and the unincorporated area of San Diego County.

Discussion of Water Availability

Availability:

- All (100%) potable water resources are purchased on an ad-hoc basis from the San Diego County Water Authority as needed/based on demand/contingent upon applications for planned construction; recycled water is purchased from the City of Escondido; SDCWA/City of Escondido approval dictates the availability of water supplies for local use on temporary construction projects; therefore, finite information regarding the available water supply is not currently available; water availability at the retail level is tied to Drought Ordinance Levels 1 – 4

Water Use:

Potable: 6,100 AFY (2015 projection)

Recycled: 3,300 AFY (2015 projection)

Total: 9,400 AFY (2015 projection)

By use category/sector (i.e., 80% Agricultural, 20% Residential, etc.) if known:

About 48% of the 2015 projected water deliveries would be used by the Residential community

Types of Local Supply (*Recycled? Others? Available for Purchase?*)

- 100% of potable water is imported from SDCWA; recycled water is purchased from the City of Escondido

Current and Projected Supplies:

4,100 AF Potable from SDCWA (2015 projection)

5,300 AF from City of Escondido (2015 projection)

9,400 Total (2015 projection)

Costs:

- \$6.08/1,000 gallons for construction water

Limits on Volume:

- Limits are subject to water district and SDCWA approval based on scale and magnitude of construction project and associated water use (both projected volume and water use type—e.g., grading)

Access Options:

- Both potable & recycled water resources would be accessed through local fire hydrants

Access Locations:

- Various locations throughout the service area; very limited hydrant locations

Permitting/Acquisition Process and Costs:

- Requires the application/rental of a construction meter to monitor/read water use during construction and associated deposit costs; associated costs include \$2,250 deposit for construction meter, \$31 for meter relocation; variable costs, such as diameter/size of construction meter, and other miscellaneous charges can be seen here:

<http://www.rinconwater.org/images/Rincon/Rates%20090114.pdf>

Summary of Feasibility for Construction Water Source

Feasible; likely dependent on construction project location; limited hydrant access could potentially be an issue.

SDG&E Construction Water Sourcing Investigation

Individual Supplier Info

Agency:	San Dieguito Water District
Contact person:	Christina Olson
Job title:	Assistant Engineer
Phone number:	760-633-2792
Date Contacted:	April 03, 2015

Overview

The San Dieguito Water District (District) provides potable water to approximately 38,974 residents through roughly 11,400 meters in the communities of Old Encinitas, Cardiff-by-the-Sea, New Encinitas and Leucadia within the City of Encinitas.

Availability

The District obtains water from Lake Hodges and imports treated and untreated water from the SDCWA. A small amount of recycled water is currently available for limited uses.

Water Use:

6,731 AFY (2015 Projection)

By use category/sector (i.e., 80% Agricultural, 20% Residential, etc.) if known:

For a 2025 projection, about 80% of deliveries would serve Residential uses.

Types of Local Supply (*Recycled? Others? Available for Purchase?*)

The Otay Water District's water sources are a combination of imported treated and raw water, surface diversions at Lake Hodges and recycled water. Imported water is provided by the SDCWA. The imported water is projected to comprise about 61 percent of the District's water supply in 2015. Recycled water is projected to comprise about 1 percent.

Current and Projected Supplies:

These are the projected water supplies available to the San Dieguito Water District (total of 7,761 AFY):

- SDCWA (Water Authority) 4,729 AFY (Projected 2015)
- Surface water 2,432 AFY (Projected 2015)
- Recycled water 600 AFY (Projected 2015)

Major Infrastructure (i.e., treatment plants):

Lake Hodges Reservoir

San Elijo Water Pollution Control Facility

Carlsbad Water Reclamation Facility

Costs:

Potable: \$4.64 per 100 cubic ft.

Recycled: \$3.94 per 100 cubic ft.

Limits on Volume:

No limit available at this time. Limits are subject to water district and SDCWA approval based on scale and magnitude of construction project and associated water use (both projected volume and water use type—e.g., grading); need to authorize new projects based on current/existing demands and anticipated water use associated with new project.

Access Options:

Potable and recycled water resources would be accessed through local fire hydrants (public/ private). Water must be used within service area. Truck hauling rates are available.

Access Locations:

Potable and recycled water can be found in various locations throughout the service area. Recycled water is available and currently limited to golf course, landscape irrigation, public land, and San Elijo Water Reclamation use. Recycled water cannot be taken across watershed boundaries.

Permitting/Acquisition Process and Costs:

Requires the application/rental of a construction meter to monitor/read water use during construction and associated deposit costs. A tanker meter installation fee costs \$200. The tanker meter deposit costs \$1,000. The deposit on water- tanker meter is \$250. Total meter fees and deposit is \$1,450. A backflow preventer will be required if hooked up to a hose or piping system. Once tanker meter is ready for pick up after construction is complete, call (760) 633-2709 for service. Tanker meters are billed monthly: \$50 monthly service charge and \$4.64 per unit of potable water consumption.

The SDWD Applicant Fee and Deposit Form is available here:

<http://encinitasca.gov/modules/showdocument.aspx?documentid=4511>

A recycled water User Permit is required. The following are the steps involved in acquiring this permit: 1) User Permit Conditions; 2) Plan Approval; 3) User Permit Issuance; 4) Construction Inspection; 5) Final Inspection; 6) Surveillance. Details are available here:

<http://encinitasca.gov/modules/showdocument.aspx?documentid=3600>

Summary of Feasibility for Construction Water Source

Feasible; contingent upon magnitude and location of temporary construction projects.

SDG&E Construction Water Sourcing Investigation

Individual Supplier Info

Agency:	Santa Fe Irrigation District
Contact person:	Bill Hunter
Job title:	District Engineer
Phone number:	858-414-9120
Date Contacted:	April 06, 2015

Overview

The District provides retail water supply to approximately 19,400 residents within the City of Solana Beach, and the communities of Rancho Santa Fe and Fairbanks Ranch located within unincorporated areas of the County of San Diego. The District's 16-square mile area is supplied by three water sources: imported raw and treated water, local surface water, and recycled water.

The District service area contains approximately 10,200 acres, of which 2,850 acres are in Solana Beach, 6,490 acres are in Rancho Santa Fe, and 920 acres are in Fairbanks Ranch.

Discussion of Water Availability

Availability:

The District obtains its potable water supply from two sources: local surface water from Lake Hodges and imported raw and treated water purchased from SDCWA.

Water Use

10, 506 AFY (2015 Projection)

By use category/sector (i.e., 80% Agricultural, 20% Residential, etc.) if known

For a 2015 projection, about 87% of deliveries would serve Residential uses.

Types of Local Supply (*Recycled? Others? Available for Purchase?*)

The Santa Fe Irrigation Water District's water sources are a combination of imported treated and raw water (combined 70%), local surface water at Lake Hodges (26%) and recycled water (4%). Imported water is provided by the SDCWA.

Current and Projected Supplies:

These are the projected water supplies available to the San Dieguito Water District (total of 11, 206 AFY):

- SDCWA (Water Authority) 7, 438 AFY (Projected 2015)
- Surface water 3, 268 AFY (Projected 2015)
- Recycled water 500 AFY (Projected 2015)

Major Infrastructure (i.e., treatment plants):

R.E. Badger Filtration Plant

Costs:

Potable: 4.39 per 100 cubic ft.

Recycled: \$3.19 per 100 cubic ft.

Limits on Volume:

No limit available at this time. Limits are subject to water district and SDCWA approval based on scale and magnitude of construction project and associated water use (both projected volume and water use type – e.g. grading, etc.); need to authorize new projects based on current/existing demands and anticipated water use associated with new project.

Access Options:

Potable and recycled water resources would be accessed through local fire hydrants. Truck hauling rates are available and can be used to haul recycled water from the western parts of the district to the eastern parts.

Access Locations:

Potable and recycled water can be found in various locations throughout the service area. Recycled water is currently available only in the western portion of the district.

Permitting/Acquisition Process and Costs:

Requires the application/rental of a construction meter to monitor/read water use during construction and associated deposit costs. The tanker meter deposit costs \$1,080 (\$1,000 returned and \$80 for service).

Summary of Feasibility for Construction Water Source

Feasible; contingent upon magnitude and location of temporary construction projects.

SDG&E Construction Water Sourcing Investigation

Individual Supplier Info

Agency:	South Coast Water District
Contact person:	Joe McDivitt
Job title:	Operations Manager
Phone number:	949-499-3122
Date Contacted:	April 13, 2015 (Lana Remington)

Overview

SCWD is situated in Orange County, approximately 60 miles south of Los Angeles and encompassing an area of approximately 5,300 acres, along the southern coastline of Orange County. SCWD is a special district, operating under state law, completely independent of county government. SCWD provides the core services of potable water production and distribution, recycled water distribution, and wastewater collection to a total population of nearly 39,000 residents, as well as hundreds of thousands of visitors each year. SCWD provides water to a population of 38,641 throughout its 8.3 square mile service area. SCWD receives its water from two main sources, the San Juan Basin, which is managed by the San Juan Basin Authority (SJBA) and imported water from the Municipal Water District of Orange County (MWDOC). Approximately 20% of SCWD's water supply comes from a single well of its Groundwater Recovery Facility along with recycled water that is treated at the Coastal Treatment Plant. Imported water is treated at the Diemer Filtration Plant and is delivered to SCWD through two imported water connections as well as the Joint Regional Water Supply System (JRWSS) which operated, maintained, and administered by SCWD.

Discussion of Water Availability

Availability:

Since potable resources are purchased on an ad-hoc basis from the San Diego County Water Authority as needed/based on demand/contingent upon applications for planned construction, SDCWA approval dictates the availability of water supplies for local use on temporary construction projects. Therefore, finite information regarding the available water supply is not currently available.

Water Use:

8,208 AFY

By use category/sector (i.e., 80% Agricultural, 20% Residential, etc.) if known:

For 2015 projection, about 57.8% would be used by the Residential community

Types of Local Supply (*Recycled? Others? Available for Purchase?*)

SCWD's main sources of water supply are a combination of imported water, local groundwater, and recycled water. In 2010, SCWD relied on 9% local groundwater, 11% recycled water, and 80% imported water. SCWD receives its water from two main sources, the San Juan Basin, which is managed by the San Juan Basin Authority (SJBA) and imported water from the Municipal Water District of Orange County (MWDOC).

Current and Projected Supplies:

5,805 AFY from MWDOC

1,300 AFY San Juan Basin (GRP)

1,100 Recycled Water

8,208 AFY Total

Major Infrastructure (i.e., treatment plants):

Groundwater Recover Facility

Coastal Treatment Plant

Diemer Filtration Plant

Costs:*Potable:* \$4.13/HCF*Recycled:* \$3.72/HCF**Limits on Volume**

Limits are subject to water district and MWDOC approval based on scale and magnitude of construction project and associated water use (both projected volume and water use type—e.g., grading); need to authorize new projects based on current/existing demands and anticipated water use associated with new project

Access Options:*Potable:* N/A*Recycled:***Access Locations:***Potable:* N/A*Recycled:***Permitting/Acquisition Process and Costs:**

- Application for construction meter and associated costs

Summary of Feasibility for Construction Water Source

Feasible; contingent upon magnitude and location of temporary construction projects.

SDG&E Construction Water Sourcing Investigation

Individual Supplier Info

Agency:	Sweetwater Authority (South Bay Irrigation District)
Contact person:	Ron Mosher
Job title:	Director of Engineering
Phone number:	619-409-6750
Date Contacted:	April 03, 2015

Overview

Sweetwater's water system provides water service to a population of approximately 179,485 within the City of National City, a portion of the City of San Diego, and the South Bay Irrigation District, which consists of a portion of the City of Chula Vista, and the unincorporated portion of the County of San Diego known as Bonita. The Sweetwater service area covers 36.5 square miles and contains approximately 33,180 service connections.

Discussion of Water Availability

Availability:

All (100%) potable water resources are purchased on an ad-hoc basis from the San Diego County Water Authority as needed/based on demand/contingent upon applications for planned construction; SDCWA approval dictates the availability of water supplies for local use on temporary construction projects; therefore, finite information regarding the available water supply is not currently available; Ron stated that, historically, there has not been a major construction draw – 'several' AFY (acre-feet/year); Sweetwater does not produce or distribute recycled water

Water Use:

25,296 AFY (2015 projection for all of Sweetwater, not just SBID – SBID estimate not available)

By use category/sector (i.e., 80% Agricultural, 20% Residential, etc.) if known:

Approximately 72% of 2015 projection would be delivered to Residential communities

Types of Local Supply (*Recycled? Others? Available for Purchase?*)

Historically, Sweetwater has obtained its water from four sources: imported treated and untreated water from the Water Authority; surface runoff from the Sweetwater River watershed, which is fully appropriated to Sweetwater; the National City well field, and a brackish groundwater desalination facility. In addition, the system has emergency water connections to three other water agencies including Otay Water District, the City of San Diego, and the California American Water Company.

Currently however, as stated by Ron, Sweetwater's (SBID's) potable water supply is 100% imported; there are no options for recycled water and no raw water supplies; the Loveland and Sweetwater Reservoirs have been appropriated and are at minimum levels

Current and Projected Supplies:

12,200 AFY Local Supply (2015 projection for all of Sweetwater, not just SBID – SBID estimate not available)

13,096 AFY Imported Supply (2015 projection for all of Sweetwater, not just SBID – SBID estimate not available)

25,296 AFY Total (2015 projection for all of Sweetwater, not just SBID – SBID estimate not available)

Note: Since these figures were projected in the UWMP, the local supply has diminished. SBID & Sweetwater would rely 100% on imports. Therefore, the estimated supply is likely lower than indicated here.

Major Infrastructure (i.e., treatment plants):

Robert A. Perdue Water Treatment Plant – treatment capacity of 30 mgd (Sweetwater Authority)

Costs:

\$5.85/unit (where one unit is equal to 100 cubic feet [1 HCF] or 748 gallons); equivalent cost of \$7.82 per 1,000 gallons

Limits on Volume:

Limits are subject to water district and SDCWA approval based on scale and magnitude of construction project and associated water use (both projected volume and water use type—e.g. grading)

Access Options:

Potable water resources would be accessed through local fire hydrants; water cannot leave service area

Access Locations:

Fire hydrants for potable water are located throughout the service area

Permitting/Acquisition Process and Costs:

Requires the application/rental of a construction meter to monitor/read water use during construction and associated deposit costs

Summary of Feasibility for Construction Water Source

Feasible; likely dependent on construction project size & location.

SDG&E Construction Water Sourcing Investigation

Individual Supplier Info

Agency:	Vallecitos Water District
Contact person:	Nick Koonce
Job title:	Engineering Tech
Phone number:	760-752-7177
Date Contacted:	April 03, 2015

Overview

Vallecitos Water District's service area encompasses approximately 45 square miles and serves the City of San Marcos, and parts of the cities of Carlsbad, Escondido, Vista and the County of San Diego.

Discussion of Water Availability

Availability:

All (100%) potable resources are purchased on an ad-hoc basis from the San Diego County Water Authority as needed/based on demand/ contingent upon applications for planned construction; SDCWA approval dictates the availability of water supplies for local use on temporary construction projects; therefore, finite information regarding the available water supply is not currently available; whoever may be requesting the use of water resources is required to provide water usage and location specifics.

Water Use:

20,963 AFY (2015 Projection)

By use category/sector (i.e., 80% Agricultural, 20% Residential, etc.) if known:

For 2015 Projection, about 91% of deliveries would serve the Residential community.

Types of Local Supply (*Recycled? Others? Available for Purchase?*)

The District obtains 100% of its water supply from the SDCWA. Recycled water is produced at the Meadowlark Water Reclamation Facility within the district. However, this water is contracted to be sold to Calleguas Municipal Water District and Olivenhain Municipal Water District.

Current and Projected Supplies:

Planned source of water from the SDCWA: 27,109 AFY (Projected 2015)

Major Infrastructure (i.e., treatment plants):

The District operates nine pump stations (including the Meadowlark Hydropneumatic Pump Station), which all feed directly to storage tanks in the system. The District operates and maintains 20 potable water reservoirs, with a total existing storage capacity of 121.6 million gallons.

Costs:

Potable only: \$6.95/unit (748 gallons)

Limits on Volume:

No limit available at this time. Limits are subject to water district and SDCWA approval based on scale and magnitude of construction project and associated water use (both projected volume and water use type—e.g., grading); need to authorize new projects based on current/existing demands and anticipated water use associated with new project.

Access Options:

Potable water resources would be accessed through local fire hydrants. Water must be used within service area. Truck hauling rates at fill stations are available.

Access Locations:

Potable can be found in various locations throughout the service area, with restrictions limited to hydrant location.

Permitting/ Acquisition Process and Costs:

Requires the application/rental of a construction meter to monitor/read water use during construction and associated deposit costs.

Meter Deposit: \$1,250 (\$1,000 refundable)

Fill Stations: \$65 per day charge. Total allowance of 10,000 gallons per day. No meter required.

Will serve for admin fees for both meters and fill stations: \$172.52

Summary of Feasibility for Construction Water Source

Feasible; contingent upon magnitude and location of temporary construction projects.

SDG&E Construction Water Sourcing Investigation

Individual Supplier Info

Agency:	Valley Center Municipal Water District
Contact person:	Patricia Garcia
Job title:	GIS/ Engineering Services Supervisor
Phone number:	760-735-4500
Date Contacted:	April 06, 2015

Overview

The Valley Center Water District covers an area of approximately 100 square miles of which 58 percent receives water service from the District.

Discussion of Water Availability

Availability:

All (100%) potable resources are purchased on an ad-hoc basis from the San Diego County Water Authority as needed/based on demand/ contingent upon applications for planned construction; SDCWA approval dictates the availability of water supplies for local use on temporary construction projects; therefore, finite information regarding the available water supply is not currently available; whoever may be requesting the use of water resources is required to provide water usage and location specifics. If Drought Level is raised from Level 2 to Level 3, no new construction meters would be available.

Water Use:

9,290 AFY (2015 Projection)

By use category/sector (i.e., 80% Agricultural, 20% Residential, etc.) if known:

For 2015 projection, about 78% of deliveries would serve the Residential community.

Types of Local Supply (*Recycled? Others? Available for Purchase?*)

The District relies almost entirely (99.9%) on water supply sourced from the SDCWA. No recycled water is available.

Current and Projected Supplies:

Planned source of water from the SDCWA: 45,968 AFY (Projected 2015)

Major Infrastructure (i.e., treatment plants):

The District operates 42 closed reservoirs with a maximum closed reservoir capacity of 421 ac-ft, 1 open reservoir with a maximum capacity of 1,612 ac-ft, and 26 pump stations.

Costs:

Potable only: \$3.9970 per 100 ac-ft of water

Limits on Volume:

No limit available at this time. Limits are subject to water district and SDCWA approval based on scale and magnitude of construction project and associated water use (both projected volume and water use type—e.g., grading); need to authorize new projects based on current/existing demands and anticipated water use associated with new project. If Drought Level is raised from Level 2 to Level 3, no new construction meters would be available.

Access Options:

Potable water resources would be accessed through local fire hydrants. Water must be used within service area. Truck hauling rates at fill stations are available.

Access Locations:

Potable can be found in various locations throughout the service area, with restrictions tied to hydrant locations.

Permitting/ Acquisition Process and Costs:

Requires the application/rental of a construction meter to monitor/read water use during construction and associated deposit costs. Apply through the District – Administrative Main office.

Meter Deposit: \$1,200

Fill Stations: \$240-\$475 per day charge.

Summary of Feasibility for Construction Water Source

Feasible; contingent upon magnitude and location of temporary construction projects.

SDG&E Construction Water Sourcing Investigation

Individual Supplier Info

Agency:	Vista Irrigation District
Contact person:	Albert Ducasin
Job title:	Engineering Dept Manager
Phone number:	760-597-3124
Date Contacted:	April 10, 2015

Overview

Vista (VID) covers an area of approximately 21,200 acres that includes the city of Vista and portions of Escondido, Oceanside, and San Marcos, and unincorporated areas of San Diego County. All water delivered by VID is filtered and includes imported water purchased from Water Authority and local water from VID's Lake Henshaw Facilities.

Discussion of Water Availability

Availability:

VID receives 30% of its water from Lake Henshaw and 70% from the Water Authority.

Water Use:

21,491 AFY (2015 Projection)

By use category/sector (i.e., 80% Agricultural, 20% Residential, etc.) if known:

For 2015 projection, about 68% of deliveries would serve Residential uses.

Types of Local Supply (*Recycled? Others? Available for Purchase?*)

Local surface water supply – 5,411 AFY (2015 projection) + SDCWA potable supply

Current and Projected Supplies:

Planned source of water from the SDCWA: 16,989 AFY (Projected 2015)

VID surface water diversions: 5,411 AFY (Projected 2015)

Total: 22,400 (Projected 2015)

Major Infrastructure (i.e., treatment plants):

Lake Henshaw - 52,000 AF capacity, water supply reservoir

Costs:

Potable: \$3.73–\$4.27/unit (748 gallons)

Limits on Volume:

No limit available at this time. Limits are subject to water district and SDCWA approval based on scale and magnitude of construction project and associated water use (both projected volume and water use type—e.g., grading); need to authorize new projects based on current/existing demands and anticipated water use associated with new project.

Access Options

Potable water resources would be accessed through local fire hydrants. Water must be used within service area.

Access Locations:

Potable can be found in various locations throughout the service area, with restrictions tied to hydrant locations.

Permitting/Acquisition Process and Costs:

Requires the application/rental of a construction meter to monitor/read water use during construction and associated deposit costs.

Deposit for meter: \$2,982

Summary of Feasibility for Construction Water Source

Feasible; contingent upon magnitude and location of temporary construction projects.

SDG&E Construction Water Sourcing Investigation

Individual Supplier Info

Agency:	Yuima Municipal Water District
Contact person:	Jolyn Duff; Lori Johnson
Job title:	Administrative Assistant
Phone number:	760-742-3704
Date Contacted:	April 10, 2015

Overview

Yuima Municipal Water District is located in the Pauma Valley in Northern San Diego County and encompasses 13,460 acres (21 square miles). A vast majority of the water sold to customers within the District are used for agricultural purposes.

Discussion of Water Availability

Availability:

The District's demand is 97% agricultural and highly seasonal in nature. Recent sustained drought conditions have increased the probability that adjacent land owners would seek a source of supplemental imported water through an annexation application. Available water supply is constrained both by the well production and limitation on sales by SDCWA.

Jolyn does not anticipate Yuima having any potable water available for use on temporary construction projects; do not have recycled water for use within the service area; Public Records request indicates that historical/metered water usage associated with temporary construction projects for the months of January, February and March of 2015 totaled 60 HCF, 25 HCF and 5 HCF, respectively

Water Use:

8,900 AFY (2015 projection)

By use category/sector (i.e., 80% Agricultural, 20% Residential, etc.) if known:

N/A

Types of Local Supply (*Recycled? Others? Available for Purchase?*)

Yuima has two sources of potable water: locally produced groundwater and imported water purchase through the SDCWA. Local groundwater is supplied by 14 District-owned wells and 7 private wells which are operated by the District under cooperative agreements. The combined capacity in 2005 was approximately 4,300 AFY. The District has connections to the First San Diego Aqueduct, which can import water at a maximum rate of 12,308 AFY.

Jolyn indicated that about half of the water is from local groundwater supplies; the other half is imported from the SDCWA

Current and Projected Supplies:

N/A

Major Infrastructure (i.e., treatment plants):

N/A

Costs:

\$0.50 per 100 gallons (+ specific pump zone charge); \$350 construction meter installation fee; \$300 meter deposit; \$294.01 monthly rental fee

Limits on Volume:

Limits are subject to water district and SDCWA approval based on scale and magnitude of construction project and associated water use (both projected volume and water use type—e.g., grading); need to authorize new projects based on current/existing demands and anticipated water use associated with new project

Access Options:

Water would be accessed through local fire hydrants

Access Locations:

Various locations throughout the service area

Permitting/Acquisition Process and Costs:

Requires the application/rental of a construction meter to monitor/read water use during construction and associated deposit costs; meter is hooked up and applicants pay by usage; no other additional permits/associated costs

Summary of Feasibility for Construction Water Source

Not feasible.

Appendix B
**SDG&E – CA Department of Public Health
Backcountry Suppliers**

SAN DIEGO DISTRICT

- **Organization Name:** DWFOB -- San Diego District Office
- **District Engineer:** Sean Sterchi
- **Export:** [Register](#) and sign-in to export all service areas in SAN DIEGO DISTRICT as Shapefile, KML, or KMZ

DISTRICT (OR LPA) WATER SYSTEMS

[Advanced Filtering/Sorting \(Off\)](#) ▼

1. ANZA BORREGO SP - HORSE CAMP (CA3710305)
2. ANZA BORREGO SP - PALM CANYON (CA3710302)
3. ANZA BORREGO SP - TAMARISK GROVE (CA3710306)
4. ANZA BORREGO SP - VALLECITO (CA3710320)
5. BORREGO WD (CA3710036)
6. BRAWLEY, CITY OF (CA1310001)
7. CALEXICO, CITY OF (CA1310002)
8. CALIFORNIA-AMERICAN WATER CO (CA3710001)
9. CALIPATRIA STATE PRISON (CA1310800)
10. CALTRANS TECATE CVEF (CA3710050)
11. CALTRANS, BUCKMAN SPRINGS REST AREA (CA3701021)
12. CALTRANS, SAND HILL REST STOP (CA1300583)
13. CAMP PENDLETON (NORTH) (CA3710700)
14. CAMP PENDLETON (SOUTH) (CA3710702)
15. CAMPO HILLS-COUNTY PUBLIC WORKS WASTEWTR (CA3710047)
16. CARLSBAD MWD (CA3710005)
17. CENTINELA STATE PRISON (CA1310801)
18. CHP CALEXICO PORT OF ENTRY (CA1310017)
19. CUYAMACA SP - GREEN VALLEY (CA3710312)
20. CUYAMACA SP - PASO PICACHO (CA3710311)
21. DEL MAR - CITY OF (CA3710004)
22. DESCANSO COMMUNITY WD (CA3710009)

23. **DHS - CALEXICO (CA1310019)**
24. **DHS BOULEVARD BORDER PATROL (CA3710051)**
25. **EL CENTRO, CITY OF (CA1310004)**
26. **ESCONDIDO, CITY OF (CA3710006)**
27. **FALLBROOK PUD (CA3710008)**
28. **GSA CALEXICO PORT OF ENTRY (CA1310016)**
29. **GSA TECATE PORT OF ENTRY (CA3710048)**
30. **GSWC, CALIPATRIA (CA1310003)**
31. **HEBER DUNES - SVRA (CA1310301)**
32. **HEBER PUBLIC UTILITY DISTRICT (CA1310007)**
33. **HELIX WATER DISTRICT (CA3710010)**
34. **HOLTVILLE, CITY OF (CA1310005)**
35. **IMPERIAL IRRIGATION DISTRICT (CA1310014)**
36. **IMPERIAL, CITY OF (CA1310006)**
37. **JACUMBA COMMUNITY SD (CA3710011)**
38. **JULIAN COMMUNITY SERVICES DISTRICT (CA3700909)**
39. **LA CIMA FIRE CENTER (CA3710802)**
40. **LAKE MORENA OAK SHORES MW CO. (CA3700923)**
41. **LAKESIDE WD (CA3710013)**
42. **MAJESTIC PINES COMMUNITY SD (CA3710041)**
43. **MCCAIN VALLEY CC (CA3710801)**
44. **N.A.F. EL CENTRO (CA1310700)**
45. **NAS NORTH ISLAND & NAB CORONADO (CA3710750)**
46. **OCEANSIDE, CITY OF (CA3710014)**
47. **OCOTILLO WELLS - HOLMES CAMP (CA3710319)**
48. **OCOTILLO WELLS SMVRA - HQ (CA3710301)**
49. **OLIVENHAIN MWD (CA3710029)**
50. **OTAY WATER DISTRICT (CA3710034)**
51. **PADRE DAM MWD (CA3710037)**
52. **PALOMAR MTN. SP - DOANE VALLEY (CA3710316)**
53. **PALOMAR MTN. SP - SILVER CREST (CA3710317)**
54. **PICACHO STATE RESERVATION AREA (CA1310300)**
55. **PINE HILLS MUTUAL WATER COMPANY (CA3700905)**
56. **PINE VALLEY BORDER PATROL STATION (CA3710049)**
57. **PINE VALLEY MUTUAL WC (CA3710039)**
58. **POWAY - CITY OF (CA3710015)**

- 59. PUERTA LA CRUZ CC #14 (CA3710800)
- 60. RAINBOW MUNICIPAL WD (CA3710016)
- 61. RAMONA MUNICIPAL WD (CA3710019)
- 62. RANCHO PAUMA MUTUAL WC (CA3710012)
- 63. RINCON DEL DIABLO MWD (ID-1) (CA3710018)
- 64. RINCON DEL DIABLO MWD (ID-A) (CA3710044)
- 65. SAN DIEGO - CITY OF (CA3710020)

→ [Register to edit service area boundaries and survey](#)

→ **Survey questions:**

Is service area described by...

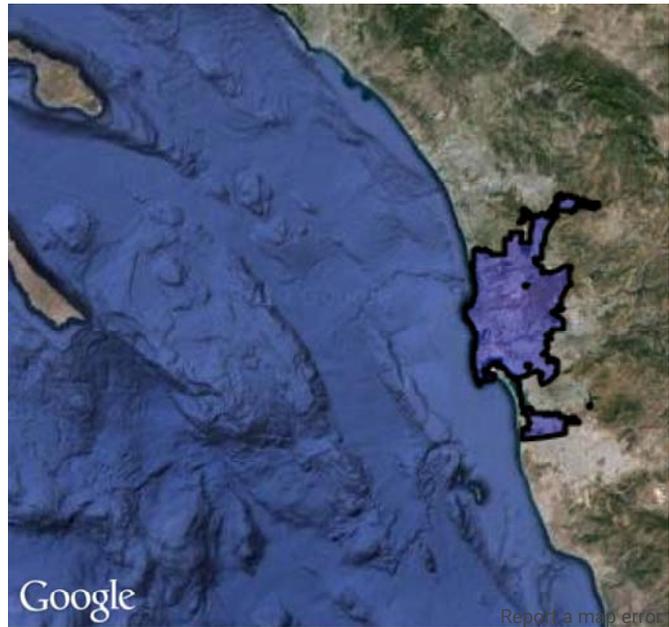
1. ... municipal boundaries? **true**
2. ... US Census Tracts? **Not answered**
3. ... voting precincts? **Not answered**
4. ... distribution lines? **Not answered**
5. ... connection addresses? **Not answered**
6. ... customers' streets? **Not answered**
7. ... US Census Blocks? **Not answered**
8. ... US Census Block Groups? **Not answered**
9. ... some other feature (if yes, please describe below)? **Not answered**
10. Description of other service area attribute: **Not provided**

→ Export service area boundary (1) as: [Shapefile](#) or [KML](#) / [KMZ](#)

- 66. SAN DIEGO COUNTY WATER AUTHORITY (CA3710042)
- 67. SAN DIEGUITO WD (CA3710021)
- 68. SAN PASQUAL BATTLEFIELD STATE PARK (CA3710318)
- 69. SANTA FE I.D. (CA3710023)
- 70. SEELEY CWD (CA1310013)
- 71. SONNY BONO SALTON SEA WILDLIFE REFUGE (CA1310302)
- 72. SWEETWATER AUTHORITY (CA3710025)
- 73. UC DESERT RESEARCH AND EXTENSION CENTER (CA1300571)
- 74. USN SAN CLEMENTE ISLAND (CA3710707)

1 boundary in system

[Maximize](#)



- 75. **USN SERE CAMP WARNER SPRINGS (CA3710706)**
- 76. **VALLECITOS WD (CA3710002)**
- 77. **VALLEY CENTER MWD (CA3710026)**
- 78. **VISTA IRRIGATION DISTRICT (CA3710027)**
- 79. **WARNER SPRINGS ESTATES (CA3702354)**
- 80. **WESTMORLAND, CITY OF (CA1310008)**
- 81. **YUIMA MUNICIPAL WATER DISTRICT (CA3701408)**
- 82. **YUIMA MUNICIPAL WATER DISTRICT IDA (CA3700938)**

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Appendix C
**SDG&E – CA Department of Environmental Health
Backcountry Suppliers**

SDG&E Water
Supply Matrix
SDG&E
Construction
Water Sourcing
Investigation
9-Apr-15

System ID	System Name	Type of System	Number of Connections	System Address
3700041	BARRETT LAKE MOBILEHOME PARK	Community Water System #C	39	1250 BARRETT LAKE RD, DULZURA, CA 91917
3700071	HEAVENLY OAKS	Community Water System #C	102	26835 OLD HIGHWAY 80, GUATAY, CA 91931
3700073	H & J WATER CO.	Community Water System #C	34	4835 BELVEDERE DR, JULIAN, CA 92036
3700074	CUYAMACA WATER DISTRICT	Community Water System #C	159	0 CUYAMACA LAKE RD, JULIAN, CA 92036
3700277	SUNRISE ESTATES MW CO.	Community Water System #C	46	20560 BEE VALLEY RD, JAMUL, CA 91935
3700291	OCOTILLO OASIS MH PARK	Community Water System #C	55	5145 HWY 78, BORREGO SPRINGS, CA 92004
3700866	DEL DIOS MUTUAL WATER CO.	Community Water System #C	150	19938 2ND PLACE, ESCONDIDO, CA 92029
3700897	GUATAY MUTUAL BENEFIT CORP.	Community Water System #C	32	0 NORTH SIDE OF OLD HY 80, GUATAY, CA 91931
3700918	RANCHO SANTA TERESA MW CO.	Community Water System #C	37	25056 OAKANA RD, RAMONA, CA 92065
3700919	LAKE WOHLFORD RESORT	Community Water System #C	137	25484 LAKE WOHLFORD RD, ESCONDIDO, CA 92027
3700924	LAKE MORENA VIEWS MW CO.	Community Water System #C	120	29846 MALLARD ROAD, CAMPO, CA 91906
3700933	PALOMAR MOUNTAIN MW CO.	Community Water System #C	197	22212 CRESTLINE RD, PALOMAR MOUNTAIN, CA 92060
3700934	PAUMA VALLEY WATER CO.	Community Water System #C	28	34102 A HAMPTON ROAD, PAUMA VALLEY, CA 92061
3700936	RANCHO ESTATES MUTUAL WATER CO	Community Water System #C	88	14999 HIGHWAY 76, PAUMA VALLEY, CA 92061
3700937	LAZY H MUTUAL WATER CO.	Community Water System #C	45	34928 VALLEY CENTER ROAD, PAUMA VALLEY, CA 92061
3700958	LOS TULES MUTUAL WATER CO.	Community Water System #C	100	32995 CAMINO MORO, WARNER SPRINGS, CA 92086
3700962	OAKVALE PARK	Community Water System #C	125	14900 OAKVALE RD, ESCONDIDO, CA 92027
3700968	SAN PASQUAL ACADEMY	Community Water System #C	42	17701 SAN PASQUAL VALLEY RD
3701184	BUTTERFIELD RANCH	Community Water System #C	75	14925 GREAT SOUTHERN OVERLAND, JULIAN, CA 92036
3701341	QUIET OAKS MH PARK	Community Water System #C	45	26455 PARADISE VALLEY RD, WARNER SPRINGS, CA 92086
3701747	NORTH PEAK MUTUAL WATER CO.	Community Water System #C	92	7465 ENGINEERS RD, JULIAN, CA 92036
3701780	RICHARDSON BEARDSLEY PARK INC.	Community Water System #C	20	4110 TICANU DR, JULIAN, CA 92036
3701793	TWIN LAKES RESORT	Community Water System #C	145	25275 POTRERO VALLEY RD, POTRERO, CA 91963
3701837	WYNOLA WATER DISTRICT	Community Water System #C	87	4839 GLENSIDE RD, SANTA YSABEL, CA 92070
3701934	PINE VALLEY BIBLE CONF. CENTER	Community Water System #C	44	8668 PINE CREEK RD, PINE VALLEY, CA 91962
3701961	PINE VALLEY TRAILER PARK	Community Water System #C	92	27521 OLD HY 80, GUATAY, CA 91931
3701988	ALPINE OAKS ESTATES	Community Water System #C	66	3505 ALPINE BL, ALPINE, CA 91901
3701995	WILLOWSIDE TERRACE WATER ASSOC	Community Water System #C	34	0 WILLOWSIDE TERRACE, ALPINE, CA 91901
3702236	PALOMAR OBSERVATORY	Community Water System #C	27	35899 CANFIELD RD, PALOMAR MOUNTAIN, CA 92060
3700422	STUART WATER CO.	Community Water System #C	30	33908 MOUNT LAGUNA DR, MOUNT LAGUNA, CA 91948
3700900	LAKE HENSHAW WATER CO.	Community Water System #C	101	26439 HWY 76, SANTA YSABEL, CA 92070
3700859	RANCHO DEL CAMPO WATER SYSTEM	Community Water System #C	110	524 - 0 JEB STUART RD, CAMPO, CA 91906
3700922	LIVE OAK SPRINGS WATER COMPANY	Community Water System #C	96	37715 ROYAL OAK PL, BOULEVARD, CA 91905
3701760	LAKE MORENA TRAILER RESORT	Community Water System #C	38	2330 LAKE MORENA DR, CAMPO, CA 91906
3702754	RANCHO CORRIDO RV RESORT	Community Water System #C	120	14715 HWY 76, PAUMA VALLEY, CA 92061
3700018	CAMPO ELEMENTARY SCHOOL	Non-Transient Non-Community Water System #P	4	1654 BUCKMAN SPRINGS RD, CAMPO, CA 91906
3700117	MOUNTAIN EMPIRE HIGH SCHOOL	Non-Transient Non-Community Water System #P	11	3305 BUCKMAN SPRINGS RD, PINE VALLEY, CA 91962
3700174	DIAMOND JACK'S RV RANCH	Non-Transient Non-Community Water System #P	45	15724 LYONS VALLEY RD, JAMUL, CA 91935
3700823	BARRETT HONOR CAMP	Non-Transient Non-Community Water System #P	10	21077 LYONS VALLEY RD, ALPINE, CA 91901
3700912	YMCA CAMP MARSTON/RAINTREE	Non-Transient Non-Community Water System #P	17	4761 PINE HILLS RD, JULIAN, CA 92036

3700953	TECATE VISTA MUTUAL WATER CO.	Non-Transient Non-Community Water System #P	15	444 HWY 188, TECATE, CA 91980
3700963	POTRERO ELEMENTARY SCHOOL	Non-Transient Non-Community Water System #P	19	24875 POTRERO VALLEY RD, POTRERO, CA 91963
3701005	SPENCER VALLEY SCHOOL	Non-Transient Non-Community Water System #P	4	4414 HY 79, SANTA YSABEL, CA 92070
3701010	WARNER UNIFIED SCHOOL DIST.	Non-Transient Non-Community Water System #P	15	30951 HWY 79, WARNER SPRINGS, CA 92086
3701478	PHOENIX HOUSE	Non-Transient Non-Community Water System #P	10	23981 SHERILTON VALLEY RD, DESCANSO, CA 91916
3701909	CAMP CUYAMACA	Non-Transient Non-Community Water System #P	18	12561 HWY 79, DESCANSO, CA 91916
3702283	MOUNT LAGUNA IMPROVEMENT ASSN.	Non-Transient Non-Community Water System #P	180	11670 SUNRISE HWY, MOUNT LAGUNA, CA 91948
3702364	CLOVER FLAT ELEMENTARY SCHOOL	Non-Transient Non-Community Water System #P	5	39639 OLD HY 80, BOULEVARD, CA 91905
3705068	ROUGH ACRES RANCH	Non-Transient Non-Community Water System #P	48	2750 MCCAIN VALLEY RD, BOULEVARD, CA 91905
3700959	WARNER SPRINGS RANCH	Non-Transient Non-Community Water System #P	8	31652 HWY 79, WARNER SPRINGS, CA 92086
3700005	R.L. HUNT WATER COMPANY	State Small Water System #S	8	22365 JANS OAK VIEW, RAMONA, CA 92065
3700055	CAMERON FIRE STATION	State Small Water System #S	5	3110 KITCHEN CREEK RD, PINE VALLEY, CA 91962
3700855	LITTLE ACRES M/H PARK	State Small Water System #S	6	5553 WILLOWS RD, ALPINE, CA 91901
3700857	BORREGO AIR RANCH MW & IMP CO.	State Small Water System #S	5	0 FLETCHER & BORREGO AIR RANCH, BORREGO SPRINGS, CA 92004
3700875	WEST CUCA MUTUAL WATER CO.	State Small Water System #S	10	20001 HWY 76, PAUMA VALLEY, CA 92061
3700899	HARRISON PARK MW CO. 2	State Small Water System #S	8	35159 TWIN OAKS RD, JULIAN, CA 92036
3700926	BAILEY MUTUAL WATER CO.	State Small Water System #S	11	33691 BAILEY MEADOW RD
3701127	BARRETT VALLEY WATER CO.	State Small Water System #S	9	19900 COCHERA VIA, DULZURA, CA 91917
3701567	LAKEVIEW SPRING	State Small Water System #S	11	27413 HWY 76, SANTA YSABEL, CA 92070
3701843	CUYAMACA FOREST MW CO.	State Small Water System #S	14	0 NORTH PEAK RD, JULIAN, CA 92036
3701895	SANTA YSABEL TRAILER PARK	State Small Water System #S	9	21848 CABRILLO ST, SANTA YSABEL, CA 92070
3702135	CANEBRAKE COUNTY WATER DIST.	State Small Water System #S	8	215 CANEBRAKE RD, JULIAN, CA 92036
3702509	RANCHO CORTE MADERA	State Small Water System #S	10	5048 CORTE MADERA RD, PINE VALLEY, CA 91962
3705050	ARYA BONSALL	State Small Water System #S	6	5710 OLIVE HILL RD, BONSALL, CA 92003
3701218	SUMMIT ESTATES MUT WTR CO.	State Small Water System #S	13	35335 PERALTA DR, WARNER SPRINGS, CA 92086
3705057	HARRISON PARK MUTUAL WATER CO.	State Small Water System #S	12	17489 MILE HI RD, JULIAN, CA 92036
3705064	BALLENA VISTA FARM	State Small Water System #S	10	26353 OLD JULIAN HWY, RAMONA, CA 92065
3705066	BAR 2 RANCH	State Small Water System #S	8	14797 HIGHWAY 76, PAUMA VALLEY, CA 92061
3700001	LEAPIN' LIZARD RV RANCH	Transient Non-Community Water System #N	61	5929 KUNKLER LN, BORREGO SPRINGS, CA 92004
3700003	WHISPERING WINDS CAMP	Transient Non-Community Water System #N	13	17606 HARRISON PARK RD, JULIAN, CA 92036
3700011	LOUIS A. STELZER COUNTY PARK	Transient Non-Community Water System #N	10	11470 WILDCAT CANYON RD, LAKESIDE, CA 92040
3700019	MT LAGUNA WATER SYSTEM	Transient Non-Community Water System #N	61	10385 SUNRISE HWY, MOUNT LAGUNA, CA 91948
3700020	ALPINE RANGER STATION	Transient Non-Community Water System #N	5	3348 ALPINE BLVD, ALPINE, CA 91901
3700023	COLEMAN CREEK VILLAGE	Transient Non-Community Water System #N	6	2907 WASHINGTON ST, JULIAN, CA 92036
3700025	CIBBETTS FLATS CAMPGROUND	Transient Non-Community Water System #N	24	0 KITCHEN CREEK & FRED CYN RDS., PINE VALLEY, CA 91962
3700029	DESCANSO FIRE STATION	Transient Non-Community Water System #N	9	24321 VIEJAS GRADE, DESCANSO, CA 91916
3700030	FRY CREEK / OBSERVATORY	Transient Non-Community Water System #N	65	35604 CANFIELD RD, PALOMAR MOUNTAIN, CA 92060
3700035	OAK GROVE COMPLEX	Transient Non-Community Water System #N	36	37560 HWY 79, WARNER SPRINGS, CA 92086
3700036	SAN LUIS REY PICNIC GROUND	Transient Non-Community Water System #N	2	0 HWY 76 6 MILES W LAKE HENSHAW, SANTA YSABEL, CA 92070
3700044	AUERBACH FARMS	Transient Non-Community Water System #N	4	30270 HWY 78, SANTA YSABEL, CA 92070
3700047	T.C. WORTHY CASH & CARRY INC.	Transient Non-Community Water System #N	3	405 TECATE RD, TECATE, CA 91980
3700063	FREEDOM RANCH	Transient Non-Community Water System #N	2	1777 BUCKMAN SPRINGS RD, CAMPO, CA 91906
3700065	SOUTH BAY ROD AND GUN CLUB	Transient Non-Community Water System #N	1	1020 MARRON VALLEY RD, DULZURA, CA 91917
3700072	WILLIAM HEISE COUNTY PARK	Transient Non-Community Water System #N	58	4945 HEISE PARK RD, JULIAN, CA 92036
3700118	CAMPO ALTERNATIVE SCHOOL	Transient Non-Community Water System #N	3	31360 HWY 94, CAMPO, CA 91906
3700235	YOUNG LIFE OAKBRIDGE CAMP	Transient Non-Community Water System #N	9	27224 HWY 78, RAMONA, CA 92065
3700846	AGUA CALIENTE COUNTY PARK	Transient Non-Community Water System #N	141	39555 GREAT SOUTHERN OVERLAND, JULIAN, CA 92036
3700847	HODGES RESERVOIR REC. AREA	Transient Non-Community Water System #N	2	20175 LAKE DR, ESCONDIDO, CA 92029
3700858	SHADY OAKS TRAILER RANCH	Transient Non-Community Water System #N	14	39537 OLD HY 80, BOULEVARD, CA 91905
3700880	CAMP DENVER FOX	Transient Non-Community Water System #N	20	24102 HWY 76, SANTA YSABEL, CA 92070

3700895	EL MONTE COUNTY PARK	Transient Non-Community Water System #N	5	15805 EL MONTE RD, LAKESIDE, CA 92040
3700903	LAKE MORENA COUNTY PARK	Transient Non-Community Water System #N	8	2550 LAKE MORENA DR, CAMPO, CA 91906
3700906	CAMP STEVENS	Transient Non-Community Water System #N	17	1108 BANNER GRADE RD, JULIAN, CA 92036
3700911	WHISPERING OAKS PROGRAM CENTER	Transient Non-Community Water System #N	17	4949 PINE HILLS RD, JULIAN, CA 92036
3700930	POTRERO COUNTY PARK	Transient Non-Community Water System #N	37	25800 POTRERO PARK DR, POTRERO, CA 91963
3700931	VALLECITO COUNTY PARK	Transient Non-Community Water System #N	44	37349 GREAT SOUTHERN OVERLAND, JULIAN, CA 92036
3700970	YOGA CENTER RETREAT	Transient Non-Community Water System #N	5	21410 STATE PARK RD, PALOMAR MOUNTAIN, CA 92060
3701240	YOGA CENTER MOTHERS KITCHEN	Transient Non-Community Water System #N	5	33120 CANFIELD RD, PALOMAR MOUNTAIN, CA 92060
3701241	AL BAHR SHRINE CAMP	Transient Non-Community Water System #N	120	11670 SUNRISE HWY, MOUNT LAGUNA, CA 91948
3701299	SCHOEPE SCOUT RES. LOST VALLEY	Transient Non-Community Water System #N	67	31422 CHIHUAHUA VALLEY RD, WARNER SPRINGS, CA 92086-9302
3701476	INDIAN HILLS CAMP	Transient Non-Community Water System #N	36	15763 LYONS VALLEY RD, JAMUL, CA 91935
3701518	NARCONON FRESH START	Transient Non-Community Water System #N	8	35025 HWY 79, WARNER SPRINGS, CA 92086
3701568	REY RIVER RANCH CORP	Transient Non-Community Water System #N	42	23503 HWY 76, SANTA YSABEL, CA 92070
3701588	JACUMBA VALLEY RANCH	Transient Non-Community Water System #N	7	45346 OLD HIGHWAY 80, JACUMBA, CA 91934
3701594	FEATHERSTONE CANYON CHR. CAMP	Transient Non-Community Water System #N	8	24352 FEATHERSTONE CANYON RD, LAKESIDE, CA 92040
3701882	SPLIT MOUNTAIN PARK	Transient Non-Community Water System #N	80	5525 SPLIT MOUNTAIN RD, BORREGO SPRINGS, CA 92004
3701965	MATAGUAY SCOUT RESERVATION	Transient Non-Community Water System #N	68	27955 HWY 79, SANTA YSABEL, CA 92070
3701982	PALOMAR CHRISTIAN CONF. CENTER	Transient Non-Community Water System #N	22	34764 DOANE VALLEY RD, PALOMAR MOUNTAIN, CA 92060
3702059	SKYLINE RANCH RV PARK & CMPGRD	Transient Non-Community Water System #N	40	17120 SKYLINE TRUCK TRL, JAMUL, CA 91935
3702111	CALEXICO LODGE	Transient Non-Community Water System #N	23	40248 OLD HIGHWAY 80, BOULEVARD, CA 91905
3702181	KQ RANCH CAMPING RESORT	Transient Non-Community Water System #N	250	449 K Q RANCH RD, JULIAN, CA 92036
3702235	MOBILAND CAMPER PARK	Transient Non-Community Water System #N	99	5491 SPLIT MOUNTAIN RD, BORREGO SPRINGS, CA 92004
3702237	BANNER SMALL WATER CO.	Transient Non-Community Water System #N	15	36342 HWY 78, JULIAN, CA 92036
3702302	DESERT IRONWOODS RESORT	Transient Non-Community Water System #N	110	4875 HWY 78, BORREGO SPRINGS, CA 92004
3702319	CAMP WINACKA	Transient Non-Community Water System #N	12	4720 BOULDER CREEK RD, JULIAN, CA 92036
3702338	WESTERN HORIZONS RAMONA CANYON	Transient Non-Community Water System #N	130	24340 HWY 78, RAMONA, CA 92065
3702459	CAMP OLIVER	Transient Non-Community Water System #N	9	8761 RIVERSIDE DR, DESCANSO, CA 91916
3702530	CAMP CEDAR GLEN	Transient Non-Community Water System #N	18	743 FARMER RD, JULIAN, CA 92036
3702686	QUESTHAVEN MUNI WATER DIST.	Transient Non-Community Water System #N	9	20560 Questhaven RD, San Marcos, CA 92078
3702703	DE ANZA SPRINGS RESORT	Transient Non-Community Water System #N	225	1951 CARRIZO GORGE RD, JACUMBA, CA 91934
3702706	HIGH LAND EAST TRAILER PARK	Transient Non-Community Water System #N	24	39375 OLD HIGHWAY 80, BOULEVARD, CA 91905
3702757	BARRETT JUNCTION CAFE	Transient Non-Community Water System #N	4	1020 BARRETT LAKE RD, DULZURA, CA 91917
3705046	MUIR INDUSTRIES	Transient Non-Community Water System #N	6	441 TECATE RD, TECATE, CA 91980
3701884	MOUNTAIN EMPIRE RV PARK/CPGND	Transient Non-Community Water System #N	19	29146 HWY 94, CAMPO, CA 91906
3705051	SUTHERLAND RESERVOIR REC. AREA	Transient Non-Community Water System #N	4	22850 SUTHERLAND DAM RD, RAMONA, CA 92065
3700913	MOLINARI WATER SYSTEM	Transient Non-Community Water System #N	3	4360 HWY 78, JULIAN, CA 92036
3701390	LUX INN	Transient Non-Community Water System #N	2	39739 AVENIDA DE ROBLES VERDES, BOULEVARD, CA 91905
3705056	JESS MARTIN COUNTY PARK	Transient Non-Community Water System #N	2	2955 HWY 79, JULIAN, CA 92036
3700782	FALLBROOK KAMP RETREAT	Transient Non-Community Water System #N	26	41322 DE LUZ RD, FALLBROOK, CA 92028
3700013	DESCANSO JUNCTION	Transient Non-Community Water System #N	5	8306 HWY 79, DESCANSO, CA 91916
3701070	PINECREST	Transient Non-Community Water System #N	85	3936 HWY 79, JULIAN, CA 92036
3700031	SUNSHINE SUMMIT GENERAL STORE	Transient Non-Community Water System #N	3	35230 HWY 79, WARNER SPRINGS, CA 92086
3700033	IRON DOOR	Transient Non-Community Water System #N	2	5460 SPLIT MOUNTAIN RD, BORREGO SPRINGS, CA 92004
3700016	RD'S LOG CABIN	Transient Non-Community Water System #N	1	26650 SAN FELIPE RD, WARNER SPRINGS, CA 92086
3705061	CAMP MORENA	Transient Non-Community Water System #N	8	3080 BUCKMAN SPRINGS ROAD, CAMPO, CA 91906
3705059	SET FREE MINISTRIES	Transient Non-Community Water System #N	5	18985 HIGHWAY 94, DULZURA, CA 91917
3701694	PINEZANITA TRAILER RANCH	Transient Non-Community Water System #N	227	4446 HWY 79, JULIAN, CA 92036
3705058	SYCAMORE CANYON / GOODAN RANCH	Transient Non-Community Water System #N	2	16281 SYCAMORE CANYON RD, LAKESIDE, CA 92071
3705063	EL CAPITAN RESERVOIR REC. AREA	Transient Non-Community Water System #N	4	16850 EL MONTE ROAD, LAKESIDE, CA 92040
3701983	DUDLEY'S BAKERY	Transient Non-Community Water System #N	1	30218 HWY 78, SANTA YSABEL, CA 92070

3700276	OAK KNOLL VILLAGE	Transient Non-Community Water System #N	53	31718 S GRADE RD, PAUMA VALLEY, CA 92061
3700049	POTRERO GENERAL STORE	Transient Non-Community Water System #N	2	25125 HIGHWAY 94, POTRERO, CA 91963
3700873	1000 TRAILS OAKZANITA SPRINGS	Transient Non-Community Water System #N	137	11053 HWY 79, DESCANSO, CA 91916
3702104	THOUSAND TRAILS PIO PICO	Transient Non-Community Water System #N	512	14615 OTAY LAKES RD, JAMUL, CA 91935
3701217	JULIAN OAKS YOUTH MINISTRIES	Transient Non-Community Water System #N	5	1298 HWY 78, JULIAN, CA 92036
3705067	MOM'S PIE HOUSE	Transient Non-Community Water System #N	2	4510 HIGHWAY 78, JULIAN, CA 92036
3702420	STAGECOACH TRLS RV PARK	Transient Non-Community Water System #N	285	7878 GREAT SOUTHERN OVERLAND, JULIAN, CA 92036
3705069	COUNTY LINE BBQ AND CAFÉ	Transient Non-Community Water System #N	3	23446 SR-79, WARNER SPRINGS, CA 92086
3701380	CAMERON CORNERS WATER SYS	Transient Non-Community Water System #N	3	31484 HWY 94, CAMPO, CA 91906
3700952	CROCKER FAMILY TRUST	Transient Non-Community Water System #N	8	35150 HWY 79, WARNER SPRINGS, CA 92086
3700040	WYNOLA PIZZA EXPRESS	Transient Non-Community Water System #N	6	4355 HWY 78, SANTA YSABEL, CA 92070
3705065	OAKOASIS OPEN SPACE PRESERVE	Transient Non-Community Water System #N	4	12620 WILDCAT CANYON RD, LAKESIDE, CA 92040
3705070	WYNOLA FARMS WATER DISTRICT	Transient Non-Community Water System #N	4	4470 HIGHWAY SR-78, JULIAN, CA 92036
3701826	MANZANITA DINER	Transient Non-Community Water System #N	4	40080 OLD HIGHWAY 80, BOULEVARD, CA 91905
3700149	CALVARY CHAPEL JULIAN	Transient Non-Community Water System #N	9	3731 WYNOLA RD, JULIAN, CA 92036-9631
3705071	ALPINE AMERICAN LEGION	Transient Non-Community Water System #N	3	3324 ALPINE BLVD, ALPINE, CA 91901
3705026	ERRECA'S ASSOCIATES	Transient Non-Community Water System #N	7	12560 SLAUGHTERHOUSE CANYON, LAKESIDE, CA 92040
3705072	SANTA MARGARITA COUNTY PRESERV	Transient Non-Community Water System #N	12	37385 DE LUZ ROAD, FALLBROOK, CA 92028
3705074	DALEY RANCH	Transient Non-Community Water System #N	1	0 LA HONDA, Escondido, CA 92027
3701407	SACRED MOUNTAIN INN	Transient Non-Community Water System #N	4	2323 FARMER RD, JULIAN, CA 92036
3700195	OUTDOOR WORLD RV PARK	Transient Non-Community Water System #N	151	1331 SHASTA WAY, BOULEVARD, CA 91905
3705060	CAMPO GROUP	Transient Non-Community Water System #N	3	31471 HIGHWAY 94, CAMPO, CA 91906

Source: California Department of Environmental Health, 2015

Appendix D
**San Diego Local Agency Formation Commission – Draft Profiles
of Special Districts in San Diego County**

DRAFT

PROFILES

OF

SPECIAL DISTRICTS

IN

SAN DIEGO COUNTY

**SERVICE REVIEW AND SPHERE OF INFLUENCE
DATA SUMMARY**

**LOCAL AGENCY FORMATION COMMISSION
2007**

**COMMUNITY SERVICES
DISTRICTS**

BORREGO SPRINGS PARK COMMUNITY SERVICES DISTRICT

CONTACT INFORMATION

3064 Borrego Valley Road
P.O. Box 306
Borrego Springs, CA 92004-0306

Telephone:
FAX: N/A
Website: None

MISSION STATEMENT

None.

(Source: None)

AGENCY PROFILE

Organization history: 1965
District principal act: Gov't Code Sec. 61000-61226.5
Population served: 334
(Source: SANDAG, 2006)
Service area: 1,209 acres

SERVICES PROVIDED

- Water
- Wastewater
- Trash

Sources of water:

Imported: N/A
Local: Well source
Reclaimed: N/A

Number of connections: 271 EDU (2005)

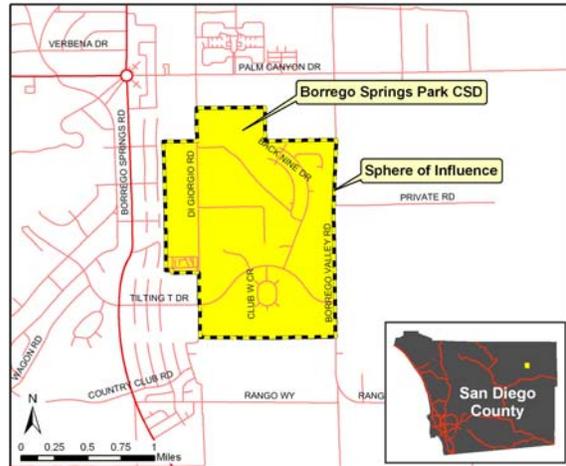
Residential: 171
Agriculture: N/A
Industrial: N/A
Reclaimed: N/A
Irrigation: Golf Course

Public: N/A
Mutual support: N/A
Other: 140 connections (hotel)
Number of public wells: 2

Treated reservoirs:

Potable: 2
Reclaimed: N/A

Capacity of treated storage reservoirs: 20,000 gal.



Potable: N/A

Reclaimed: N/A

Agency planning documents: N/A

(Source: None)

Service regulation:

Fines by regulators for violations within the past three years? Yes; Citations by Department of Environmental Health for groundwater source well quality & CSD ownership.

Total amount of fines, if any: Pending

Regulatory Agency that issued the fines: County of San Diego, Department of Environmental Health

Service enhancement:

Cost avoidance/efficiency strategies: N/A

Governmental opportunities reorganization with neighboring agencies: Yes, Borrego Water District

Other: N/A

Infrastructure improvement:

Major improvements to service delivery sought by agency to address infrastructure/service deficiencies over next five years. Potential consolidation with Borrego WD

Facilities and Services Description:

Two wells (one currently failed)

Non potable source

MANAGEMENT

Number of employees: Part-time / Contracts

Full-time employees: N/A

Part-time employees: N/A

Executive / management to non-executive/
non-management employees ratio: N/A
Staff turnover rate for preceding three fiscal years:
N/A
Professional awards and recognition granted: N/A

FINANCE

Annual District budget (FY 2005-06):
Operating budget: \$341,664
Capital budget: N/A
Financial audits frequency: Unknown
Financing capital replacement method: N/A
Agency revenue:
Revenue derived from charges/fees: \$292,993
Revenue derived from property taxes: \$3,000
Other revenues: \$216
Unrestricted net assets to total revenues: 50%
Bond rating: N/A
Total Agency revenue: \$296,209

GOVERNANCE

Board of Directors
Meeting location:
3064 Borrego Valley Road
P.O. Box 306
Borrego Springs, CA 92004-0306
Date/time of meetings:
Number of Board of Directors (elected/appointed):
5 (elected)
Board vacancies over the past 5 years:
Unknown
Per diem/stipend paid to each Board member:
Unknown
Board of Directors members receive benefits?
Unknown
Annual reports, strategic plans, and adoption dates for
reports / plans: N/A

SPHERE OF INFLUENCE

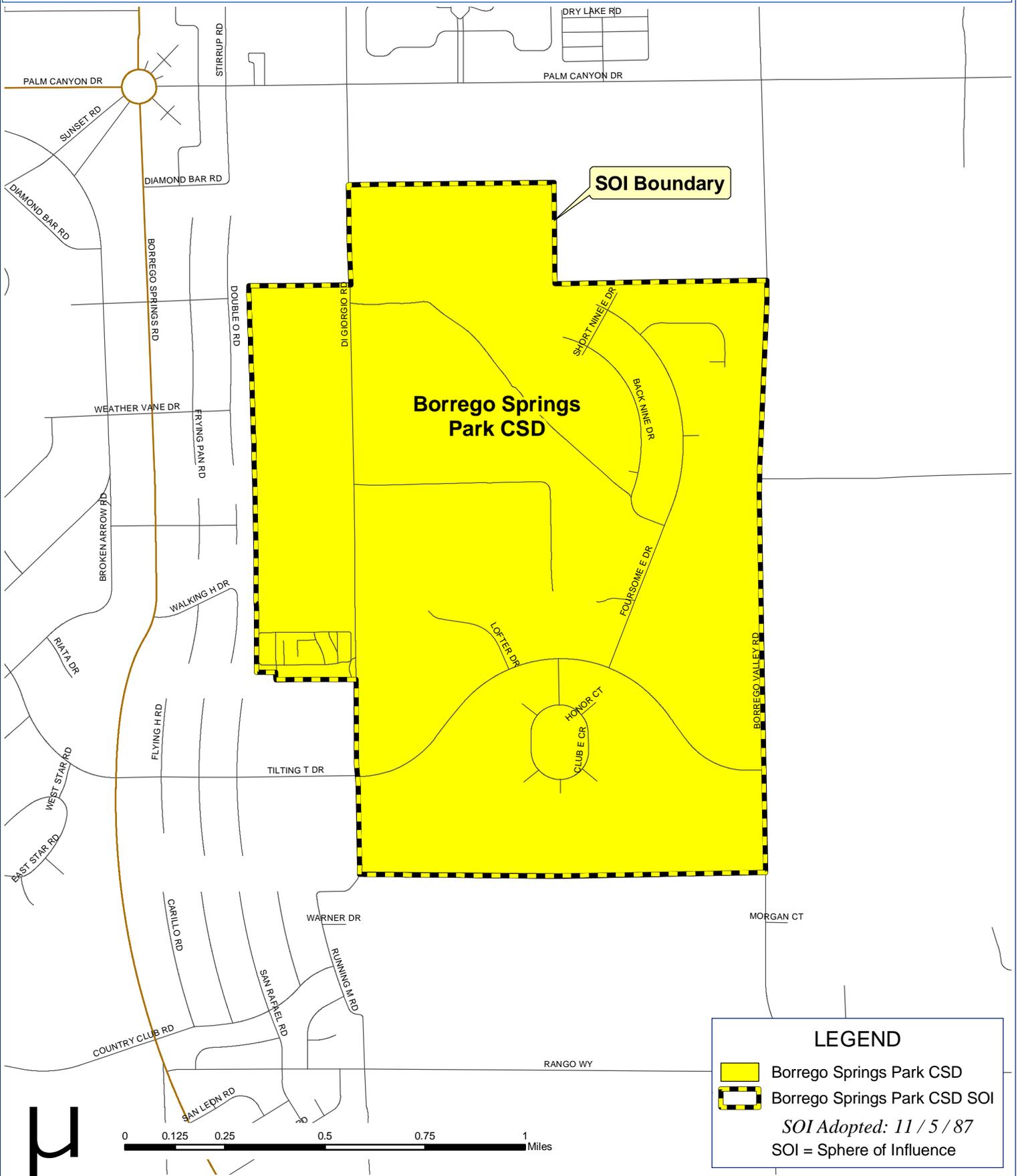
Acreage/square miles of Agency:
1,209 acres / 1.89 square miles
Current population of Agency: 334 (SANDAG, 2006)
(Source: LAFCO)

Projected population: Unknown
(Source: None)
Acreage/square miles of Agency, plus adopted
sphere of influence:
1,209 acres / 1.89 square mile
Adoption / affirmation date of sphere of influ-
ence: Adopted November 5, 1987
Number of sphere amendments since sphere was
adopted / affirmed: None
Number of acres included in sphere amendments: N/A
Anticipated amendments to sphere of influence:
Currently under review
Assessor parcel numbers for sphere amend-
ment territory: N/A
Need for sphere update: Under review

MISCELLANEOUS INFORMATION

Municipal Service Review currently in process
including Borrego Water District studying possi-
ble reorganization■

Borrego Springs Park Community Services District



DESCANSO COMMUNITY SERVICES DISTRICT

CONTACT INFORMATION

c/o CAL-AM Water Company
880 Kuhn Drive
Chula Vista, CA 91914
Telephone: (760) 742-1330
FAX: (760) 742-2069
Website: N/A

MISSION STATEMENT

N/A

AGENCY PROFILE

Organization history:

In 1982, the Descanso Community Services District was formed to purchase the water system owned by the Descanso Park Water Company; the acquisition was finalized in December 1985. The District has neither bonded debt nor a property tax rate. The District's services and responsibilities have been contracted to the CAL-AM Water Company.

District principal act: Gov't Code Sec. 61000-61226.5

Population served: 685

(Source: SANDAG based on January 1, 2005 estimates from the State Department of Finance)

Service area:

421.85 acres located in southeastern San Diego County, the District has a population of approximately 800 and includes 425 acres situated north of Old Highway 80, west of Highway 79, and south of Cuyamaca Rancho State Park.

(Source: SANGIS/2000 LAFCO publication *Profiles of Special Districts*)

SERVICE(S) PROVIDED

▪ Potable Water

Sources of Water:

Imported:

Local:

Reclaimed:

Number of connections:

Residential:

Approximately 315 metered connections

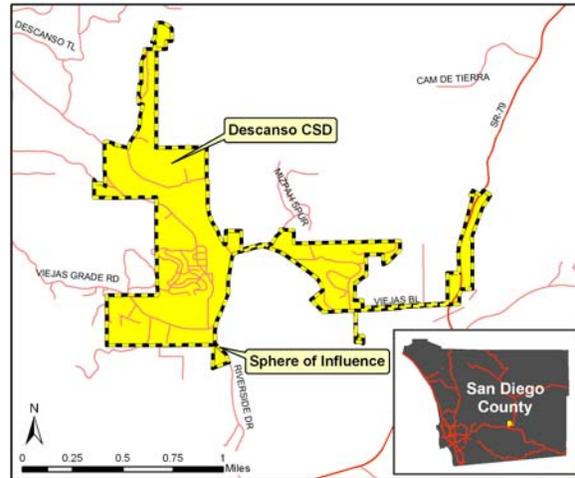
Agriculture:

Industrial:

Reclaimed:

Irrigation:

Public:



Mutual support:

Other:

Number of public wells:

3 (137,000 gallons of storage)

Treated reservoirs:

Potable: 105,395 feet of distribution lines

Reclaimed:

Capacity of treated storage reservoirs:

Potable:

Reclaimed:

Agency planning documents:

Service regulation:

Fines by regulators for violations within the past three years?

Total amount of fines, if any:

Regulatory Agency that issued the fines:

Service enhancement:

Cost avoidance/efficiency strategies:

Governmental reorganization opportunities with neighboring agencies:

Other:

Infrastructure improvement:

Major improvements to service delivery sought by agency to address infrastructure/service deficiencies over next five years.

MANAGEMENT

Number of employees:

The district has no employees. All responsibilities have been transferred to CAL-AM Water Company

Full-time employees: 0

Part-time employees: 0
Executive / management to non-executive/
non-management employees ratio: N/A

Staff turnover rate for preceding three fiscal years:
N/A

Professional awards and recognition granted: N/A

(Source:)

Number of sphere amendments since sphere was
adopted / affirmed: One

Number of acres included in sphere amendments: 3.32
ac

Anticipated amendments to sphere of influence:
None

Need for sphere update: None

(Source: SANGIS)

FINANCE

Annual District budget (FY 2003-04):

Operating budget: \$ 261,468

Capital budget: None reported

Financial audits frequency: unknown

Financing capital replacement method: grant funds
debt of \$715,512

Agency revenue:

Revenue derived from charges/fees:

Revenue derived from property taxes: \$27,575

Other revenues: Interest

Unrestricted net assets to total revenues: N/A

Bond rating: Unknown

Total Agency revenue: \$395,093

(Source:) State Controllers Report 2003-04

MISCELLANEOUS INFORMATION

N/A ■

GOVERNANCE

Board of Directors

Meeting location:

Date/time of meetings:

Number of Board of Directors (elected/appointed):

Board vacancies over the past 5 years:

Per diem/stipend paid to each Board member:

Board of Directors members receive benefits?

Annual reports, strategic plans, and adoption
dates for reports / plans:

SPHERE OF INFLUENCE

Acreage/square miles of Agency:

421.85 acres / .66 square mile

Current population of Agency:

(Source:)

Projected population:

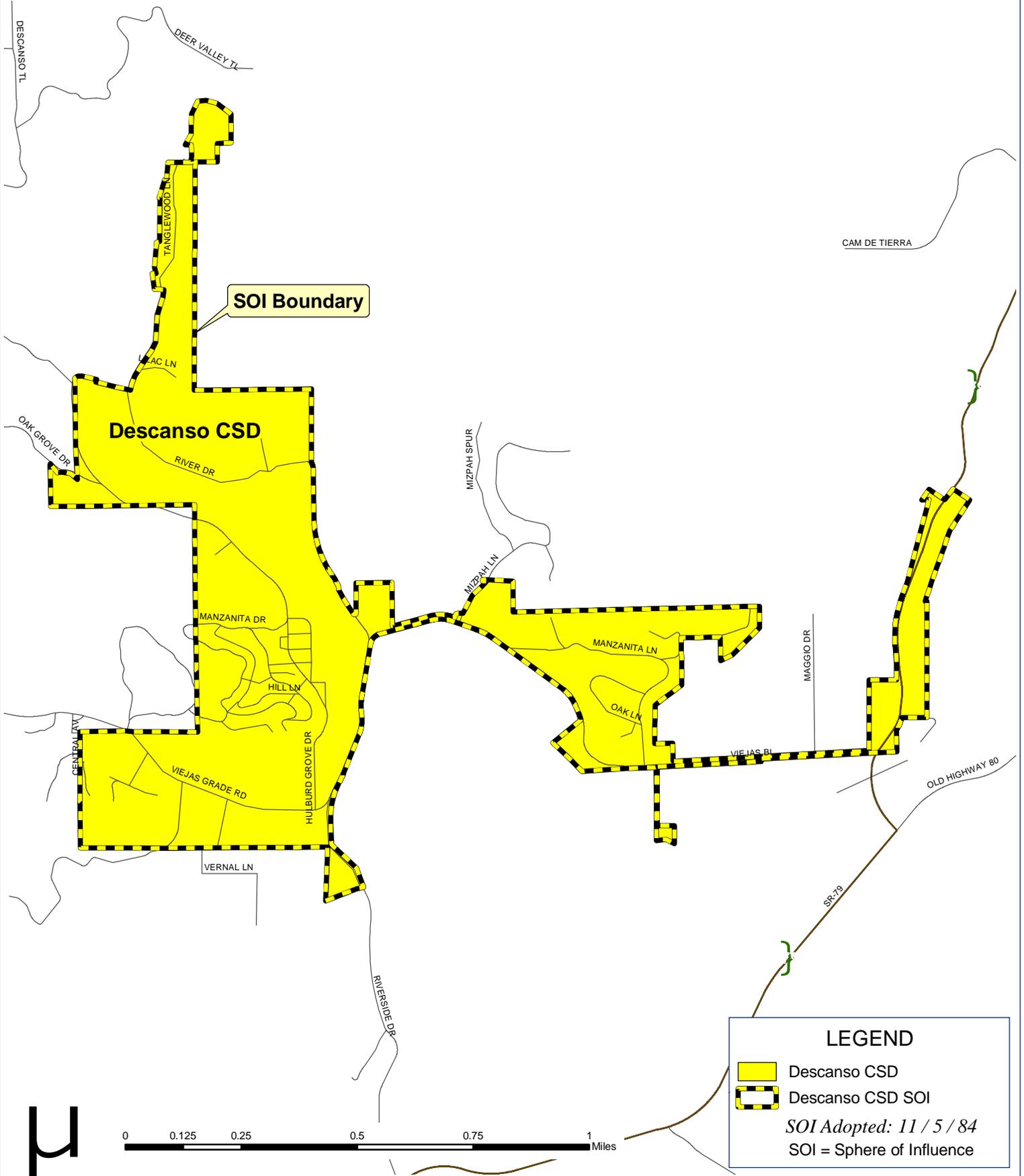
(Source:)

Acreage/square miles of Agency, plus adopted sphere of
influence:

421.85 acres / .66 square mile

Adoption / affirmation date of sphere of influ-
ence: November 5, 1984

Descanso Community Services District



LEGEND

- Descanso CSD
- Descanso CSD SOI

SOI Adopted: 11 / 5 / 84
 SOI = Sphere of Influence

FAIRBANKS RANCH COMMUNITY SERVICES DISTRICT

CONTACT INFORMATION

605 Third Street
Encinitas, CA 92024
Telephone: (760) 942-5147
FAX: (760) 942-5206

MISSION STATEMENT

None.

AGENCY PROFILE

Organization history: December 1987
District principal act: Gov't Code Sec. 61000
Population served: 1,322
Service area: 1,236 acres

(Source: Formation Documents)

SERVICE(S) PROVIDED

▪ Wastewater Service

Service Area / Acreage:
Gated community of Fairbanks Ranch and associated commercial center / 126 acres

Treatment Capacity:
0.280 mgd

Average Flow: 0.210 mgd

Capacity rights in regional treatment facility:
None

Ability of regional facility to meet service demands of agency: 100%

Reclaimed Water Distribution: None

Location of plant: N/A

Local agencies/communities served:
Fairbanks Ranch, CA

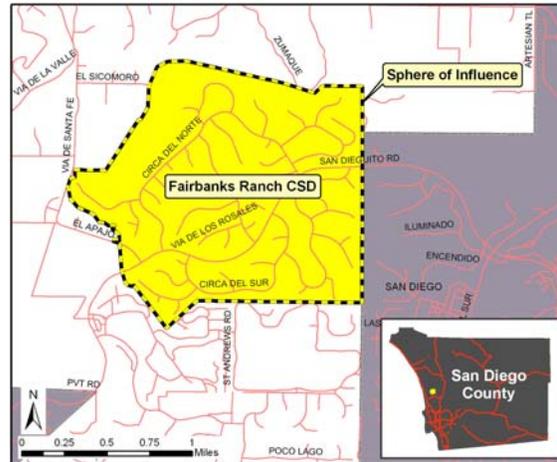
Agency planning documents: N/A

Service regulation:
Fines by regulators for violations within the past three years? None.

Total amount of fines, if any: N/A

Regulatory Agency that issued the fines: N/A

Service enhancement:
Cost avoidance/efficiency strategies:
Due to its small size, the Fairbanks Ranch Community Services District (FRCSD) contracts for all of its management and operations labor with a private engineering firm in order to provide high quality and cost efficient services. FRCSD also has co-



operative agreements with the Rancho Santa Fe CSD and the Fairbanks Ranch CSD for sharing of equipment and emergency response services.

Governmental reorganization opportunities with neighboring agencies: None

Other: N/A

Infrastructure improvement:

Major improvements to service delivery sought by agency to address infrastructure/service deficiencies over next five years:

None required, District is at planned buildout.

(Source: District General Manager)

MANAGEMENT

Number of employees: 5
Full-time employees: 1
Part-time employees: 4
Executive / management to non-executive/non-management employees ratio: 1 : 4
Staff turnover rate for preceding three fiscal years: 0%
Professional awards and recognition granted: N/A

(Source:)

FINANCE

Annual District budget (FY 2005-06):
Operating budget: \$615,750
Capital budget: \$60,000
Financial audits frequency: Annually
Financing capital replacement method:
Sewer service charges

Agency revenue:

Revenue derived from charges/fees: \$667,000

Revenue derived from property taxes: 0

Other revenues: \$390,000 (What Kind)

Unrestricted net assets to total revenues: 81%

Bond rating: None

Total Agency revenue: \$706,000

(Source: Adopted FY 2005-06 Budget)

MISCELLANEOUS INFORMATION

N/A ■

GOVERNANCE

Board of Directors

Meeting location:

Fairbanks Ranch Clubhouse

17561 Circa Del Norte

Rancho Santa Fe, CA 92067

Date/time of meetings:

3rd Monday of each month / 6:00 p.m.

Number of Board of Directors (elected/appointed):

5 (elected)

Board vacancies over the past 5 years: 3

Per diem/stipend paid to each Board member:

\$50 per meeting

Board of Directors members receive benefits? No

Annual reports, strategic plans, and adoption dates for reports / plans: N/A

SPHERE OF INFLUENCE

Acreage/square miles of Agency:

1,237 acres / 1.93 square miles

Current population of Agency: 1,322

(Source: Estimate from FR Association records)

Projected population: 1,380

(Source: Estimate from FR Association records)

Acreage/square miles of Agency, plus adopted sphere of influence:

1,237 acres / 1.93 square miles

Adoption / affirmation date of sphere of influence: Adoption September 18, 1987

Number of sphere amendments since sphere was adopted / Affirmed: None

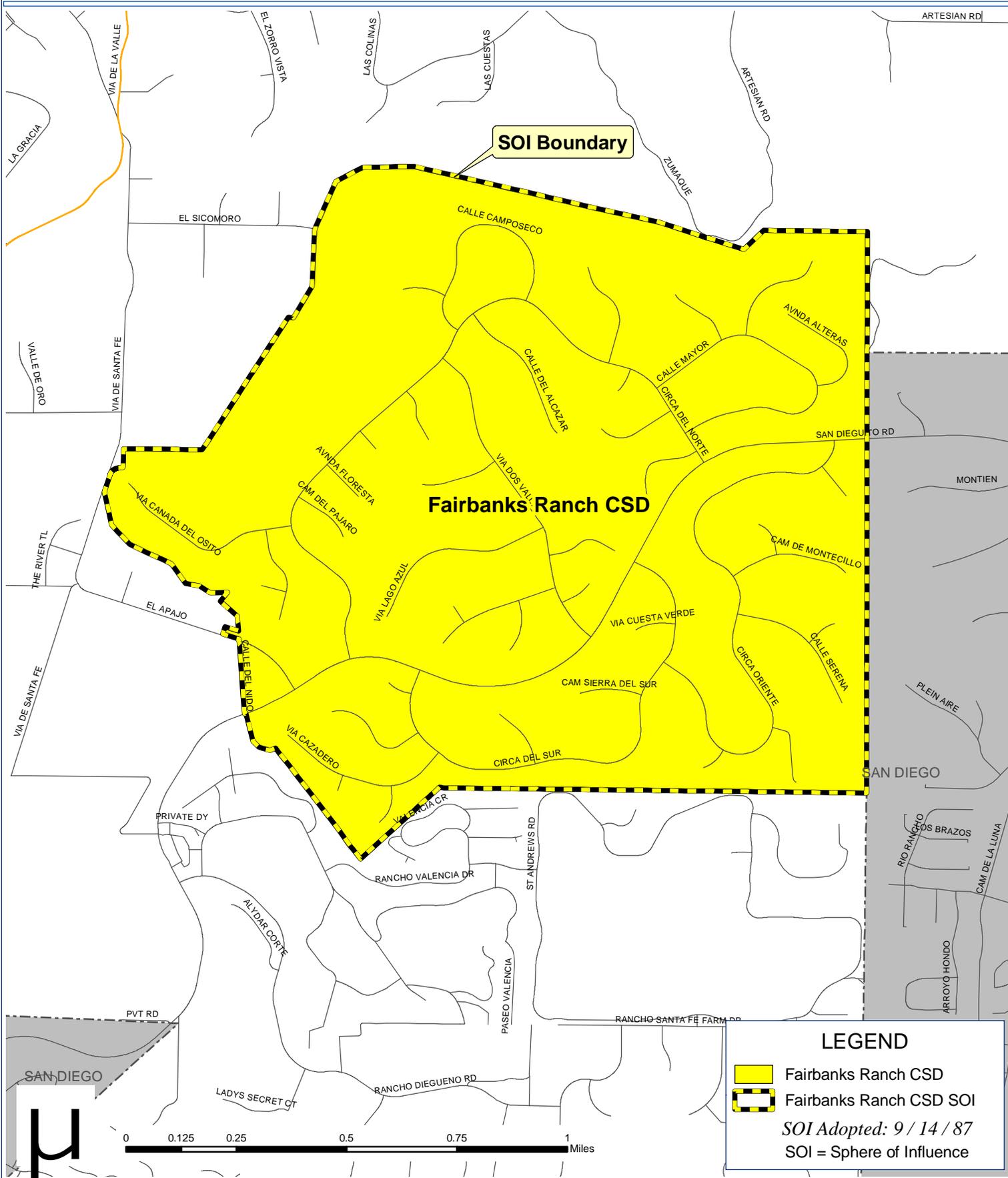
Number of acres included in sphere amendments: 0

Anticipated amendments to sphere of influence: None

Assessor parcel numbers for sphere amendment territory: N/A

Need for sphere update: None.

Fairbanks Ranch Community Services District



JACUMBA COMMUNITY SERVICES DISTRICT

CONTACT INFORMATION

P.O. Box 425
 Jacumba, CA 91934
 Telephone: (619) 766-4359
 FAX: (619) 766-9061
 Website: None

MISSION STATEMENT

None.
 (Source: None)

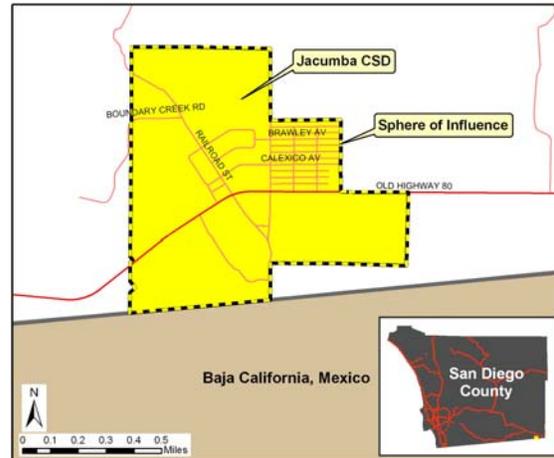
AGENCY PROFILE

Organization history: 1985 formation
 District principal act: Gov't Code Sec. 61000-62336.5
 Population served: 541
 (Source: SANDAG based on January 1, 2005 estimates from the State Department of Finance)
 Service area: 430 acres

SERVICES PROVIDED

Water

Sources of water:
 Imported: N/A
 Local: Local Sources
 Reclaimed: N/A
 Number of connections:
 Residential: 230
 Agriculture: N/A
 Industrial: N/A
 Reclaimed: N/A
 Irrigation: N/A
 Public: N/A
 Mutual support: N/A
 Other: 3 (commercial)
 Number of public wells: 2
 Treated reservoirs:
 Potable: 2
 Reclaimed: 0
 Capacity of treated storage reservoirs:
 Potable: 435 + 203 = 639,000 gallons
 Reclaimed: 0
 Agency planning documents:
 Water District Map, 2005



(Source: N/A)

Service regulation:

Fines by regulators for violations within the past three years? None.

Total amount of fines, if any: N/A

Regulatory Agency that issued the fines: N/A

Service enhancement:

Cost avoidance/efficiency strategies: N/A

Governmental opportunities reorganization with neighboring agencies: N/A

Other: N/A

Infrastructure improvement:

Major improvements to service delivery sought by agency to address infrastructure/service deficiencies over next five years.

Well project

Parks

Service regulation:

Fines by regulators for violations within the past three years? None.

Total amount of fines, if any: N/A

Regulatory Agency that issued the fines: N/A

Service enhancement:

Cost avoidance/efficiency strategies: N/A

Governmental reorganization opportunities with neighboring agencies: N/A

Other: N/A

Infrastructure improvement:

Major improvements to service delivery sought by agency to address infrastructure/service deficiencies over next five years.

Restrooms

MANAGEMENT

▪ **Water**

Number of employees: 3
Full-time employees: 1
Part-time employees: 2
Executive / management to non-executive/
non-management employees ratio:
2 out of 3 management
Staff turnover rate for preceding three fiscal years: 0
Professional awards and recognition granted: 0

▪ **Parks**

Number of employees: 0 (Volunteer only)
Full-time employees: 0
Part-time employees: 0
Executive / management to non-executive/
non-management employees ratio: 0
Staff turnover rate for preceding three fiscal years: 0
Professional awards and recognition granted: 0

FINANCE

▪ **Water**

Annual District budget (FY 2005-06):
Operating budget: \$105,476
Capital budget: 0
Financial audits frequency: Annually
Financing capital replacement method: Grants
Agency revenue:
Revenue derived from charges/fees: 0
Revenue derived from property taxes: 0
Other revenues: 0
Unrestricted net assets to total revenues: N/A
Bond rating: Unknown
Total Agency revenue: N/A

▪ **Parks**

Annual District budget (FY 2005-06):
Operating budget:
\$1,500—donations/fund raisers
Capital budget: 0
Financial audits frequency: Annually
Financing capital replacement method: N/A
Agency revenue:
Revenue derived from charges/fees: 0
Revenue derived from property taxes: 0
Other revenues: 0
Unrestricted net assets to total revenues: N/A

Bond rating: Unknown
Total Agency revenue: \$1,500

GOVERNANCE

Board of Directors
Meeting location:
Jacumba Library
Date/time of meetings:
4th Tuesday of each month/5:00 p.m.
Number of Board of Directors (elected/appointed):
5 (elected)
Board vacancies over the past 5 years: 4
Per diem/stipend paid to each Board member: 0
Board of Directors members receive benefits? No
Annual reports, strategic plans, and adoption dates for reports / plans:
Water:
CCR
Budget
Water Quality Report
Park and Recreation:
Audit

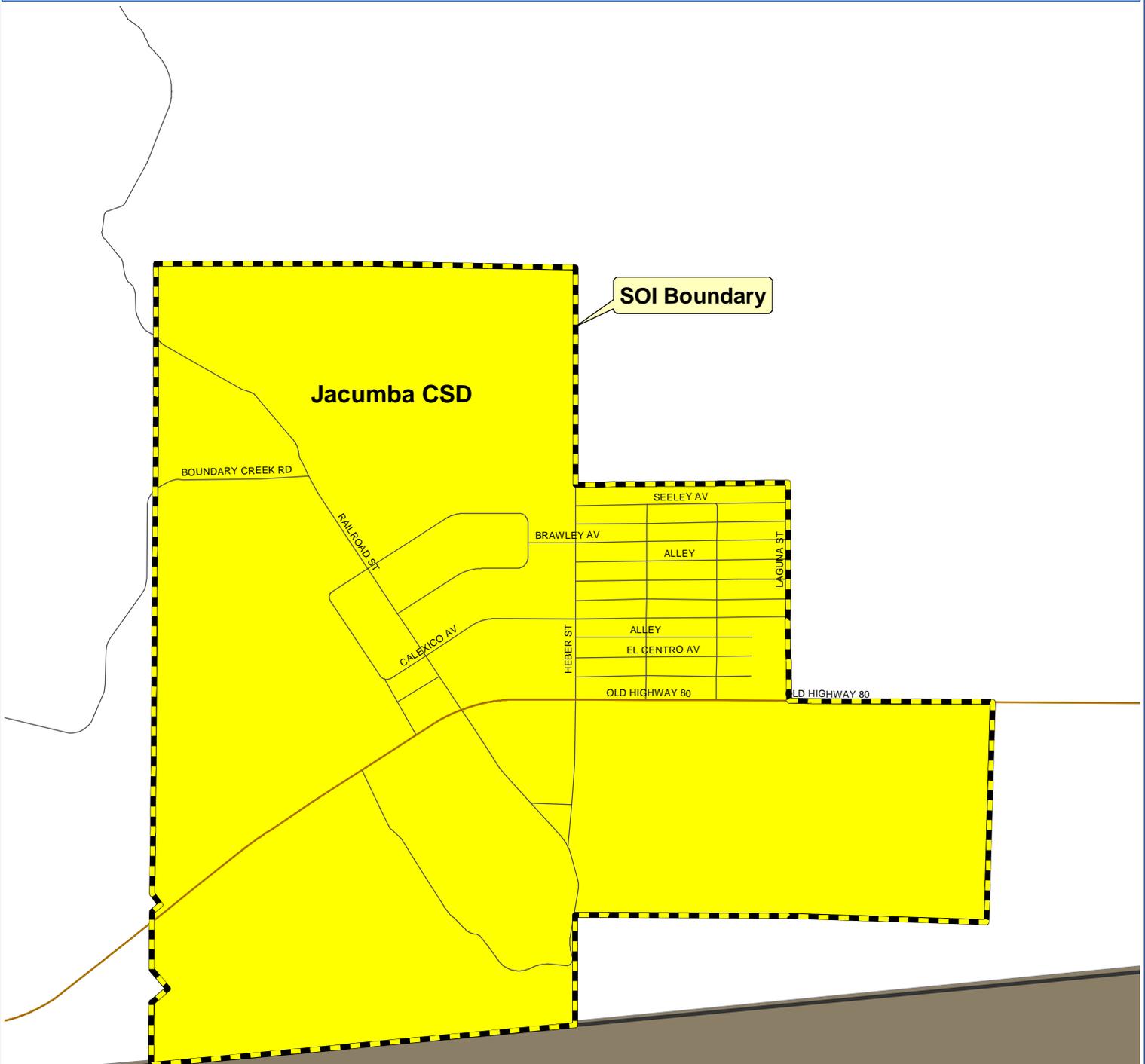
SPHERE OF INFLUENCE

Acreage/square miles of Agency:
423.42 acres / .66 square mile
Current population of Agency: Approximately 500
(Source: None)
Projected population: 1% per year
(Source: None)
Acreage/square miles of Agency, plus adopted sphere of influence:
423.42 acres / .66 square mile
Adoption / affirmation date of sphere of influence: Adopted October 7, 1985
Number of sphere amendments since sphere was adopted / affirmed: None
Number of acres included in sphere amendments: N/A
Anticipated amendments to sphere of influence: N/A
Assessor parcel numbers for sphere amendment territory: N/A
Need for sphere update: None

MISCELLANEOUS INFORMATION

N/A ■

Jacumba Community Services District



SOI Boundary

Jacumba CSD

BOUNDARY CREEK RD

RAILROAD ST

BRAWLEY AV

CALIXICO AV

SEELEY AV

ALLEY

LAGUNA ST

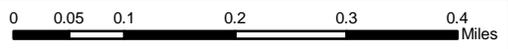
ALLEY

EL CENTRO AV

OLD HIGHWAY 80

OLD HIGHWAY 80

Baja California, Mexico



LEGEND

- Jacumba CSD
- Jacumba CSD SOI

SOI Adopted: 10 / 7 / 85
SOI = Sphere of Influence

JULIAN COMMUNITY SERVICES DISTRICT

CONTACT INFORMATION

Physical address:
2656 Farmer Road
Julian, CA 92036

Mailing address:
P.O. Box 681
Julian, CA 92036-0681

Telephone: (760) 765-0483
FAX: (760) 765-1484
Website: None

MISSION STATEMENT

A prudent stewardship of our water resources.

(Source: None)

AGENCY PROFILE

Organization history: 1965

District principal act: Gov. Code Sec 61000-61226.5

Population served: 269

(Source: SANDAG based on January 1, 2005 estimates from the State Department of Finance)

Service area: 287 acres

SERVICE(S) PROVIDED

Water

Sources of water:

Imported: N/A

Local: Groundwater

Reclaimed: N/A

Number of connections:

Residential: 152

Agriculture: N/A

Industrial: N/A

Reclaimed: N/A

Irrigation: N/A

Public: 5

Mutual support: N/A

Other: 31 Commercial

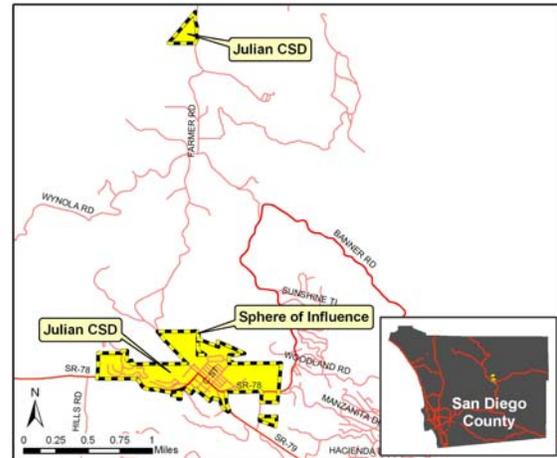
Number of public wells: 6

Treated reservoirs:

Potable: 2

Reclaimed: 0

Capacity of treated storage reservoirs:



Potable: 2 @ 225,000 each

Reclaimed: 0

Agency planning documents:

(Source: District files)

Service regulation:

Fines by regulators for violations within the past three years? None.

Total amount of fines, if any: N/A

Regulatory Agency that issued the fines: N/A

Service enhancement:

Cost avoidance/efficiency strategies: N/A

Governmental opportunities reorganization with neighboring agencies: N/A

Other: N/A

Infrastructure improvement:

Major improvements to service delivery sought by agency to address infrastructure/service deficiencies over next five years.

Replace 6,500 of old steel distribution line.

MANAGEMENT

Number of employees: 5

Full-time employees: 1

Part-time employees: 4

Executive / management to non-executive/non-management employees ratio: 1 : 4

Staff turnover rate for preceding three fiscal years: 0

Professional awards and recognition granted: 0

FINANCE

Annual District budget (FY 2005-06):

Operating budget: \$231,551
Capital budget: \$48,000
Financial audits frequency: Yearly
Financing capital replacement method: N/A
Agency revenue:
Revenue derived from charges/fees: \$231,551
Revenue derived from property taxes: \$21,000
Other revenues:
\$53,750 (capacity fees enacted by Ordinance 98-01)
Unrestricted net assets to total revenues: N/A
Bond rating: Unknown
Total Agency revenue: \$290,000

adopted / affirmed: Two; 1989, 2000
Number of acres included in sphere amendments: 73.1 acres
Anticipated amendments to sphere of influence: N/A
Assessor parcel numbers for sphere amendment territory: N/A
Need for sphere update: None

MISCELLANEOUS INFORMATION

N/A ■

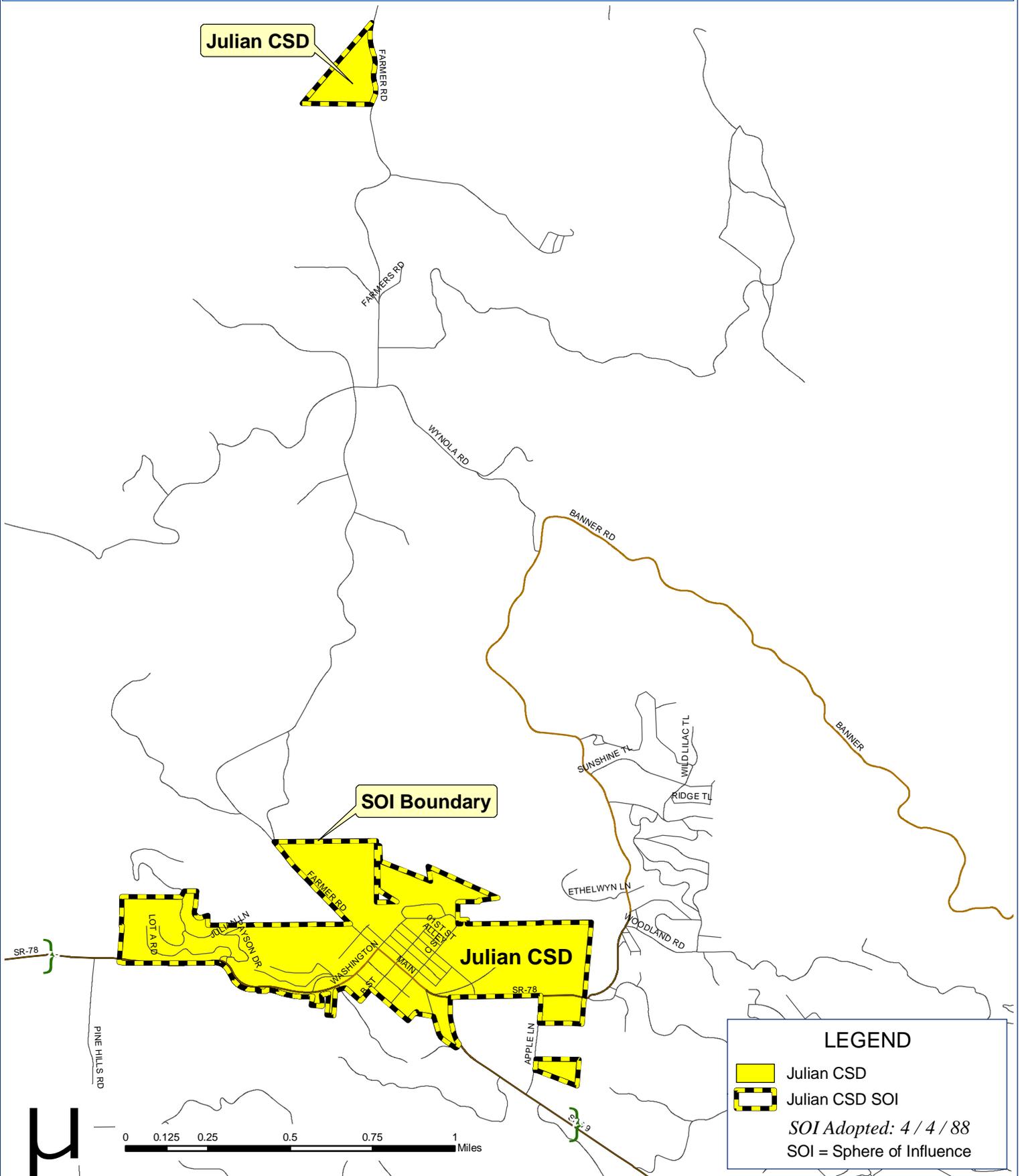
GOVERNANCE

Board of Directors
Meeting location:
San Diego County Sheriff's Office
Julian Substation, Public Meeting Room
2907 Washington Street
Julian, CA 92036
Date/time of meetings:
3rd Tuesday of each month/10:00 a.m.
Number of Board of Directors (elected/appointed):
5 (elected)
Board vacancies over the past 5 years: None
Per diem/stipend paid to each Board member: 0
Board of Directors members receive benefits? No
Annual reports, strategic plans, and adoption dates for reports / plans:
Consumer Confidence Reports, Annually

SPHERE OF INFLUENCE

Acreage/square miles of Agency:
287.3 acres / .45 square mile
Current population of Agency: 269
(Source: SANDAG based on January 1, 2005 estimates from the State Department of Finance)
Projected population:
(Source: None)
Acreage/square miles of Agency, plus adopted sphere of influence:
287.3 acres / .45 square mile
Adoption / affirmation date of sphere of influence: Adopted April 4, 1988
Number of sphere amendments since sphere was

Julian Community Services District



MAJESTIC PINES COMMUNITY SERVICES DISTRICT

CONTACT INFORMATION

P.O. Box 266
Julian, CA 92036
Telephone: (760) 765-0532
FAX: (760) 765-0532
Website: N/A

MISSION STATEMENT

N/A

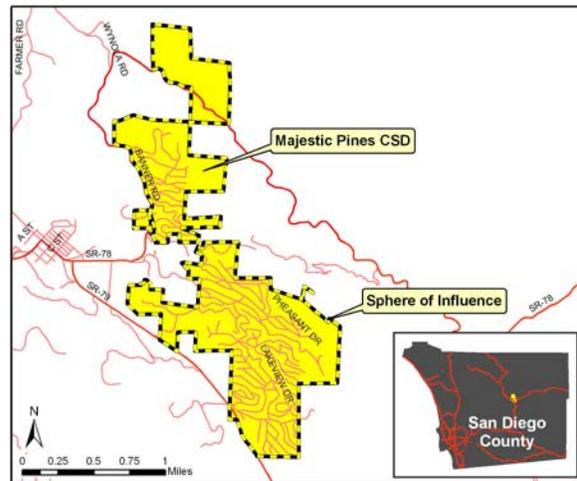
AGENCY PROFILE

Organization history: November 1993
District principal act: Gov. Code Sec. 61000-61226.5
Population served: 1,062
(Source: SANDAG based on January 1, 2005 estimates from the State Department of Finance)
Service area: 1,019 acres

SERVICE(S) PROVIDED

Water

Sources of water:
Imported: N/A
Local: 100%
Reclaimed: N/A
Number of connections:
Residential: 695
Agriculture: N/A
Industrial: N/A
Reclaimed: N/A
Irrigation: N/A
Public: N/A
Mutual support: N/A
Other: N/A
Number of public wells: 3
Treated reservoirs:
Potable: 3
Reclaimed: 0
Capacity of treated storage reservoirs:
Potable: 790,000 gallons
Reclaimed: 0
Agency planning documents: N/A
Service regulation:
Fines by regulators for violations within the past three years? N/A



Total amount of fines, if any: N/A
Regulatory Agency that issued the fines: N/A
Service enhancement:
Cost avoidance/efficiency strategies: N/A
Governmental opportunities reorganization with neighboring agencies: N/A
Other: N/A
Infrastructure improvement:
Major improvements to service delivery sought by agency to address infrastructure/service deficiencies over next five years: N/A

MANAGEMENT

Number of employees: 3
Full-time employees: 3
Part-time employees: 0
Executive / management to non-executive/non-management employees ratio: 1 : 2
Staff turnover rate for preceding three fiscal years: 2
Professional awards and recognition granted: N/A

FINANCE

Annual District budget (FY 2004-05):
Operating budget: \$350,000 approximately
Capital budget: N/A
Financial audits frequency: Annually
Financing capital replacement method:
Savings and USDA
Agency revenue:
Revenue derived from charges/fees: 100%
Revenue derived from property taxes: None

Other revenues: None
Unrestricted net assets to total revenues:
Bond rating:
Total Agency revenue: \$400,000

GOVERNANCE

Board of Directors
Meeting location:
1405 Banner Road
Julian, CA 92036
Date/time of meetings:
3rd Wednesday of each month/7:00 p.m.
Number of Board of Directors (elected/appointed):
5 (elected)
Board vacancies over the past 5 years: 3
Per diem/stipend paid to each Board member: 0
Board of Directors members receive benefits? No
Annual reports, strategic plans, and adoption dates for reports / plans: No formal plans

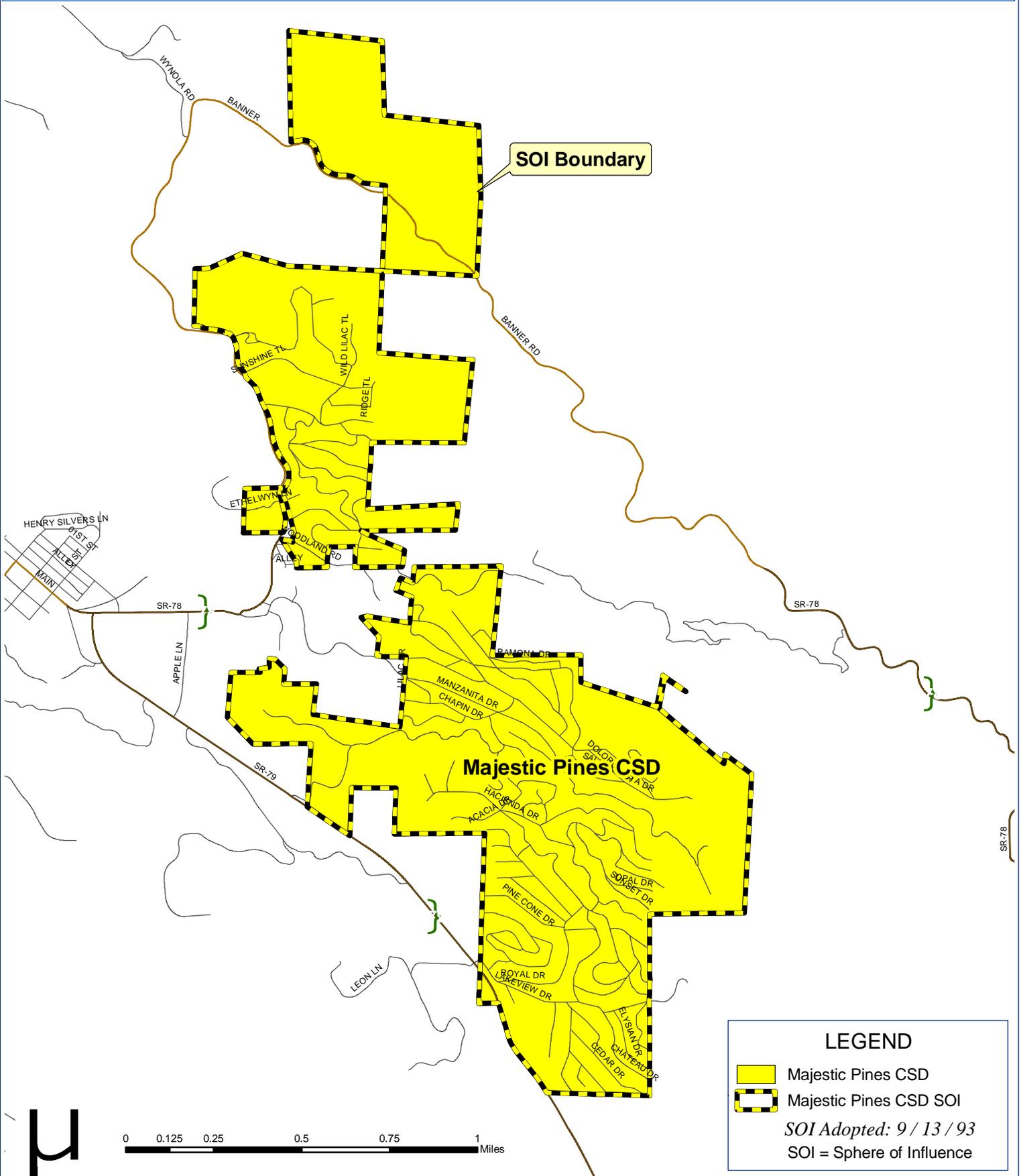
SPHERE OF INFLUENCE

Acreage/square miles of Agency:
1,019.58 acres; 1.59 square miles
Current population of Agency: 1,062
(Source: SANDAG based on January 1, 2005 estimates from the State Department of Finance)
Projected population: N/A
Acreage/square miles of Agency, plus adopted sphere of influence:
1,019.58 acres / 1.59 square miles
Adoption / affirmation date of sphere of influence: Adopted September 13, 1993
Number of sphere amendments since sphere was adopted / affirmed: None
Number of acres included in sphere amendments: N/A
Anticipated amendments to sphere of influence:
N/A
Assessor parcel numbers for sphere amendment territory: N/A
Need for sphere update: N/A

MISCELLANEOUS INFORMATION

N/A ■

Majestic Pines Community Services District



MORRO HILLS COMMUNITY SERVICES DISTRICT

CONTACT INFORMATION

P.O. Box 161
 Fallbrook, CA 92088-161
 Telephone: (760) 723-3642
 FAX: None
 Website: www.morro-hills.com

MISSION STATEMENT

Morro Hills Community Services District shall acquire, construct, improve, and maintain streets, bridges, culverts, drains, curbs, gutters, easements, and incidental works.

(Source: SB 135)

AGENCY PROFILE

Organization history:

The District was formed in 1961 to establish and maintain the roads within the area known as Morro Hills. Since establishment, the District has maintained the roads to the satisfaction of the community. On January 1, 2006, the District's latent powers were restated even though these powers were tacit under the establishment document. These newly stated powers, duties and authority included: Division 2 and Part 3 of the Streets and Highway Code; Divisions 11 and 15 of the Vehicle Code.

District principal act: Gov. Code Sec. 61000-61226.5

Population served: 420 parcels, 342 property owners, and approximately 700 residents

Service area: 1,107 acres

(Source: Parcel Maps/Book 121 County Assessor)

SERVICE(S) PROVIDED

- Management of repairs, construction, and safety of 6.1 miles of Morro Hills roads.

Service regulation:

Fines by regulators for violations within the past three years? None.

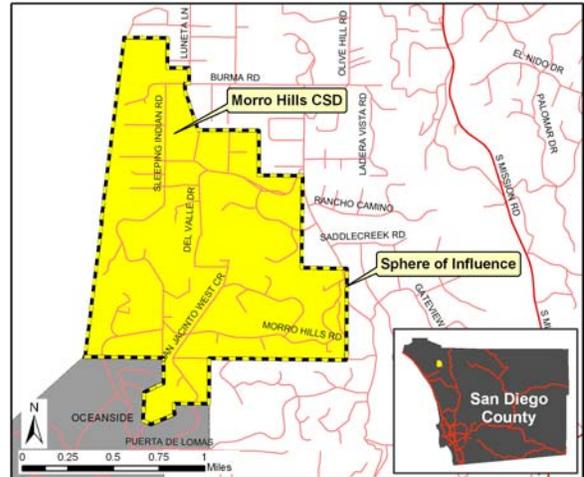
Total amount of fines, if any: N/A

Regulatory Agency that issued the fines: N/A

Service enhancement:

Cost avoidance/efficiency strategies: N/A

Governmental reorganization opportunities with neighboring agencies: N/A



Other: N/A

Infrastructure improvement:

Major improvements to service delivery sought by agency to address infrastructure/service deficiencies over next five years.

Traffic Calming System

MANAGEMENT

Number of employees:

Full-time employees: 6 Volunteers (no pay)

Part-time employees: 0

Executive / management to non-executive/non-management employees ratio:

6 Directors and Officers / 0 non-management

Staff turnover rate for preceding three fiscal years:

67%—4/6 volunteers resigned

Professional awards and recognition granted: None

(Source: District Files)

FINANCE

Annual District budget (FY 2005-06):

Operating budget: \$58,000

Capital budget: \$0

Financial audits frequency: Annual

Financing capital replacement method: Portion of annual Revenue and Beneficial Assessment (from time-to-time, as necessary)

Agency revenue:

Revenue derived from charges/fees:

\$200 (approximately)

Revenue derived from property taxes: \$58,000

Other revenues: Interest on Short-term CDs
Unrestricted net assets to total revenues: 0
Bond rating: N/A
Total Agency revenue: N/A

(Source: District Files)

MISCELLANEOUS INFORMATION

This is an extremely small Community Services District with a small tax-base, which funds the maintenance of the roads. The 6.1 miles of roads are private, rural and not up to County standards. ■

GOVERNANCE

Board of Directors

Meeting location:

Bonsall Community Center
31505 Old River Road
Bonsall, CA 92003

Date/time of meetings:

1st Saturday of each month/9:00 a.m.

Number of Board of Directors (elected/appointed):

5 (elected)

Board vacancies over the past 5 years: 4

Per diem/stipend paid to each Board member: 0

Board of Directors members receive benefits?

No

Annual reports, strategic plans, and adoption dates for reports / plans:

Morro Hills Traffic Calming System Plan,
November 1, 2005

SPHERE OF INFLUENCE

Acreage/square miles of Agency:

1,107.24 acres / 1.73 square miles

Current population of Agency:

Approximately 700

(Source: District Files)

Projected population: 750

(Source: District Files/Approximation)

Acreage/square miles of Agency, plus adopted sphere of influence:

1,107.24 acres / 1.73 square miles

Adoption / affirmation date of sphere of influence: Adopted November 5, 1984

Number of sphere amendments since sphere was adopted / affirmed: None

Number of acres included in sphere amendments: N/A

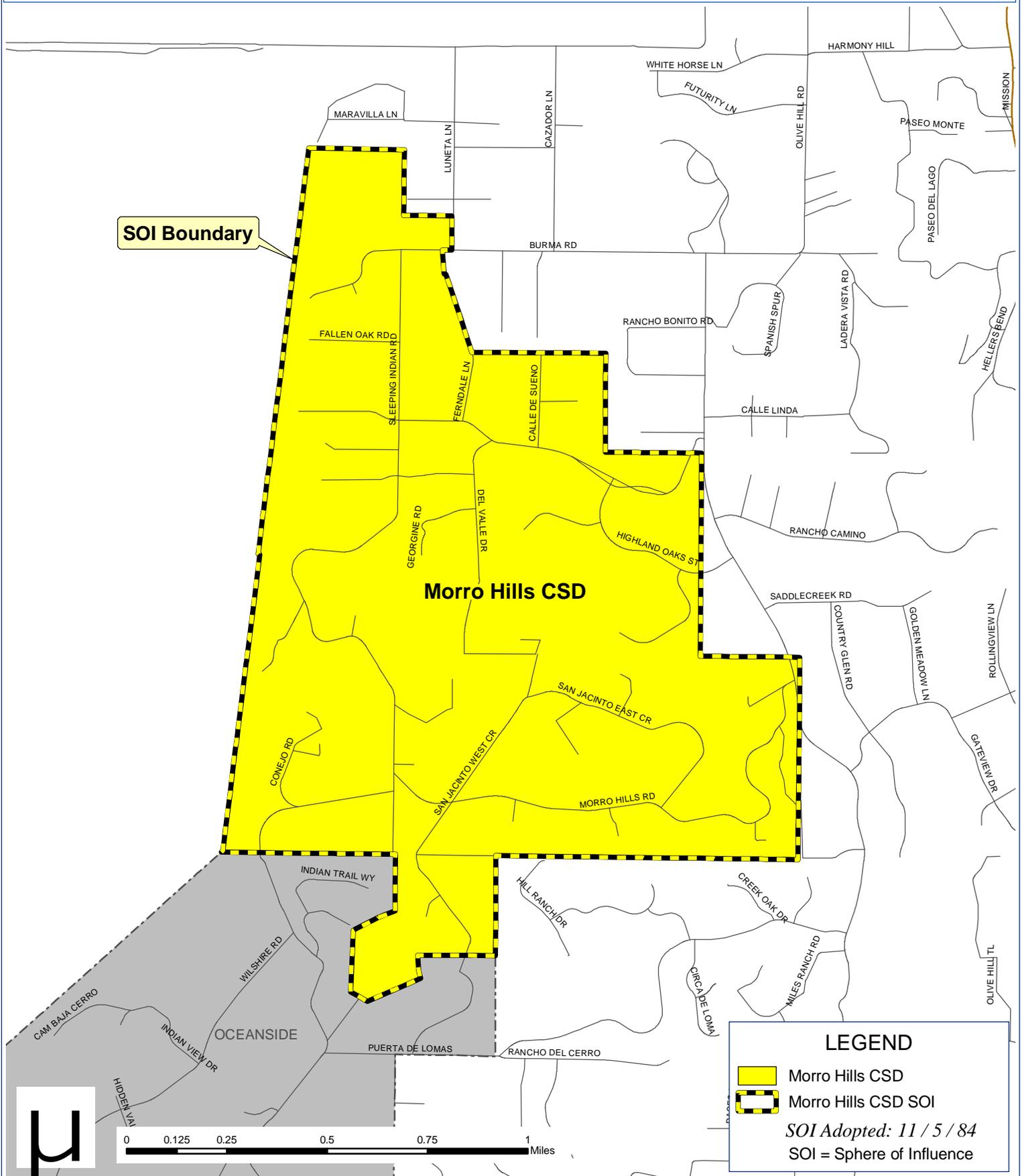
Anticipated amendments to sphere of influence:
N/A

Assessor parcel numbers for sphere amendment territory: N/A

Need for sphere update: None

(Source: District Files)

Morro Hills Community Services District



PAUMA VALLEY COMMUNITY SERVICES DISTRICT

CONTACT INFORMATION

Telephone: (760) 742-1909
FAX: (760) 742-1588
E-mail: oggiewatson@hotmail.com

MISSION STATEMENT

None

AGENCY PROFILE

Organization History: June 2, 1986
District Principal Act: Gov't Code Sec. 61000-61934
Population served: 600
Service area: 1,445 acres

SERVICE(S) PROVIDED

Wastewater Service

Service Area: 1,445 acres
Treatment Capacity: 115,000 gpd
Average Flow: 90,000 gpd
Capacity rights in regional treatment facility: No
Ability of regional facility to meet service demands of agency: No
Reclaimed Water Distribution: Yes for irrigation
Location of plant: N/A
Local agencies/communities served:
Local property owners
Agency planning documents: None

Security Services

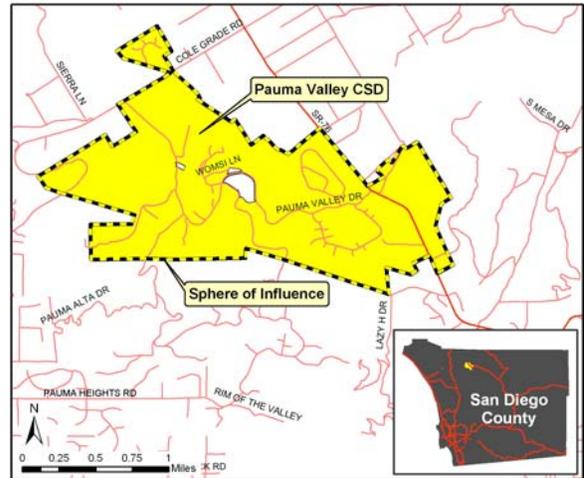
Guard and patrol to local properties within the District.

MANAGEMENT

Number of employees: 13
Full-time employees: 01
Part-time employees: 10
Executive / management to non-executive/
Staff turnover rate for preceding three fiscal years: 1:9
Professional awards and recognition granted: N/A

FINANCE

Annual District budget (FY 2005-06):
Operating budget: 1,073,341



Capital budget

Financial audits frequency: Annual

Financing capital replacement method: Rates & charges

Agency revenue:

Revenue derived from charges/fees: 1,041,041

Revenue derived from property taxes: 0

Other revenues: \$32,300

Unrestricted net assets to total revenues: N/A

Bond rating: N/A

Total Agency revenue: \$1,073,341

GOVERNANCE

Board of Directors

Meeting location:

33129 Cole Grade Road
Pauma Valley, CA 92061-0434

Date/time of meetings:

One day per month / 7:00 p.m.

Number of Board of Directors (elected/appointed):

5 / elected at large

Board vacancies over the past 5 years: None

Per diem/stipend paid to each Board member:
None

Board of Directors members receive benefits? None

Annual reports, strategic plans, and adoption dates for reports / plans: Sewer Master Plan, 2005

SERVICE REGULATION

- **Wastewater Service**
 Fines by regulators for violations within the past three years? None.
 Total amount of fines, if any: N/A
 Regulatory Agency that issued the fines: N/A
- **Security Services**
 Fines by regulators for violations within the past three years? None.
 Total amount of fines, if any: N/A
 Regulatory Agency that issued the fines: N/A

Number of acres included in sphere amendments:
 35 acres
 Anticipated amendments to sphere of influence:
 One possible for 37 acres
 Assessor parcel numbers for sphere amendment territory: APN 130-100-17
 Need for sphere update: No

MISCELLANEOUS INFORMATION

N/A ■

SERVICE ENHANCEMENT

- **Wastewater Service**
 Cost avoidance/efficiency strategies:
 None, small package plant
 Governmental opportunities reorganization with neighboring agencies: N/A
 Other: N/A

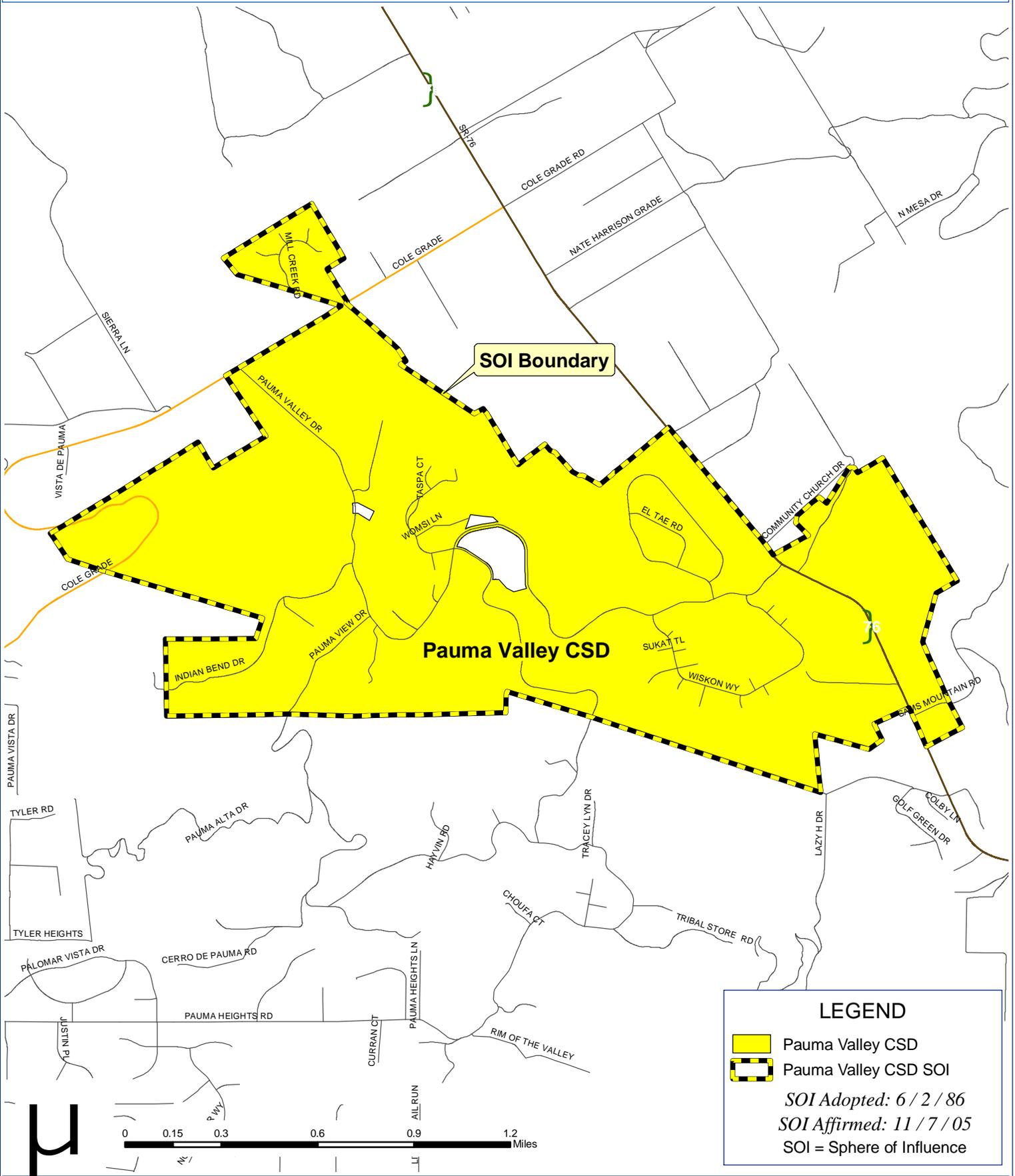
INFRASTRUCTURE IMPROVEMENT

- **Wastewater Service**
 Major improvements to service delivery sought by agency to address infrastructure/service deficiencies over next five years: Expanding / upgrading of WWPF in 2007-08 to meet SDRWQCB permit.

SPHERE OF INFLUENCE

- **Wastewater Service**
 Acreage/square miles of Agency:
 1,445 acres / 2.26 square miles
 Current population of Agency: 600
 (Source: 2003 Survey)
 Projected population: Unknown
 (Source:)
 Acreage/square miles of Agency, plus adopted sphere of influence:
 1,463.9 acres / 2.29 square miles
 Adoption / affirmation date of sphere of influence: June 2, 1986
 Number of sphere amendments since sphere was adopted /affirmed: One, 1988; affirmed November 7, 2005

Pauma Valley Community Services District



LEGEND

- Pauma Valley CSD
- Pauma Valley CSD SOI

SOI Adopted: 6 / 2 / 86
SOI Affirmed: 11 / 7 / 05
 SOI = Sphere of Influence

RANCHO SANTA FE COMMUNITY SERVICES DISTRICT

CONTACT INFORMATION

605 Third Street
Encinitas, CA 92024
Telephone: (760) 942-5147
FAX: (760) 942-5206
Website: RSFCSD.com

MISSION STATEMENT

None.

AGENCY PROFILE

Organization history: December 1981

District principal act: Gov't Code Sec. 61000-61226.5

Population served: 7,535

(Source: SANDAG based on January 1, 2005 estimates from the State Department of Finance)

Service area: 10,348 acres

(Source: Formation Documents)

SERVICE(S) PROVIDED

▪ Reclaimed Water

▪ Wastewater Service

Service area / acreage:

Rancho Santa Fe area, including Covenant and Santa Fe Valley area / 9,910 acres

Treatment capacity: 0.45 mgd and 0.48 mgd

Average flow: 0.33 mgd and 0.069 mgd

Capacity rights in regional treatment facility:

0.250 mgd leased capacity in San Elijo Joint Powers Authority (JPA) Water Reclamation Facility (WRF)

Ability of regional facility to meet service demands of agency: N/A

Reclaimed water distribution:

Reclaimed water is produced at the Santa Fe Valley WRF and sold to the Olivenhain Municipal Water District (MWD) for distribution in their system

Location of plant:

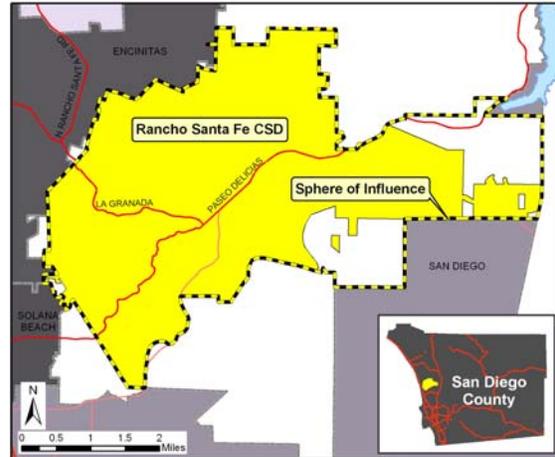
8798 Artesian Road
San Diego, CA 92127

Local agencies/communities served:

Rancho Santa Fe, CA

Agency planning documents:

Sewer Master Plan, 1980
Sewer Hydraulic Model, 1997



Service regulation:

Fines by regulators for violations within the past three years? None.

Total amount of fines, if any: N/A

Regulatory Agency that issued the fines: N/A

Service enhancement:

Cost avoidance/efficiency strategies:

The Rancho Santa Fe (RSF) Community Services District (CSD) contracts for its management and wastewater operations labor with a private engineering company in order to provide high quality and cost efficient services. RSF CSD also has cooperative agreements with the Whispering Palms CSD, the Fairbanks Ranch CSD and the San Elijo JPA for sharing of equipment and emergency services to reduce costs.

Governmental reorganization opportunities with neighboring agencies: None

Other: N/A

Infrastructure improvement:

Major improvements to service delivery sought by agency to address infrastructure/service deficiencies over next five years:

Del Dios/El Vuelo PS Replacement
WRF Improvements
Santa Fe Hills PS Construction
Miscellaneous Sewerline Replacements
Miscellaneous Manhole Relining

Source: District General Manager and CIP Program)

▪ Roadside Landscape Maintenance

Service regulation:

Fines by regulators for violations within the past three years? None.

Total amount of fines, if any: N/A

Regulatory Agency that issued the fines: N/A

Service enhancement:

Cost avoidance/efficiency strategies:

The RSF CSD contracts with a private engineering company for management and with the Ranch Santa Fe Association for all landscape maintenance services.

Governmental opportunities reorganization with neighboring agencies: None

Other: N/A

Infrastructure improvement:

Major improvements to service delivery sought by agency to address infrastructure/service deficiencies over next five years: None

Facilities and services description: N/A

(Source: District General Manager)

MANAGEMENT

▪ **Wastewater Service**

Number of employees: 12

Full-time employees: 11

Part-time employees: 1

Executive / management to non-executive/ non-management employees ratio: 2 : 10

Staff turnover rate for preceding three fiscal years: 0%

Professional awards and recognition granted: N/A

(Source: District General Manager)

▪ **Roadside Landscape Maintenance**

Number of employees: 2

Full-time employees: 0

Part-time employees: 2

Executive / management to non-executive/ non-management employees ratio: 1 : 1

Staff turnover rate for preceding three fiscal years: 0%

Professional awards and recognition granted: N/A

(Source: District General Manager)

FINANCE

▪ **Wastewater Service**

Annual District budget (FY 2005-06):

Operating budget: \$2,461,870

Capital budget: \$221,500

Financial audits frequency: Annually

Financing capital replacement method:

Sewer service charges

Agency revenue:

Revenue derived from charges/fees: \$2,181,282

Revenue derived from property taxes: \$22,000

Other revenues: \$376,023

Unrestricted net assets to total revenues: 100%

Bond rating: None

Total Agency revenue: \$2,579,305

(Source: Adopted FY 2005-06 Budget)

▪ **Roadside Landscape Maintenance**

Annual District budget (FY 2005-06):

Operating budget: \$462,460

Capital budget: 0

Financial audits frequency: Annually

Financing capital replacement method:

Reserve funds

Agency revenue:

Revenue derived from charges/fees: 0

Revenue derived from property taxes: \$360,000

Other revenues: \$20,000

Unrestricted net assets to total revenues: 100%

Bond rating: None

Total Agency revenue: \$380,000

(Source: Adopted FY 2005-06 Budget)

GOVERNANCE

Board of Directors

Meeting location:

Rancho Santa Fe Fire Department

16936 El Fuego

Rancho Santa Fe, CA 92067

Date/time of meetings:

2nd Monday of each month / 1:30 p.m.

Number of Board of Directors (elected/appointed):

5 / elected

Board vacancies over the past 5 years: 3

Per diem/stipend paid to each Board member:

\$100 per meeting

Board of Directors members receive benefits? No

Annual reports, strategic plans, and adoption dates for reports / plans: N/A

SPHERE OF INFLUENCE

Acreage/square miles of Agency:

10,348.63 acres / 16.17 square miles

Current population of Agency: 5,700

(Source: LAFCO MSR and SOI Study)

Projected population:

(Source:)

Acreage/square miles of Agency, plus adopted sphere of influence:

12,275 acres / 19.18 square miles

Adoption / affirmation date of sphere of influence: Adopted November 7, 1983 / Updated May 2, 2005

Number of sphere amendments since sphere was originally adopted / Affirmed: Ten

Number of acres included in sphere amendments: 2,210.2 acres

Anticipated amendments to sphere of influence: 2

Assessor parcel numbers for sphere amendment territory:

265-380-24

264-104-05, 12, 13, 14, 16 and 17

Need for sphere update: None.

MISCELLANEOUS INFORMATION

N/A ■

RINCON RANCH COMMUNITY SERVICES DISTRICT

CONTACT INFORMATION

P.O. Box 882
Pauma Valley, CA 92061-0882
Telephone: (760) 742-1330
FAX: (760) 742-2069
Website: N/A

MISSION STATEMENT

None

AGENCY PROFILE

Organization history:

Formed in 1963, the Rincon Ranch Community Services District (CSD) serves an estimated population of 225 and provides road maintenance, drainage and improvements.

District principal act: Gov. Code Sec. 61000-61226.5

Population served: 205

(Source: SANDAG based on January 1, 2005 estimates from the State Department of Finance)

Service area:

Currently the district maintains 3.5 miles of roadway. There are 139 parcels and 1,701.42 acres in the boundaries of the district.

(Source: District files)

SERVICE(S) PROVIDED

▪ Road Maintenance

Service regulation:

Fines by regulators for violations within the past three years? None.

Total amount of fines, if any: N/A

Regulatory Agency that issued the fines: N/A

Service enhancement:

Cost avoidance/efficiency strategies: N/A

Governmental reorganization opportunities with neighboring agencies:

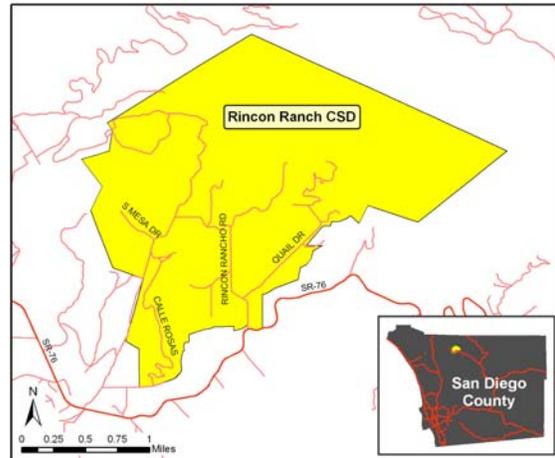
None—no similar services provided in area

Other: N/A

Infrastructure improvement:

Major improvements to service delivery sought by agency to address infrastructure/service deficiencies over next five years.

By 2011, the 3.5 miles of roadway will be in need of an overlay.



MANAGEMENT

Number of employees:

The district has no employees. All services are contracted out. To be in compliance with SB134 (Kehoe), the district will be naming a general manager under an independent contract.

Full-time employees: 0

Part-time employees: 0

Executive / management to non-executive/non-management employees ratio: N/A

Staff turnover rate for preceding three fiscal years: N/A

Professional awards and recognition granted: N/A

(Source:)

FINANCE

Annual District budget (FY 2005-06):

Operating budget: \$6,200

Capital budget: \$0

Financial audits frequency:

Annually by Certified Public Accountant

Financing capital replacement method:

Road overlay projects are financed by a special tax approved by the voters for a specific period of time. Regular road maintenance is financed by a portion of the 1% general tax rate.

Agency revenue:

Revenue derived from charges/fees: 0

Revenue derived from property taxes: \$11,500

Other revenues: Interest \$250 per year

Unrestricted net assets to total revenues: 18.8%

Bond rating: N/A

Total Agency revenue: N/A
(Source:)

(Source:)

MISCELLANEOUS INFORMATION

N/A ■

GOVERNANCE

Board of Directors

Meeting location:

32859 Rincon Ranch Road
Pauma Valley, CA 92061

Date/time of meetings:

Special quarterly meetings/4:45 p.m.

Number of Board of Directors (elected/appointed):

3 (will change to 5 under CSD Act, SB135
(Kehoe)) (elected)

Board vacancies over the past 5 years:

2 (vacancies created by SB135)

Per diem/stipend paid to each Board member: 0

Board of Directors members receive benefits?

No

Annual reports, strategic plans, and adoption dates for reports / plans:

None. A special Road Tax will go before the voters on November 7, 2006 to overlay roads.

SPHERE OF INFLUENCE

Acreage/square miles of Agency:

2,830.99 acres / 4.42 square miles

Current population of Agency: 205

(Source: SANDAG based on January 1, 2005 estimates from the State Department of Finance)

Projected population: 350

(Source: Estimate + planned lot divisions)

Acreage/square miles of Agency, plus adopted sphere of influence: (Transitional-Zero)

Currently the district maintains 3.5 miles of roadway. There are 139 parcels and 1,701.42 acres in the boundaries of the district.

Adoption / affirmation date of sphere of influence: Adopted (Zero) June 2, 1986 / Affirmed November 7, 2005

Number of sphere amendments since sphere was adopted / affirmed: N/A

Number of acres included in sphere amendments: N/A

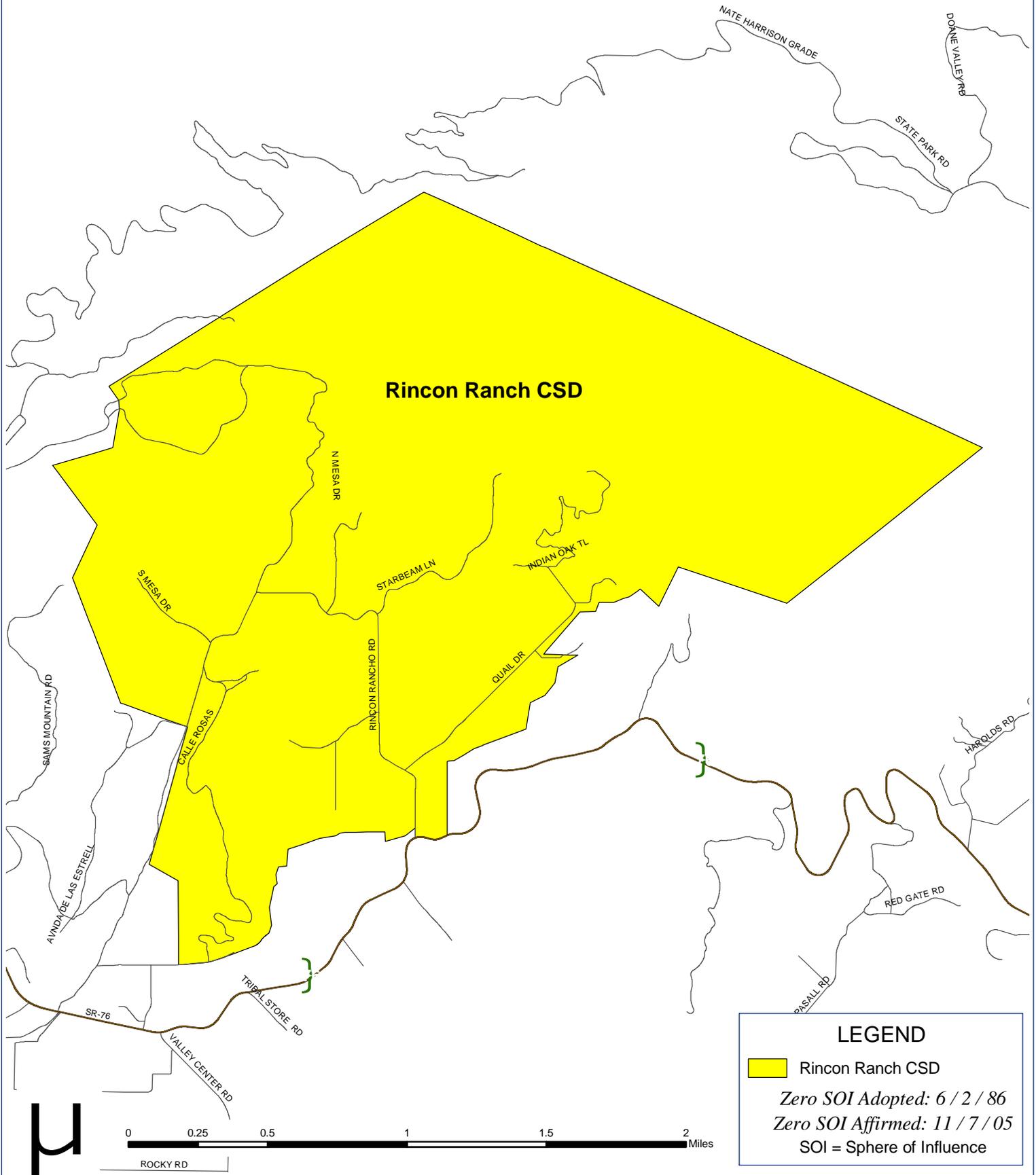
Anticipated amendments to sphere of influence:

None

Assessor parcel numbers for sphere amendment territory: N/A

Need for sphere update: No

Rincon Ranch Community Services District



VALLEY CENTER COMMUNITY SERVICES DISTRICT

CONTACT INFORMATION

PO Box 141
28246 Lilac Road
Valley Center, CA 92082

Telephone: (760) 749-8852
FAX: (760) 749-6075
Website: valleycenterparksrecreation.com

MISSION STATEMENT

It is the Mission of the Valley Center Parks and Recreation District to respond to the Community needs for a well balanced system of parks and recreation through efficient planning, designing, financing, construction, and maintenance of facilities, while providing the necessary leadership to meet future community needs.

(Source: Valley Center Community Services District)

AGENCY PROFILE

Organization History: Formed in 1966, Valley Center Parks and Recreation District

District Principal Act: Gov't Code Sec. 61000-61226.5

Population served: 21,000

Service area: 41,876 acres / 65.4 square miles

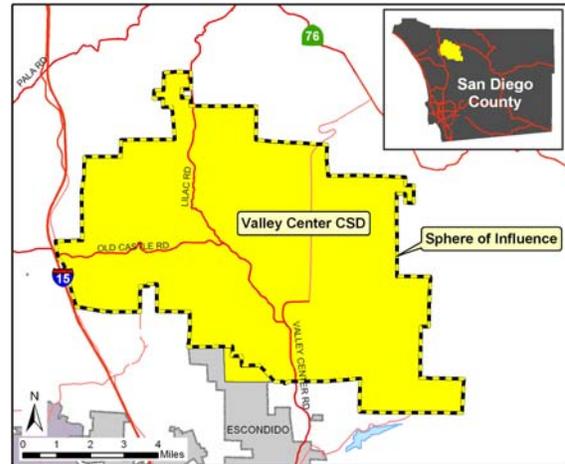
SERVICE PROVIDED

▪ Parks & Recreation

The Valley Center Parks and Recreation District maintains and operates nine facilities. Adams Community Park is on six acres of land leased from the Valley Center-Pauma Unified School District. Park facilities include a public swimming pool also used by the High School for water polo and swim team practices and some matches. During the summer a Red Cross program is offered, with swim lessons, recreational swim, water aerobics and lap swim. The park also has six tennis courts, tennis club building, horseshoe pits and picnic areas.

In addition to owning a community hall, pavilion, stage and dance floor, Valley Center Park and Recreation District maintains and schedules the use of these facilities for a variety of groups, organizations, weddings, parties and community events.

Valley Center Park and Recreation District also



owns and operates the athletic fields which are used for Little League baseball, and Men's softball practices and games. The fields include a playground area for children. Located on 10 acres behind the community hall, the fields are completely lighted and have a concession building.

MANAGEMENT

Number of employees: 19

Full-time employees: 1

Part-time employees: 1 District Secretary
17 Seasonal

Executive / management to non-executive/
non management: 1/20

Staff turnover rate for preceding three fiscal years: 1
General Manager

Professional awards and recognition granted: N/A

FINANCE

Annual District budget (FY 2005-06):

Operating budget: \$264,650

Capital budget Approximately \$6,000

Financial audits frequency: Annual

Financing capital replacement method:

Pay as you go

Grants

Agency revenue/operating:

Revenue derived from charges/fees: \$125,169

Revenue derived from property taxes: \$100,128

Other revenues: \$43,064
Unrestricted net assets to total revenues:
Bond rating: N/A
Total Agency revenue: \$646,494

GOVERNANCE

Board of Directors
Meeting location: 28246 Lilac Road; Valley Center, CA 92082
Date/time of meetings: Fourth Thursday of the month
Number of Board of Directors (elected/appointed):
/elected
Board vacancies over the past 5 years: 0
Per diem/stipend paid to each Board member: 0
Board of Directors members receive benefits? No
Annual reports, strategic plans, and adoption dates for reports / plans: None

SERVICE REGULATION

Parks & Recreation
Fines by regulators for violations within the past three years? No
Total amount of fines, if any: N/A
Regulatory Agency that issued the fines: N/A

SERVICE ENHANCEMENT

Parks & Recreation
Cost avoidance/efficiency strategies: N/A
Governmental opportunities reorganization with neighboring agencies:
Other: N/A

INFRASTRUCTURE IMPROVEMENT

Parks & Recreation
Major improvements to service delivery sought by agency to address infrastructure/service deficiencies over next five years: N/A
Facility / services description: Community Hall, Athletic Fields (Little League Fields), pool, Adams Park, Cole Grade Park (Softball Fields), Aerie Park, Parks and Recreational Services

SPHERE OF INFLUENCE

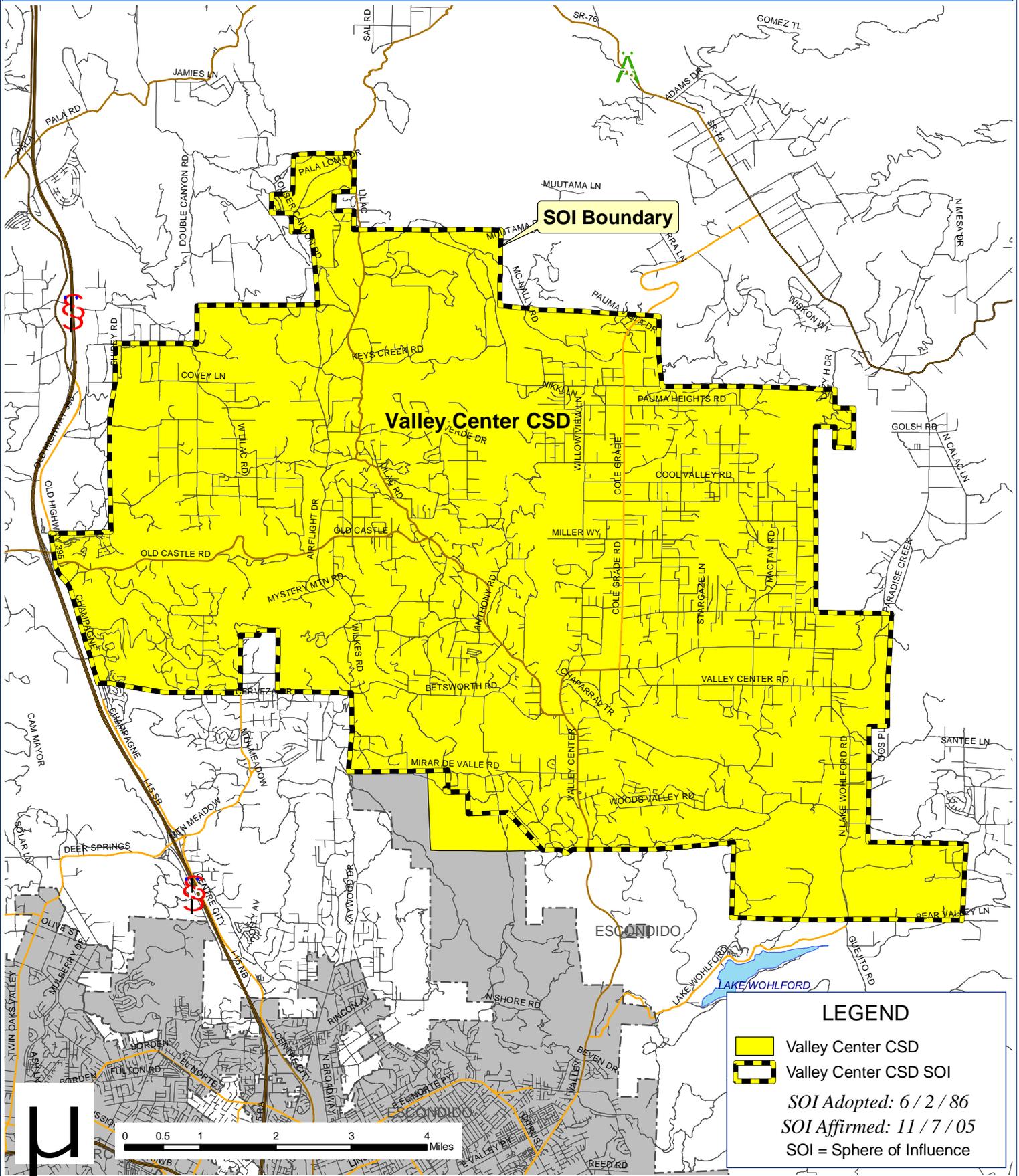
Parks & Recreation

Acreage/square miles of Agency:
42,421.21 acres/66.28 square miles
Current population of Agency: 21,000
(Source: SANDAG)
Projected population: 30,000
(Source: SANDAG)
Acreage/square miles of Agency, plus adopted sphere of influence:
41,876 acres/65.43 square miles
Adoption / affirmation date of sphere of influence: Adopted June 2, 1986 / Affirmed November 7, 2005
Number of sphere amendments since sphere was adopted / affirmed: None
Number of acres included in sphere amendments: N/A
Anticipated amendments to sphere of influence: None
Assessor parcel numbers for sphere amendment territory: N/A
Need for sphere update: None

MISCELLANEOUS INFORMATION

- N/A

Valley Center Community Services District



WHISPERING PALMS COMMUNITY SERVICES DISTRICT

CONTACT INFORMATION

605 Third Street
Encinitas, CA 92024
Telephone: (760) 942-5147
FAX: (760) 942-5206

MISSION STATEMENT

None.

AGENCY PROFILE

Organization history: May 1987
District principal act: Gov't Code Sec. 61000-61226.5

Population served: 2,878

(Source: SANDAG based on January 1, 2005 estimates from the State Department of Finance)

Service area: 2,203 acres

(Source: Formation documents and GIS mapping records.)

SERVICE(S) PROVIDED

- Roadside Landscape Maintenance;
- Lighting and Street Sign Maintenance; and
- Wastewater Service

Service area / acreage: 2, 203 acres

Rancho Santa Fe area, including communities of Whispering Palms, San Diegueno Hills, Santa Fe Sur, Rancho Diegueno, Rancho Santa Fe Farms and Del Mar Country Club

Treatment capacity:

0.40 mgd

Average flow: 0.27 mgd

Capacity rights in regional treatment facility:
None

Ability of regional facility to meet service demands of agency: 100%

Reclaimed water distribution:

Pasture irrigation to Rancho Paseana

Location of plant:

15525 Via de Santa Fe
Rancho Santa Fe, CA 92067

Local agencies/communities served:

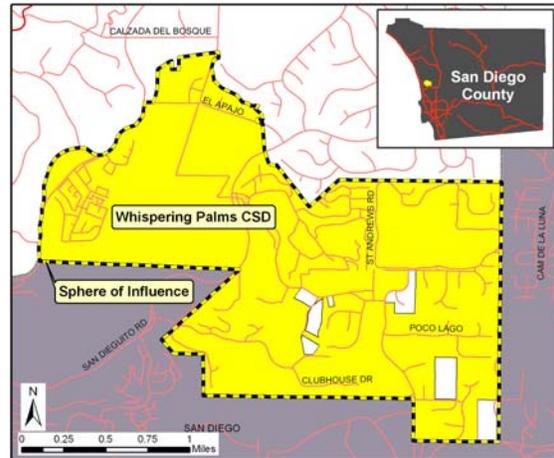
Whispering Palms, California

Agency planning documents: N/A

Service regulation:

Fines by regulators for violations within the past three years? None.

Total amount of fines, if any: N/A



Regulatory Agency that issued the fines: N/A

Service enhancement:

Cost avoidance/efficiency strategies:

The Whispering Palms Community Services District (WPCSD) contracts for all of its management and wastewater operations labor with a private engineering company in order to provide high quality and cost efficient services. WPCSD also has cooperative agreements with the Rancho Santa Fe CSD and the Fairbanks Ranch CSD for sharing of equipment and emergency response services.

Governmental opportunities reorganization with neighboring agencies: None

Other: N/A

Infrastructure improvement:

Major improvements to service delivery sought by agency to address infrastructure/service deficiencies over next five years:

None required, District is at planned buildout.

(Source: District General Manager)

MANAGEMENT

Number of employees: 5

Full-time employees: 2

Part-time employees: 3

Executive / management to non-executive/non-management employees ratio: 1 : 5

Staff turnover rate for preceding three fiscal years: 0%

Professional awards and recognition granted: N/A

(Source: District General Manager)

FINANCE

Annual District budget (FY 2005-06):

Operating budget: \$554,900

Capital budget: \$308,200

Financial audits frequency: Annually

Financing capital replacement method:

Sewer service charges

Agency revenue:

Revenue derived from charges/fees: \$518,825

Revenue derived from property taxes: \$20,000

Other revenues: \$116,000

Unrestricted net assets to total revenues: 100%

Bond rating: None

Total Agency revenue: \$684,825

(Source: Adopted FY 2005-06 Budget)

Assessor parcel numbers for sphere amendment territory: N/A

Need for sphere update: None.

MISCELLANEOUS INFORMATION

N/A ■

GOVERNANCE

Board of Directors

Meeting location:

Morgan Run Resort
4000 Cancha De Golf
Rancho Santa Fe, CA 92067

Date/time of meetings:

2nd Monday of each month / 400 p.m.

Number of Board of Directors (elected/appointed):

5 (elected)

Board vacancies over the past 5 years: 2

Per diem/stipend paid to each Board member:

\$100 per meeting

Board of Directors members receive benefits? No

Annual reports, strategic plans, and adoption dates for reports / plans: N/A

SPHERE OF INFLUENCE

Acreage/square miles of Agency:

2,144.80 acres / 3.35 square miles

Acreage/square miles of Agency, plus adopted sphere of influence:

2,144.80 acres / 3.35 square miles

Adoption/affirmation date of sphere of influence:

Adopted May 4, 1987

Number of sphere amendments since sphere was adopted / Affirmed: One; May 4, 1987

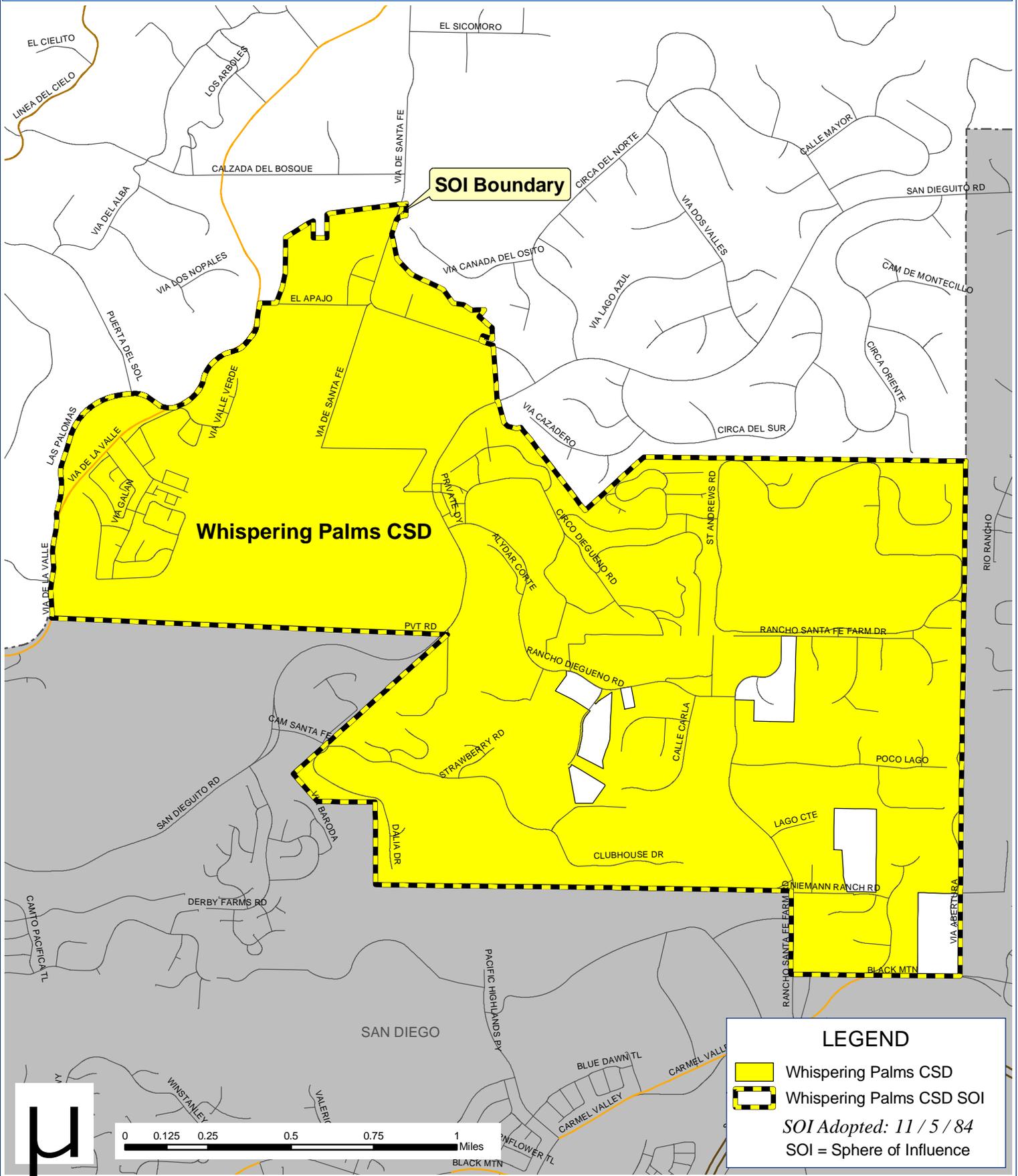
Number of acres included in sphere amendments:

800

Anticipated amendments to sphere of influence:

None

Whispering Palms Community Services District



Appendix E

**RWQCB – Region 9 Conditional Waiver No. 2 –
Discharges to Land of Recycled Water (Order No. R9-2-
14-0041, Adopted 6/26/14)**

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION**

ORDER No. R9-2014-0041

**CONDITIONAL WAIVERS OF WASTE DISCHARGE REQUIREMENTS FOR
LOW THREAT DISCHARGES IN THE SAN DIEGO REGION**

The Discharger, as described in the following table is subject to the waiver of waste discharge requirements as set forth in this Order:

Table A. Discharger Information

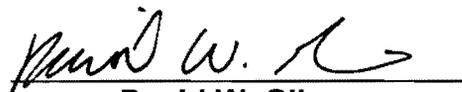
Discharger	Any person responsible for the discharge of low threat discharges which in accordance with the general and specific conditions specified in each of the waivers are unlikely to affect the quality of the waters of the State.
Dischargers regulated under this Order and the applicable waivers contained within, must be subject to application and annual fees assessed relative to their assigned threat and complexity ranking or other discharge specific conditions identified in California Code of Regulations, Title 23, section 2200.7.	

Discharges of wastes by persons from their locations in the San Diego Region are subject to the requirements set forth in this Order. Administrative information regarding this Order is contained in Table B below.

Table B: Administrative Information

This Order was adopted by the California Regional Water Quality Control Board, San Diego Region on:	June 26, 2014
This Order shall become effective on the date of adoption.	

I, David W. Gibson, Executive Officer, do hereby certify that this Order with all appendices is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Diego Region, on June 26, 2014.


David W. Gibson
Executive Officer

Waiver No. 2 – Discharges to Land of Recycled Water

A. Specific Findings for Discharges to Land of Recycled Water

1. The conditional waiver for discharges of Recycled Water to Land (Recycled Water Waiver) is for discharges of recycled water to land from short-term recycled water project,²⁰ not exceeding 365 days. Discharges of recycled water may contain pollutants that can adversely affect the quality of waters of the State. The application of recycled water to land may result in pollutants being concentrated in soils, which may adversely impact the quality of the waters of the State when those concentrated pollutants are leached out during rainfall events and/or overuse of irrigation water. The Recycled Water Waiver is not available, or applicable, to recycled water projects and users subject to rules and regulations established by master reclamation permits (MRPs) issued pursuant to Water Code section 13523.1, or otherwise regulated under WDRs or water reclamation requirements (WRRs), issued pursuant to Water Code sections 13260 and 13523, respectively.
2. Short term recycled water projects eligible for enrollment in the Recycled Water Waiver, are those without permanent recycled water delivery and/or distribution systems; and are not regulated or authorized under WDRs, WRRs, and/or MRPs.
3. In order to be eligible for the Recycled Water Waiver, discharges must comply with both the general and specific conditions of this waiver.
4. Discharges of recycled water to land that comply with the general and specific waiver conditions in the Recycled Water Waiver are not expected to pose a threat to the quality of waters of the State.

IT IS HEREBY ORDERED, that any Discharger proposing to discharge recycled water as part of a recycled water project, in order to meet the provisions contained in Division 7 of the Water Code, section 13269, must comply the following requirements.

B. General Waiver Conditions for Recycled Water Projects.

1. All windblown spray and surface runoff of recycled water, not considered “incidental runoff,”²¹ on to property not owned or controlled by the discharger must be prevented by implementation of MMs/BMPs consistent with the State Recycled Water Policy.
2. Discharges of recycled water to land must:
 - a. Not adversely affect the quality or beneficial uses of underlying groundwater;
 - b. Comply with the requirements of Calif. Code Regs. title 22 section 60310(a) through (i), unless sufficient information is provided

²⁰ Short-term recycled water projects are those without permanent recycled water delivery and/or distribution systems.

²¹ The State *Recycled Water Policy* defines and characterizes “incidental runoff” of recycled water.
http://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2013/rs2013_0003_a.pdf

- to demonstrate that a proposed alternative is protective of water quality and human health;
 - c. Be prohibited from entering into the MS4;
 - d. Not be used for groundwater recharge unless sufficient information is provided to demonstrate that it will be protective of water quality and human health; and
 - e. Be in compliance with the performance requirements of any applicable basin-specific Salt and Nutrient Management Plan(s).
3. The San Diego Water Board and/or other local regulatory agencies must be allowed reasonable access to the site in order to perform inspections and conduct monitoring.

C. Specific Waiver Conditions for Short-Term Recycled Water Projects

1. Operators of short-term projects proposing to discharge recycled water must file a NOI:²²
- a. Containing information about the operator, location of the project, source of the recycled water, planned period of and frequency of discharge of recycled water, and the MMs/BMPs or other measures that will be taken to prevent the discharge of pollutants with the potential to affect surface water and groundwater quality, and to prevent any discharges to the MS4; and
 - b. Including a letter, from the permitted recycled water agency supplying the recycled water, stating that the project will comply with recycled water regulations promulgated in Calif. Code Regs. title 22, Division 4, Chapter 3, Articles 1 through 10. The letter must also specify any monitoring and/or reporting required by the recycled water agency to demonstrate compliance with Calif. Code Regs. title 22, Division 4, Chapter 3, Reclamation Criteria, Articles 2, 3, 4, 5, and 5.1.

The NOI is valid for 365 days after the submittal of a complete NOI. A new NOI must be filed with the San Diego Water Board if the short-term project will exceed 365 days. A new NOI must be received by the San Diego Water Board at least 60 days prior to the expiration of the previous NOI. If no new NOI is received 60 days prior to the expiration of the previous NOI, the short-term recycled water project must cease operation 365 days after a complete NOI has been submitted.

2. Operators of short-term projects proposing to discharge recycled water must provide sufficient information demonstrating the operator will comply with both the general and specific conditions of this waiver and applicable recycled water regulations before the discharge may begin.
3. Operators of a short-term project proposing to discharge recycled water is not required to submit payment of an annual fee to the San Diego Water Board, in accordance with Water Code section 13269(a)(4).

²² A Notice of Intent required to be submitted for enrollment in the Recycled Water Waiver is located in Attachment A of Order No. R9-2014-0041 (*Appendix B of this Technical Report*).

D. Specific Waiver Conditions for Permanent Recycled Water Projects

1. Recycled water agencies proposing to supply and/or distribute recycled water through permanently installed facilities or structures before receiving WDRs must file a ROWD²³ pursuant to Water Code sections sections 13260 and 13522.5 containing the following:
 - a. Sufficient information for the San Diego Water Board to determine that the project will be consistent with the Basin Plan and any State Water Board recycled water policies, and will comply with all applicable recycled water regulations;
 - b. A letter from the California Department of Public Health (CDPH) stating that the project will comply with recycled water regulations in Calif. Code Regs. title 22, Division 4, Chapter 3, Articles 1 through 10. The letter must also specify any provisions, monitoring, and/or reporting required by the CDPH to demonstrate compliance with Calif. Code Regs. title 22, Division 4, Chapter 3, Reclamation Criteria, Articles 2, 3, 4, 5, and 5.1; and
 - c. A list of recycled water end users that will be regulated by the recycled water agency, and the proposed monitoring and reporting program the recycled water agency will implement to demonstrate that the end users are complying with the waiver conditions and applicable recycled water regulations.
2. The recycled water agency must submit sufficient information demonstrating that the recycled water agency, and its end users, will comply with the general and specific conditions of these waiver conditions and applicable recycled water regulations before the discharge may begin.
3. The conditional waiver issued to the recycled water agency is valid for 365 days after a completed ROWD has been submitted, or until either WDRs, Water Reclamation Requirements (WRRs) or a Master Reclamation Permit (MRP) are adopted for the project, whichever occurs first. The San Diego Water Board will adopt the project appropriate WDRs, Water Reclamation Requirements or a Master Reclamation Permit at the earliest possible opportunity.
4. Depending on the specifics of the project, the San Diego Water Board may enroll eligible recycled water projects in the Statewide General Order regulating discharges of recycled water²⁴ rather than this waiver.. The San Diego Water Board may also terminate enrollment in this waiver for those qualifying recycled water discharges and enroll those qualifying facilities/operations in the Statewide General Order.
5. If the WDRs, WRRs or an MRP cannot be adopted within 365 days after the completed ROWD has been submitted, the recycled water agency must

²³ A Report of Waste Discharge (ROWD) required to be submitted for enrollment in the Recycled Water Waiver as a "Permanent Recycled Water Project" is located on the San Diego Water Boards website at: http://www.waterboards.ca.gov/sandiego/publications_forms/forms/docs/form200m.pdf

²⁴ Adopted by the State Water Board on June 3, 2014.

request an extension of the conditional waiver at least 60 days prior to the expiration of the previous conditional waiver. If no request for an extension is received 60 days prior to the expiration of the previous conditional waiver, the permanent recycled water project must cease the discharge of recycled water 365 days after the completed ROWD was submitted.

6. If a recycled water agency enrolled in this waiver, in accordance with the waiver conditions in section D of this waiver, proposes to significantly add to or modify the treatment process (e.g., change the disinfection or filtration processes), then the discharger must submit a new ROWD containing the information listed in section D.1 of this Recycled Waiver Waiver.

Appendix F

City of San Diego – Rules and Regulations for Recycled Water

Rules and Regulations for
Recycled Water Use and Distribution
within the City of San Diego



September 2008

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SECTION 1: INTRODUCTION

1.1 BACKGROUND

The City of San Diego is primarily dependent on imported water for domestic and industrial uses. This imported supply is considered limited and its future reliability uncertain. In addition, transport of this water requires tremendous energy input which contributes a considerable portion of the total cost to the end user. It is in the best interest of the City of San Diego to promote and implement innovative water management strategies to conserve water and energy resources while still satisfying the water needs of its people.

On July 24, 1989 the San Diego City Council adopted Ordinance 0-17327, the Water Reclamation Ordinance, which provides for the planning of wastewater reclamation facilities, fostering the use of recycled water (also known as reclaimed water), controlling its sage distribution, and permitting and regulating its use. The basis for this ordinance is the California Water Code Section 13551, which states that the continued use of potable water for greenbelt irrigation and certain other non-domestic water uses is an unreasonable use of water if recycled water is available and usable for such purposes.

The use of water recycled from municipal wastewater is regulated by the California Regional Water Quality Control Board (RWQCB). California Water Code Section 13551 establishes a state policy to encourage the use of recycled water. Permission to use recycled water is based on the ability to adequately treat municipal wastewater to the point that the recycled water (effluent) meets the requirements of existing Title 22, Chapter 3 regulations of the California Code of Regulations. Title 22 was promulgated by the California Department of Public Health (DPH) to ensure proper health protection and specify the treatment degree to match the intended applications.

With the City's adoption of Ordinance 0-17327, the following Rules and Regulations have been developed to govern the distribution and use of recycled water for greenbelt irrigation and other non-potable uses as and when it becomes available.

1.2 POLICY

It is the policy of the City of San Diego that recycled water be used for any purpose approved for recycled water use when it is economically, financially, and technically feasible, as mandated by Ordinance 0-17327. Use of potable water for non-domestic uses shall be contrary to the City Policy, and shall not be considered the most beneficial use of a natural resource and shall be avoided to the maximum extent possible.

The distribution and use of recycled water shall be consistent with the standards and requirements of regulatory agencies for the protection of public health and welfare, and the preservation of the quality of the environment.

1.3 PURPOSE

The Rules and Regulations set forth herein pertain to recycled water service provided by the City of San Diego within the City's service area. These Rules and Regulations establish procedures for the distribution and use of recycled water.

Recycled water service from the City is subject to the availability of facilities and adequate capacity in these facilities.

It is the general intent of the City to provide recycled water to all service areas in the City identified in the Water Reclamation and Reuse Conceptual Master Plan for Modifications to the Metropolitan Sewerage System, and subsequent additions, revisions or updates of the plan, herein referred to as "Master Plan". Owners or property identified as being in a class of potential users in the Master Plan within areas for recycled water use shall qualify for a recycled water Use Permit from the City in compliance with these Rules and Regulations.

These Rules and Regulations shall be interpreted in accordance with the purpose, policy, and intent of these Rules and Regulations and the definitions as set forth in Section 2 herein. Insofar as these Rules and Regulations support portions of the California Code of Regulations, Title 22, any amendment of the California Code of Regulations which may be pertinent to these Rules and Regulations shall be incorporated accordingly.

1.4 GOALS

Recycled water shall be distributed and used in a manner that meets all Federal, State, County, and City requirements and which shall achieve the following:

- a. Prevent direct human consumption of recycled water through adherence to all applicable rules and regulations and laws which include a strict cross-connection/backflow prevention program.
- b. Prevent cross-connection between recycled and potable water systems.
- c. Isolate contamination by other sources, such as wastewater, sludge, urban run-off, or other substances which may come into contact with the recycled water.

Because recycled water is not processed to the point that it is acceptable for human consumption, it is important that these Rules and Regulations contain provisions which minimize or eliminate the possible misuse of the recycled water. Currently recycled water is only processed to a tertiary level for irrigation, industrial uses, dual plumbing, dust suppression, and soil compaction.

SECTION 2: DEFINITIONS

The terms hereinafter set forth, unless otherwise specified, shall have the following meanings:

AEROSOL (see WINDBLOWN SPRAY).

AIR-GAP SEPARATION shall mean a physical break between a supply of pipe and a receiving vessel. The air-gap shall be at least double the diameter of the supply pipe, measured vertically above the flood rim of the vessel, and in no case less than one inch. The design shall be to the satisfaction of the City of San Diego.

AMERICAN WATER WORKS ASSOCIATION (AWWA) shall mean the American Water Works Association California-Nevada Section.

APPLICANT shall mean any person, firm, corporation, association, agency or authorized representative who applies for recycled water service under the terms of these Rules and Regulations.

APPLICATION RATE shall mean the rate at which recycled water is applied to an irrigation or construction area expressed in inches per hour (or cm/hr).

APPROVED BACKFLOW PREVENTER shall mean a device installed to protect the potable water supply from contamination by recycled water as approved by California Department of Public Health and the Foundation for Cross-Connection Control and Hydraulic Research, University of Southern California (USC), School of Engineering.

APPROVED CHECK VALVE shall mean a watertight semiautomatic device which seats readily and completely and is designed to permit flow in only one direction, as approved by California Department of Public Health (DPH) and the Foundation for Cross-Connection Control and Hydraulic Research, University of Southern California (USC), School of Engineering.

APPROVED DOUBLE CHECK VALVE ASSEMBLY (DC) shall mean an assembly of at least two independently acting approved check valves including tightly closing shut-off valve assemblies on each side of the check valve assembly and test cocks available for testing the water tightness of each check valve as approved by California Department of Public Health (DPH) and the Foundation for Cross-Connection and Hydraulic Research, University of Southern California (USC), School of Engineering.

APPROVED USE shall mean the use of recycled water in a manner, and for such purpose, designated in a user permit issued by the City and in compliance with any and all applicable regulatory agency requirements.

APPROVED USE AREA shall mean a site, with well defined boundaries, designated in a user permit issued by the City to receive recycled water for an approved use.

AS-BUILT DRAWINGS (see RECORD DRAWINGS).

AUTOMATIC IRRIGATION SYSTEM shall mean an electronic, electrical, or mechanical system which includes automatic controllers, valves, and associated equipment required for the programming of effective water application rates when using recycled water.

CAPACITY CHARGE shall mean a one-time charge determined from the Schedule of Rates of the City, and payable by the customer for obtaining recycled water. The purpose of this charge is for the expansion of recycled water facilities to accommodate future growth.

CITY shall mean The City of San Diego, California.

CITY COUNCIL shall mean the Council of the City of San Diego.

CITY MAYOR shall mean the City Mayor of the City of San Diego or designee.

COMMERCIAL USE shall mean the use of recycled water for toilets, urinals, decorative fountains, landscape irrigation, industrial, and other related uses.

CONNECTION FEE shall mean a charge imposed by the City for establishing or reestablishing recycled water service, including construction and/or installation of offsite facilities.

CONSTRUCTION USE shall mean the approved use of recycled water to support construction activities such as soil compaction and dust control during grading.

CONTRACTOR shall mean a person, persons, or firm entering into a legal agreement with the owner, customer, or the City for the performance of work on all or any portion of facilities subject to these regulations.

COUNTY shall mean the County of San Diego, California.

CROSS-CONNECTION shall mean any unprotected connection between any part of a potable water system and recycled water system, and/or between any part of recycled water system and other sources such as sewers and sludge force mains whereby contamination may enter the potable water system.

CUSTOMER shall mean any person, firm, corporation, association, or agency that holds a valid recycled water Use Permit or agreement, or has obtained approval from the City to use recycled water.

DEPARTMENT OF ENVIRONMENTAL HEALTH (DEH) shall mean the County of San Diego Department of Environmental Health.

DEPARTMENT OF PUBLIC HEALTH (DPH) shall mean the Department of Public Health for the state of California.

DESIGNATED USE AREA shall mean the area covered by recycled water.

DEVELOPMENT SERVICES DEPARTMENT shall mean the City of San Diego's Development Services Department.

DIRECT BENEFICIAL USE shall mean the use of recycled water which has been transported from the point of production to the point of use without an intervening discharge to waters of the State.

DISCHARGE shall mean any release or distribution of recycled water to a sewerage system, or storm drain system.

DUAL PLUMBING SYSTEM shall mean when the toilets and urinals in a building are served by recycled water.

GPH shall mean the rate of recycled water delivery in gallons per hour.

GPM shall mean the rate of recycled water delivery in gallons per minute.

GRAYWATER shall mean untreated wastewater other than toilet and/or urinal waste and kitchen sink waste.

GREENBELT AREAS shall mean parcels of recreational or unoccupied public or private lands within the service area, including but not limited to, golf courses, cemeteries, parks, street median strips, and landscaping of common areas within the service area.

HCF shall mean the unit of water quantity measurement delivered to the user in hundreds of cubic feet.

INDUSTRIAL WATER shall mean recycled water used in industrial facilities.

INFILTRATION RATE shall mean the rate at which water will penetrate the soil surface and enters the soil profile, expressed in inches per hour (or cm/hr).

INSPECTOR shall mean any person authorized by the City to perform inspections of either onsite or offsite facilities or areas prior to construction, during construction, after construction, and during operation.

KILL SERVICE (see SERVICE KILL)

LANDSCAPE IMPOUNDMENT shall mean a body of recycled water which is stored or used for aesthetic enjoyment or which otherwise serves a function not intended to include bodily contact.

LANDSCAPE STANDARDS shall mean the Landscape Standards of the City of San Diego.

LANDSCAPE TECHNICAL MANUAL shall mean the Landscape Technical Manual (LTM) of the City of San Diego dated November 1989, City Clerk Document No. RR-274506. This manual is used when the Landscape Standards do not cover an area of concern.

MAYOR shall mean the Mayor of the City of San Diego or designee.

MUNICIPAL CODE shall mean the Municipal Code of the City of San Diego.

NON-POTABLE WATER shall mean water that has not been treated for, or is not acceptable for, human consumption in conformance with the Federal, State and local water standards, such as recycled water and raw water.

NON-RESTRICTED RECREATIONAL IMPOUNDMENT shall mean an impoundment of recycled water in which no limitations are imposed on body-contact water sport activities.

OFFSITE FACILITIES shall mean facilities under the control of the City including, but not limited to, recycled water transmission mains, recycled water pipelines, reservoirs, pumping stations, treatment plants, and other appurtenances and property. For recycled water service offsite facilities shall be those upstream of the point of connection with the customer's onsite facilities located at and starting at the downstream end of the meter tailpiece.

ONSITE FACILITIES shall mean the facilities under the control of the applicant, owner, or customer including, but not limited to, landscape irrigation systems and agricultural irrigation systems. For recycled water service, the onsite facilities shall be those downstream of the recycled water service connection, which shall normally be the downstream end of the meter tailpiece.

OPERATIONS PERSONNEL shall mean any employee of the user, owner, or customer whether permanent or temporary, or any contracted worker whose regular or assigned work involves the supervision, operation, or maintenance of equipment, facilities, or a system using recycled water.

PERMIT (see **USE PERMIT**)

PERMITTED CAPACITY OF RECYCLED WATER shall mean the amount of recycled water that the user is entitled to have for the area and use specified in the recycled water permit and plans and/or agreement.

POC shall mean the point of connection of the onsite facilities to the offsite facilities of the recycled water distribution system.

PONDING shall mean the retention of recycled water on the surface of the ground or other man-made surfaces, including the designated use area, for a period of time following the cessation of an approved recycled water use activity such that a hazard or potential hazard to public health results.

POTABLE WATER shall mean water that is pure, wholesome, and suitable for human consumption, and which conforms to the latest edition of the United States Public Health Service Drinking Water Standards, the California Safe Drinking Water Act, and any other applicable standards.

RECLAIMED WATER is also known as recycled water. (See RECYCLED WATER)

RECORD DRAWINGS shall mean approved Mylar drawings that correctly show the completed onsite facilities and/or offsite facilities as constructed or modified. These drawings shall show all potable water, recycled water and sewer lines, and other utility systems.

RECREATIONAL IMPOUNDMENT shall mean a body of recycled water used for recreational activities including, but not limited to, fishing, boating, and/or swimming. Allowable uses will depend on treatment level of the recycled water.

RECYCLED WATER shall have the definition set forth in Title 22, Division 4 of the California Code of Regulations and shall mean water which, as a result of treatment of wastewater, is suitable for a direct beneficial use or a controlled use that otherwise would not occur. Specifically excluded from this definition is gray water.

RECYCLED WATER DISTRIBUTION MAINS shall mean recycled water pipelines and appurtenances acquired or constructed and owned by the City, and used for the conveyance of recycled water between the recycled water transmission mains and the recycled water service connections.

RECYCLED WATER FACILITIES shall mean systems, structures, etc., used in the treatment, storage, pumping, transmission and distribution of recycled water.

RECYCLED WATER SERVICE CONNECTION shall mean the point of connection (POC) of the customer's recycled water line with the recycled water service line of the City, which shall normally be the downstream end of the recycled water meter tailpiece.

RECYCLED WATER SERVICE LINES shall mean recycled water distribution pipelines and appurtenances acquired or constructed and owned by the City, and used for the conveyance of recycled water between the recycled water distribution mains and the individual recycled water service connections.

RECYCLED WATER SITE SUPERVISOR shall mean a person designated and authorized by the user, owner, or customer to operate the onsite facilities and irrigation systems and be responsible for the application of the guidelines, criteria, and standards of these Rules and Regulations. The designated Site Supervisor shall be certified to operate and maintain the onsite facilities and irrigation system, and to assume the responsibilities outlined in Section 6.2.2 by completing a Recycled Water Site Supervisor class. Certification classes are offered by the County of Water Authority (CWA) and the City of San Diego.

RECYCLED WATER TRANSMISSION MAINS shall mean major recycled water pipelines and appurtenances acquired or constructed and owned by the City, and used for the conveyance of recycled water between the water reclamation plant and pump station, reservoir, and/or the recycled water distribution mains.

REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION DEVICE (RPPD) shall mean a backflow preventer incorporating not less than two check valves, and automatically operated differential relief valve located between the two check valves, a tightly closing shut-off valve on each side of the check valve assembly, and equipped with necessary test cocks for testing.

REGULATORY AGENCIES shall mean those public entities legally constituted by Federal, State, County, and City statutes to protect public health and safety and water quality.

RESTRICTED RECREATIONAL IMPOUNDMENT shall mean a body of recycled water in which recreation is limited to fishing, boating, and other non-body-contact water recreation activities.

RULES AND REGULATIONS shall mean these Rules and Regulations for Recycled Water Use and Distribution within the City of San Diego.

RUN-OFF shall mean the movement of recycled water beyond the boundaries of the designated use area along the ground surface or man-made surfaces including, but not limited to, pedestrian walkways, streets, playground surfaces, grassy slopes, and drainage courses.

RWQCB shall mean the Regional Water Quality Control Board of the State of California, San Diego Region.

SCHEDULE OF RATES shall mean a schedule containing fees, charges, and deposits determined and issued by the City for the uses and services of recycled water.

SEPARATION shall mean the horizontal and/or vertical distance between a recycled water pipeline and a parallel potable water pipeline, sewer pipeline, or a sludge force main. The separation shall be the clear outside-to-outside distance between the pipelines in question.

SERVICE AREA shall mean all areas identified for recycled water use in the Water Reclamation and Reuse Conceptual Master Plan or the Recycled Water Distribution Master Plan, including all subsequent revisions/updates for use of recycled water within greater San Diego.

SERVICE KILL shall mean discontinue and cap service at main line and remove the meter.

SPRAY IRRIGATION shall mean application of recycled water to land to maintain vegetation or support growth of vegetation by spraying it from sprinklers or orifices in piping.

SSPWC shall mean the latest edition of the Standard Specifications for Public Works Construction, including the Regional Supplement Amendments of the County of San Diego commonly known as the “Green Book”.

SURFACE IRRIGATION shall mean application of recycled water by means other than spraying.

UNAUTHORIZED DISCHARGE shall mean any release of recycled water that violates these Rules and Regulations or any applicable Federal, State, County, or City statutes, regulations, ordinances, contracts or other requirements.

USE PERMIT (Recycled Water Use Permit) shall mean a permit issued by the City to a recycled water service applicant after the satisfactory completion of the service application procedures set forth in these Rules and Regulations. This permit constitutes a service agreement which legally binds the user to all conditions of these Rules and Regulations.

USER shall mean any person, group, firm, partnership, corporation, association or agency approved to use recycled water by having been issued a Use Permit and having plans approved by the City.

WASTEWATER shall mean a combination of water and water-carried wastes, whether treated or untreated, discharges into or permitted to enter a public sewer.

WATER DEPARTMENT shall mean the Water Department of the City of San Diego.

WINDBLOWN SPRAY shall mean dispersed, airborne particles of recycled water resulting from the discharge of recycled water and capable of being transmitted through the air to locations other than those for which the direct application of recycled water was intended.

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SECTION 3: RECYCLED WATER SERVICE REQUIREMENTS

3.1 GENERAL

The City shall provide recycled water service in accordance with these Rules and Regulations to all areas identified in the Water Reclamation Master Plan and subsequent updates, additions, revisions, or amendments for the use of recycled water, as and when such recycled water becomes available.

3.2 SERVICE CONDITIONS

The City shall control and schedule recycled water distribution to customers. The application for recycled water service and the use of recycled water by any customer shall be subject to all the terms and conditions of the State, Federal, County, and City, including these Rules and Regulations and the California Code of Regulations Title 17 and Title 22.

3.3 APPLICATION PROCEDURE

3.3.1 Filing Application for Recycled Water Service

An applicant meeting the requirements for recycled water service shall file an application for recycled water use with the Water Department, Water Resources and Planning Division, Recycled Water Program, on a standard form designated by the City.

The application form shall contain detailed information concerning the applicant as follows:

- a. The application relationship to the property for which recycled water service is requested. In cases where the applicant is not the legal owner of the property, the legal owner shall consent to the application on a supplemental notarized form.
- b. The address and legal description of the property covered by the application.
- c. The purpose for which the property will be used.
- d. The proposed use of recycled water within a specifically defined designated use area on the property
- e. The estimated service requirements for recycled water.
- f. The designation of a Recycled Water Site Supervisor.
- g. Any special condition for service pursuant to these Rules and Regulations.

Section 3: Recycled Water Service Requirements

3.3.2 Compliance of Application with Regulatory Requirements

The applicant for recycled water shall agree to comply with the requirements of these Rules and Regulations and any and all applicable Federal, State, County, and City statutes, ordinances, regulations and other requirements.

3.3.3 Application Fees and Other Charges

Application fees, deposits, meter and/or services fees, cross connection test fees and capacity charges (if applicable) shall be paid in accordance with the schedule of rates of the City and shall be subject to all terms and conditions of these Rules and Regulations.

3.3.4 Review of Application by the City

Upon receipt of an application for recycled water service, the City shall review the application and conduct any necessary investigation in order to determine whether the City shall provide recycled water service. The City may prescribe requirements in writing to the applicant as to the facilities necessary to be constructed including design, manner of construction, method of operations, and conditions of service.

3.4 ESTABLISHING SERVICE

3.4.1 Request for Service Connection

Following the completion of construction and/or installation of the recycled water facilities, the customer shall request the City to install the service connection.

The request for service connection shall be accompanied by all required fees for installation and connection as indicated in the current schedule of rates and as appropriate for the size and type of service.

3.4.2 Request for Service Start-Up

Following final acceptance of the onsite facilities by the City, the customer shall request recycled water service start-up. The request for start-up shall be accompanied by any outstanding cash payments as per the current schedule of rates in addition to those indicated in Section 3.3.3.

3.4.3 Temporary Use of Potable Water

At the discretion of the City, potable water may be made available on a temporary basis, until recycled water is made available. Before the customer receives temporary potable water and prior to commencement of recycled water service, an inspection of the onsite facilities shall be conducted by the City to verify that the facilities have been maintained

Section 3: Recycled Water Service Requirements

and are in compliance with the recycled water Use Permit. Upon verification of compliance, the customer shall request service start-up.

The City may suspend or terminate recycled water service at any time the recycled water at the terminal point of the City's reclamation plant does not meet the requirements of the regulatory agencies. Recycled water service would, in such case, be restored when the recycled water meets the governing requirements at the terminal point of the treatment plant. In addition, an approved air gap separation must be used in any connection for temporary potable water.

3.4.4 Non-registering Recycled Water Meter

Should a recycled meter be identified as non-functioning, non-registering, or out of service an immediate shutdown of the recycled service to the meter shall be executed. A notice shall be sent to the customer within 24 hours. Re-connection of service shall require the same procedure as a new service per these Rules and Regulations and all applicable Federal, State, County, City, and other applicable regulations.

3.4.5 Wholesale Service

Wholesale service to other water agencies (i.e. City of Poway, Olivenhain, and Otay) downstream of the City of San Diego point-of-connection (POC) requires those agencies to enforce all Federal, State, County, and other applicable regulations on their "retail" customers. Upstream of the wholesale service POC shall be the responsibility of the City of San Diego per these Rules and Regulations and all applicable Federal, State, County, and other applicable regulations

3.5 CONDITIONS FOR RECYCLED WATER SERVICE

Permits for recycled water service and any connections for service made, as provided in the permit issued under these Rules and Regulations, shall be subject to the following conditions:

3.5.1 Control of Facilities (Liability)

- a. The City shall have control of and shall maintain and repair recycled water service lines and meters. The customer shall repair and maintain in good working condition the recycled water service connections and onsite facilities. The City shall be entitled to inspect and test all connections and onsite facilities in the manner in these Rules and Regulations.
- b. The City and its agents shall be indemnified and held harmless by the permit holder from and against all claims, damages, losses or expenses arising from the use of recycled water, and/or during the testing and inspection of a recycled water user site under the permit or from the use of facilities by which recycled water is

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conveyed, except that the City shall retain liability for its established sole negligence or willful misconduct.

- c. The customer shall, at all times, keep the meter assembly and the area around the meter, or other facilities free from deposits of oil, toxic, hazardous or contaminated liquid or waste, trash, soil, building materials or substances, objects, or obstructions. The customer shall not allow or permit meter boxes, or other facilities to become obstructed or obscured by trees, shrubs, plants or in any manner impede their use or access to them. If such substances, objects, or obstructions are not cleaned and removed by the customer, the cleaning and removal shall be done by the City at the expense of the customer after a reasonable time of notification.

3.5.2 Extension of Distribution Mains

The customer shall pay for all onsite facilities, including their installation, as well as for recycled water service lines and extension of recycled water transmission and distribution mains in order to provide recycled water service to the customer.

3.5.2.1 Reimbursement Agreement:

In cases where a customer and/or developer requests recycled water services in areas where the City does not have existing transmission and distribution mains, the customer's request for recycled water service shall be handled as follows:

Where the City determines it will be most practical to require extension of transmission and distribution mains to areas not covered in a permit application, or where oversized or additional facilities may be needed to accommodate future development, the permit may be conditioned upon the applicant financing and developing such extra service lines. In this event, the City or applicant shall undertake to provide for cost reimbursement whereby subsequent developers of benefited property will reimburse the original developer or the City for proportional shares of the improvements.

Such reimbursement shall be accomplished pursuant to the Cost Reimbursement District Procedural Ordinance of the San Diego Municipal Code, or in the event that the total cost of all improvements is less than an amount established by the City Council, by the Municipal Code, pursuant to MC 67.52.

3.5.2.2 Participation Agreement:

In cases, where the City has planned capital improvement projects which are scheduled for undertaking and completion on a planned timetable, and where the customer and/or developer finds the City's plan for implementation and completion too long to wait for, and where the customer chooses to undertake and

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complete a specific planned capital improvement project of the City with the customer's own financial resources, then a participation agreement shall be concluded with the customer or developer and the City agreeing on equitable sharing of the financial outlay of the project, and the project shall be completed in accordance with the design and specification of the City.

3.5.3 Prohibition of Changes:

The customer shall not make any changes in, or additions to, the recycled water system or the potable system in the recycled water use area. Any changes or alterations to existing onsite facilities, whether the result of intended or unintended damage, shall be reported in writing immediately to the City.

3.5.4 Services to Common Areas

The City reserves the right to supply recycled water to contiguous areas of a single ownership through a single recycled water service connection.

Common areas owned or operated by home owner's associations or similar cooperatives should have only one service connection whenever it is practical, and will be operated as a single ownership. A recycled water service connection and water meter shall not be used to supply property not covered by the permit authorizing the connection.

3.5.5 Subdividing an Approved Service Area

- a. When a property provided with a recycled water service connection and water meter is subdivided, such connection and meter shall be considered as serving a lot or parcel of land on which the meter is located. Additional recycled water distribution mains and/or service lines will be required for all subdivided areas in accordance with these Rules and Regulations, unless the sub divider provides covenants, conditions, and restrictions (CC&R's) properly recorded with the County Recorder for the operation of onsite recycled water facilities serving more than one lot, and also provides easements for recycled water distribution mains and/or service lines or shows easement locations in the CC&R's.
- b. All recycled water used on any premise where a meter is installed must pass through the meter. Customers shall be charged for all recycled water passing through the meter.
- c. Every recycled water service connection and meter assembly shall include a curb cock or wheel valve, as approved by the City, on the inlet side of the meter, which shall be used exclusively by the City for controlling the recycled water supply through the recycled water service line. If the curb cock or wheel valve is damaged by the customer's use, repair and/or replacement by the City shall be at the customer's expense.

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- d. Each customer shall restrict the use of recycled water to those uses set forth in the Use Permit for recycled water services approved by the City.

3.5.6 Temporary Discontinuation of Recycled Water Service

By reason of circumstances beyond the control of the City, or in order to protect the facilities of the City, or for the protection of public health, safety and welfare of the residents or property owners of the City, recycled water service may be terminated under the conditions set forth below:

- a. On a temporary or permanent basis in the manner provided for in Section 11.1.
- b. On a temporary basis at any time the recycled water, at the terminal point of the City's water reclamation plant takeoff, does not meet the requirements of the regulatory agencies, including but not limited to those prescribed by the California Code of Regulations, Title 22. Recycled water service would, in such case, be renewed at such time that recycled water at the terminal point of the water reclamation plant would again meet the requirements of the regulatory agencies or at such time that the City would supplement the recycled water system from the potable water system.
- c. When the City determines that a water shortage exists or is threatened which prevents further recycled water service.
- d. When a meter is found to be out of service or is not registering, the system will be shutdown until the meter is serviced and inspected.

3.5.7 Interim Water Service

Recycled water may be provided via a potable water meter which is connected to a fire hydrant on an interim basis if requested by a customer provided the following conditions are met:

- a. Water is provided to the customer for no longer than twelve (12) months.
- b. A Reduced Pressure Principal Assembly is connected to the outlet side of a fire hydrant meter.
- c. "Do not drink" signage (per standard sign detail).
- d. All above ground, exposed facilities shall be consistently color-coded (purple) and marked to differentiate recycled water facilities from potable water and/or wastewater facilities, as per Recycled Water System Guidelines Book 7 Standard Drawings of the City of San Diego.

3.5.8 Conditions of Pressure and Service

Pressure and service shall be provided on an as available basis, at the location of the customer's meter. The Water Department Director shall state the desirable pressure of the system in the department's design guide. All customers shall hold the City harmless from any and all damages and liabilities caused in whole or in part by pressure conditions, water quality variations, or interruptions in service. It shall be the owner's responsibility to install booster pumps or increase pressure if necessary.

3.6 SIZE AND LOCATIONS OF SERVICE CONNECTIONS

The City reserves the right to determine the size and location of recycled water service lines, the service connections, and the meters. The City shall also have the right to determine the kinds and size of backflow prevention devices and any and all other appurtenances to the service.

The recycled water service lines shall be extended to a curb line, or property line of the customer's property, abutting upon a public street, highway, road, or City's easement in which recycled water distribution mains are installed.

3.7 ILLEGAL CONNECTIONS

No person shall make any connection to recycled water facilities of the City without a permit from the City. Penalties for violations may be assessed according to Section 11 of these Rules and Regulations.

3.8 METER TESTING

Any customer may request that the meter through which the recycled water is being furnished be examined and tested by the City for the purpose of ascertaining whether or not it is correctly registering the amount of recycled water being delivered through it. In such an event, the customer shall make a request to the Customer Services Office of the Water Department for a Meter Controversy Test. The meter testing shall be performed in conformance with the standards set in the Municipal Code Section 67.22 for potable water meters.

3.9 CROSS-CONNECTION PREVENTION

3.9.1 Purpose

The primary purpose of a cross-connection program is to protect the City's potable water supply from possible contamination by prohibiting and preventing cross-connections between the potable water distribution system and the recycled water distribution system, in accordance with Title 17, Chapter 5 of the California Code of Regulations. The secondary purpose is to protect the recycled water system from other contaminants.

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The following provisions are in additions to, and not in lieu of, the controls and requirements of other regulatory agencies, such as the County of San Diego Department of Environmental Health (DEH):

3.9.2 Backflow Prevention

Regulations governing backflow prevention devices are intended to protect the City's potable water supplies and are not intended to protect users from potential hazards of cross-connections in the user's onsite facilities.

City approved backflow prevention for the City's recycled water supply shall be provided by the user in accordance with the specifications of the Water Department. Provisions, installation, maintenance and inspection of backflow prevention devices shall be the sole responsibility and duty of the customer, and at customer's expense. Inspection of backflow prevention devices shall be done at least once a year, or more often in those instances where successive inspections indicate repeated failures. These devices shall be inspected, repaired, overhauled or replaced at the expense of the customer whenever they are found to be defective. Records of such tests, repairs and overhauls shall be kept by the City, and such records shall be made available to any concerned regulatory agency on request.

The installation and inspection of backflow prevention devices shall be done by a certified inspector at the expense of the customer. The customer shall submit to the City Water Department original inspection certificates as proof of compliance. All inspection and testing shall be done to the satisfaction of the City and the regulatory agencies concerned.

3.9.3 Type of Protection

The level of protection required is related to the degree of hazard that the City determines exists on the premises served. The following protective devices may be required: Reduced Pressure Principle Backflow Prevention Device (RPPD), Double Check valve (DC), and/or an Air Gap separation (AG). The user may choose a higher level of protection than required by the City. Minimum types required, relative to various situations, are listed below. Situations not listed shall be evaluated on a case-by-case basis and the appropriate level of protection required shall be determined by the City in consultation with the County of San Diego Department of Environmental Health (DEH) and the California Department of Public Health (DPH).

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3.9.3.1 Type of Backflow Prevention

Recycled Water Situations:	Type of Prevention
a. Premises where the public water system is used to supplement the recycled water supply.	AG
b. Premises where recycled water is used, other than as allowed in paragraph (3), and there is no interconnection with the potable water system.	RPPD
c. Residences using recycled water for landscape irrigation as part of an approved dual plumbed use area established pursuant to sections 60313 through 60316 unless the recycled water supplier obtains approval of the local public water supplier, or the Department if the water supplier is also the supplier of the recycled water, to utilize an alternative backflow protection plan that includes an annual inspection and annual shutdown test of the recycled water and potable water systems pursuant to subsection 60316(a).	DC

3.9.3.2 Color-Coding Dual or Multiple Water Systems:

Where any property subject to recycled water service is served by or contains dual or multiple water systems and piping, the exposed portion of recycled water pipelines, valves, and other fittings shall be painted purple, banded or marked to distinguish clearly which is used for potable water and which is used for recycled water. In addition, all new unexposed recycled water pipes installed on any such property shall be similarly painted purple, banded or marked. All recycled water outlets shall be posted with bilingual precautionary posters with the wording “CAUTION: RECYCLED WATER - DO NOT DRINK” and “CUIDADO: AGUA RECICLADA - NO TOME EL AGUA”. Main shut-off valves shall be clearly identified to distinguish between recycled water and potable water systems.

3.9.4 User’s Designated Recycled Water Site Supervisor

The user’s designated Recycled Water Site Supervisor, whose qualifications and responsibilities are discussed in Section 6.2.2, shall be responsible for the prevention of any cross-connections on the property. In the event of a cross-connection to the potable water system, the user shall immediately shut off the main recycled water supply valve and depressurize the recycled water system to prevent further mixing with the potable supply. The user shall also immediately advise the City of the occurrence of the cross-

Section 3: Recycled Water Service Requirements

connection. The County and State health officers shall be immediately advised by the City so that appropriate measures may be taken to control any contamination or pollution.

The user shall assume all responsibilities for the prevention of cross-connections between the on-site facilities and any potable water supply, and shall indemnify and hold the City harmless from and against any claim of damage or loss which is caused or is alleged to have been caused, in whole or in part, by cross-connections of on-site facilities. Notwithstanding this covenant, the user shall be subject to the rules pertaining to the use of recycled water as otherwise provided herein, including but not limited to those allowing the City or County DEH to inspect and approve all on-site recycled water facilities.

3.10 CONVERSION TO/FROM RECYCLED WATER SERVICE

3.10.1 Conversion to Recycled Water Service

When a user proposes the conversion of any existing potable water irrigation system to a recycled water irrigation system, a comprehensive investigation of the proposed recycled water system shall be performed for the City at the expense of the user. On a case-by-case basis, the City and the County DEH shall review the as-built drawings, and investigation reports, and determine the measures necessary to bring the existing system into full compliance with these Rules and Regulations. No existing potable water facilities shall be converted to, or incorporated into, the recycled water system without proper testing and approval by the City and/or other regulatory agencies. The City or the County of San Diego may deny issuance of recycled water users permit if either determines that the proposed conversion cannot be made safely.

3.10.2 Conversion from Recycled Water Service

If, due to onsite failure of the recycled water system, or use violations, the City determines it necessary to convert the onsite facilities from recycled water supply to a potable water system, or other water supply, it shall be the responsibility of the user to

pay all costs for such conversion, unless determined otherwise by the City. Conversion costs shall include the following:

3.10.2.1 Isolation of the Recycled Water Supply

Service shall be killed and meter shall be removed by the City at the recycled water main, or abandoned in a manner approved by the City.

3.10.2.2 Installation of Backflow Prevention Device

The user shall install approved backflow devices on all potable water, or other water meter connections.

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3.10.2.3 Removal of Existing Fittings

The user shall be responsible for removal and replacement of all fittings with approved fittings for potable water.

3.10.2.4 Hydraulic Testing and Disinfections

The user shall be responsible for hydraulic testing and disinfection of the converted pipeline.

3.10.2.5 Notification

The user shall notify all personnel involved with the operation of the abandoned recycled water service.

3.10.2.6 Warning Labels/Signs

The user shall be responsible for the removal of all warning signs and labels.

3.10.2.7 Installation of Potable Water System:

Provisions and installation of all potable water lines and facilities and any capacity fees due, as provided for in these Rules and Regulations shall be the responsibility of the user.

3.10.2.8 Threshold Valves:

Threshold valves are required for potable water at the building in order to isolate during testing. A bypass is required downstream of the threshold valve for testing purposes.

3.11 AUTHORIZED USES OF RECYCLED WATER

The uses of recycled water may include, but are not limited to, landscape irrigation, agricultural irrigation, construction water, industrial process water, toilet and urinal flushing, commercial use, groundwater recharge, enhancement of wildlife habitat, and recreational impoundment. Each such use must be considered for approval by the City on a case-by-case basis. Determinations as to specific uses to be allowed shall be in accordance with the standards set forth in Title 22, Division 4 of the California Code of Regulations and with the intent of this ordinance to preserve the public health. The City may, at its discretion, set forth specific requirements as conditions to providing such services and/or require specific approval from the appropriate regulatory agencies. The use of recycled water in swimming pools is not permitted.

3.12 SCHEDULING RECYCLED WATER

The City will control and schedule the delivery of recycled water if, in the opinion of the City, scheduling is necessary for purposes including, but not limited to, the maintenance of an acceptable working pressure in the recycled water system and the provision for reasonable safeguards in relation to public health.

3.13 TEMPORARY/EMERGENCY CONNECTIONS TO THE POTABLE WATER SYSTEM

If, in the opinion of the City an emergency exists, or is threatened to occur, whereby all or a portion of the water in the recycled water system is not available, the City may approve a temporary connection to the potable water system. Such a temporary connection shall be made in accordance with these Rules and Regulations. The decision to allow temporary service to the potable water system shall be at the sole discretion of the City, and the City shall maintain and operate all connections.

Before such temporary connection is made, the portion where potable water is to be supplied shall be isolated by an air gap separation from the remainder of the recycled water system. This isolation shall occur at either individual services or on the offsite system, as determined by the City. An approved backflow prevention device shall be installed on the potable water lines in accordance with Section 3.10 of these Rules and Regulations and all applicable regulations of the governing agencies. The emergency connection shall be removed before connection is re-established to the recycled water system. Re-establishment of recycled water service must be inspected and approved by a City inspector prior to resuming delivery of recycled water.

On a case by case basis, the City of San Diego and all related regulatory agencies may approve a temporary potable water connection for a customer's recycled water system used for irrigation without an air gap. The temporary connection shall be designed to allow only one water source to serve the customer's system at any given time. An approved backflow device and meter shall be installed on the potable water service and the recycled water service prior to the customer's connection, in accordance with Section 3.10. At no time shall the potable water system be connected to a system simultaneously served by a non-potable source.

The City, at its own discretion, may provide potable water or disinfected raw water in lieu of recycled water.

3.14 ADDITIONAL RESTRICTIONS ON THE USES OF RECYCLED WATER

3.14.1 Run-off And Ponding

- a. The onsite facilities shall be designed to meet the peak moisture demand of all plant materials used within the design area and to apply irrigation water in a

Section 3: Recycled Water Service Requirements

manner compatible with the infiltration rates of the soil types within the approved use area.

Conditions that directly or indirectly cause a run-off of recycled water outside of the approved recycled water use areas; cause a ponding of recycled water; or permit windblown spray to pass outside of the approved use area, whether by design, construction practice, or system operations, shall be eliminated or controlled to the greatest extent possible with the use of the best practicable technology or methodology.

- b. The use of recycled water shall be limited to those uses permitted by Federal and State law, and to those uses approved by the City for the recycled water service area.

3.14.2 Protection Of Drinking Fountains And Public Facilities

Any and all drinking fountains located within an approved recycled water use area shall be protected by re-siting or isolating them with a protective structure from contact with recycled water, whether by windblown spray or by direct application through irrigation or other approved uses.

Recycled water irrigation systems shall not be installed near food establishments or public facilities such as picnic tables. Design of systems near such facilities shall require the County DEH approval.

3.14.3 Hose Bibs And Quick Couplers

No customer shall use or install any hose bibs on a recycled water system regardless of style, construction, or identifications. The use of quick couplers is at the sole discretion of the City of San Diego Water Department. Their intended use shall require a separate plan review from the Department. Only quick couplers with the approved color and identification will be allowed.

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SECTION 4: FACILITIES DESIGN AND CONSTRUCTION

4.1 DESIGN GUIDELINES FOR ON/OFFSITE FACILITIES

The design of the offsite facilities, including the preparation of plans and specifications shall be under the responsibility of an engineer registered with the State of California. The design of the onsite facilities that will use recycled water and the preparation of plans and specifications, shall be under the responsibility of a landscape architect, civil engineer or mechanical engineer registered with the State of California. All offsite and onsite recycled water facilities shall comply with the Guidelines for Distribution of Non-potable Water developed by the American Water Works Association (AWWA) California-Nevada Section and the State Department of Public Health Guidelines for Use of Recycled Water. All offsite and onsite facilities shall also comply with all the requirements, conditions and standards set forth in the current edition of the Standard Specifications for Public Works Construction including the Regional Amendments of the County and City of San Diego and the Recycled Water System Guidelines Book 7 Standard Drawings of the City of San Diego, The City's Landscape Technical Manual, Park and Recreation Consultant's Guide, California Health Laws Related to Recycled Water ("The Purple Book"), and the provisions of these Rules and Regulations, and other related design standards and construction specifications guidelines.

The recycled water system including both offsite and onsite facilities, shall be separate and independent of any potable water system. Refer to Book 7 for offsite requirements.

4.2 ONSITE RECYCLED WATER FACILITIES

All onsite recycled water facilities which specifically benefit the approved use area shall be provided by the applicant, owner or customer at his/her expense. The customer shall make, at his/her expense, any modification to the potable water system on the premises which is required by the City, in order to permit recycled water service, including but not limited to the installation by the customer of approved backflow preventers. Onsite recycled water facilities shall be designed to accommodate the use of recycled water in those areas where the City has determined that recycled water will be supplied in the future, even though recycled water service is not immediately available when the design area is ready for construction. Provisions shall be made for connection to the recycled water system when it becomes available. In the interim, potable water will be supplied to the onsite facilities through an approved temporary potable water connection. Such temporary connection to the potable water system shall be provided with an approved reduced pressure backflow prevention device installed by the user to the satisfaction of the City and County DEH. Plan and specifications for customer recycled water facilities shall be submitted to the City as specified in these Rules and Regulations.

4.2.1 Pressure Requirements

Service pressure requirements shall be determined by the City. The user shall design for available pressure.

If available service pressure is excessive, the user shall utilize pressure regulators downstream of the meter to obtain the correct pressure. If available pressure is insufficient, the user shall provide booster pumping to increase the pressure.

Whenever possible, the City will operate the recycled water system at a lower pressure than the potable water systems. This will aid in the prevention of a cross-connection.

4.2.1.1 Booster Pumps:

Customers who use booster pumps to increase the operating pressure shall identify the pumping systems as recycled water, avoid release of recycled water in an uncontrolled manner, and provide a proper drainage of the packing seal water. At least one sign in English and Spanish shall be posted on the premises of the booster pumps which can be readily seen by all operations personnel working in the area.

4.2.1.2 Sealing Water:

Any potable water used as a seal water for recycled water pump seals shall be adequately protected against backflow. If at all possible, recycled water should be used as a seal water, as it is the preferred method.

4.2.2 Depth of Pipe Cover

The depth of cover on service lines shall be considered on a case-by-case basis in accordance with the City's Landscape Technical Manual.

4.2.3 Separations

4.2.3.1 Horizontal

A 10-foot separation of the recycled water pipeline shall be maintained at all times between a potable water pipeline and/or a parallel sanitary sewer or sludge pipeline. If a 10-foot separation is not available, the approval for special construction requirements shall be obtained from the City, the County DEH and California Department of Public Health (DPH) prior to commencement of construction. Common trench construction shall not be permitted. In any event, a horizontal separation less than four (4) feet shall not be allowed.

4.2.3.2 Vertical

All new systems, including potable water, recycled water, and sewer lines shall be located from the ground surface in order of descending quality. Potable water shall be above recycled water which should be above sewer. Minimum vertical separation between a potable water line and a recycled water line shall be one foot between the outside top and bottom surfaces of pipes. A ten (10) foot separation shall be maintained at all times between a potable water line and a recycled water line. A sleeve shall be installed wherever recycled water crosses potable water lines unless there is a ten (10) foot vertical separation. The sleeve shall extend ten (10) feet each side of the crossing. Irrigation systems where intermittently pressurized recycled water lines serve sprinkler heads, the potable water line(s) may be placed under the recycled water services. No special construction requirements are necessary provided that one foot vertical separation is maintained.

4.2.4 Color Identification of Recycled Water Pipes

All service pipelines, valves and other appurtenances shall either be colored purple and embossed, or be integrally stamped/marked “CAUTION: RECYCLED WATER – DO NOT DRINK”, and “CIUDADO: AGUA RECICLADA – NO TOME EL AGUA”, or be installed with a purple identification tape, or a purple polyethylene or vinyl wrap.

Color coded identification (caution) tape differentiating the recycled water piping from other utility lines shall be consistent throughout the service area. The purple color shall be standardized by the City.

When converting an existing potable water pipeline to recycled water usage the water pipeline shall be accurately located and tested in coordination with the Water Department and the regulatory agencies, and the necessary actions taken to bring the water pipeline and appurtenances in compliance with these Rules and Regulations.

If the existing pipeline meets approval of the Water Department and the regulatory agencies, except for the pipe identification, the pipeline shall be approved for recycled water service. If verification of the existing pipeline is not possible, the pipeline shall be uncovered, inspected, and identified prior to use. However, all replacements of an offsite distribution and/or delivery system connected to a recycled water irrigation system shall be color-coded for identification in accordance with the provisions of these Rules and Regulations.

For all offsite requirements refer to Book 7.

4.2.5 Identification Tapes

Warning tapes or tags with metallic backing shall be installed on all recycled water lines which help to trace the pipeline shall be prepared with black printing on a purple field having the words “CAUTION: RECYCLED WATER-DO NO DRINK” and “CUIDADO: AGUA RECICLADA- NO TOME EL AGUA”. The overall width of the tape shall be at least three inches.

Warning tapes shall be installed over the pipe longitudinally 2 feet below the finished surface and shall be centered. The identification shall be continuous in its coverage on the pipe and shall be fastened to each pipe length. Taping attached to sections of pipe before they are placed in the trench shall have overlaps sufficient for continuous coverage. Other satisfactory means of securing the tape during backfill of the trench may be used if suitable for the work, as determined by the Water Department. Sample tape marking and the inscriptions that go with it are as shown in the following figures:

CAUTION: RECYCLED WATER – DO NOT DRINK

CUIDADO: AGUA RECICLADA - NO TOME EL AGUA

4.2.6 Valve Casings, Frame and Cover Box Identification

Valve casings and frames shall be a special triangular, heavy-duty cover. For new construction all valve covers shall be, and for retrofits all valve covers should be of non-interchangeable shape with potable water covers. All covers must have a recognizable inscription indicating recycled water cast on the top surface. For offsite facilities refer to Book 7.

4.2.7 Color-Coding Exposed Recycled Water Facilities.

All above ground, exposed facilities shall be consistently color-coded (purple) and marked to differentiate recycled water facilities from potable water and/or wastewater facilities, as per Book 7.

4.2.8 Blow-Off Assemblies

Either in-line type or end-of-line type blow-off or drain assembly shall be installed for removing water or sediment from the pipe. The line tap for the assembly shall be no closer than 18 inches to a valve, coupling, joint, or fitting unless it is at the end of the line (refer to Standard Drawings). If there are restrictions on discharge or runoff, the regulatory agencies (Storm Water Pollution Prevention Program, Metropolitan Wastewater Department) shall be consulted to find an acceptable alternative.

4.2.9 Hundred Year Flood Clause

4.2.9.1 Runoff and Erosion

All recycled water storage facilities owned and/or operated by recycled water users shall be protected against erosion, overland runoff, and other impacts resulting from 100-year frequency 24-hour-duration storms.

4.2.9.2 Peak Flood Levels

All recycled water storage facilities owned and/or operated by recycled water users shall be protected against 100-year frequency peak stream flows as defined by the County of San Diego flood control agency.

4.3 RECYCLED WATER FOR CONSTRUCTION USE

4.3.1 Permits

The use of recycled water for construction purposes requires approval of the City and other regulatory agencies. The permit shall be obtained prior to beginning construction.

4.3.2 Uses

Recycled water used for construction purposes may only be used for soil compaction during grading operations, dust control and consolidation and compaction of backfill in trenches for non-potable water, sanitary sewer, storm drain, gas and electric pipelines.

4.3.3 Equipment

Equipment operators shall be instructed about the requirements contained herein and the potential health hazards involved with the use of recycled water. Water trucks, hoses, drop tanks, etc. shall be identified as containing non-potable water, and not suitable for drinking.

Recycled water shall not be introduced into any domestic water piping system. No unprotected connection shall be made between equipment containing recycled water and any part of a domestic water system as per Title 17 Division 1, Chapter 5, Group 4, Articles 1 and 2.

4.3.4 Ponds

Ponds used for storage of construction recycled water shall be posted to limit public access. Fences shall be in accordance to Chapter 10, Article 1, Division 10 of the Municipal Code.

4.3.5 Equipment And Facilities Cleaning

4.3.5.1 Equipment

Any equipment or facilities such as tanks, temporary piping or valves, and portable pumps which have been used with recycled water shall be cleaned and disinfected before removal from the approved use area for use at another job site. This disinfection and cleaning shall ensure the protection of public health in the event of any subsequent use as approved by the City supervisor or inspector and the disinfection process shall be performed in the presence of authorized personnel.

Service connections, equipped with recycled water meters, for the construction use of recycled water shall be provided by the City at locations convenient to the user but at the discretion of the City.

4.3.5.2 Tanks and Other Recycled Water Storage Devices

Disinfection of storage tanks shall be performed per American Water Works Association (AWWA) Standard C52 using the following procedure:

1. Personnel must not drink recycled water.
2. Drain all recycled water from pumper tanks.
3. Rinse all fittings, hose, and tank with potable (drinking) water.
4. Fill tanks with chlorinated water using one gallon of chlorine bleach (5-¼% sodium
5. Hold for at least 30 minutes.
6. Drain chlorinated tank (if draining to storm drain, dechlorinate first with 0.4 pound of sodium sulfite or 0.3 pound of sodium thiosulfate per 500 gallons).
7. Refill pumper tank with potable water.

4.4 SUBMITTALS

The following information shall be submitted to and approved by the City prior to commencing any construction:

4.4.1 Customer's Plans and Specifications

Plans and specifications prepared by an on-site system designer, civil engineer, a mechanical engineer or a landscape architect registered with the State of California, for the construction of onsite recycled water facilities shall be submitted to the City for review and approval. The plans shall delineate the proposed recycled water service area,

Section 4: Facilities Design and Construction

the proposed location, size and type of all recycled water service connections and onsite facilities. The plans shall include the layout of existing potable water pipelines and facilities including any areas in which recycled water must be specifically excluded. The plans shall also include the offsite potable and recycled water mains, services and points of connection.

4.4.2 Information on Customer's Plans

Exterior drinking fountains and potable water hose bibs and other public facilities shall be shown and called out on the plans. If no exterior drinking fountains or other public facilities are present in the design area, then it shall be specifically stated on the plans that none exist.

A signage plan shall be prepared and forwarded to the County of San Diego and the City of San Diego, for approval prior to the use of recycled water.

4.4.3 Information Required For Recycled Water Irrigation Systems

If the onsite facilities include a landscape irrigation system, data for the materials used in the irrigation system shall be included on the plans.

4.5 RECORD (AS-BUILT) DRAWINGS

The applicant, customer, or owner shall submit as-built record drawings to the City before a request for service start-up is made.

All changes in the work constituting departures from the original design drawings shall be accurately recorded on one set of drawings and submitted to the City for agreement and approval prior to construction. Such changes shall be approved by the City before any changes, modifications, or additions are made.

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SECTION 5: DUAL PLUMBING SYSTEM

5.1 INTRODUCTION

As per its definition, a dual plumbing system is when the toilets and urinals in a building are served by recycled water while the remaining fixtures are served by potable water. This co-existence of the two systems will require extra caution to prevent un-authorized plumbing modifications that can lead to a cross-connection between recycled water and potable water systems which is absolutely prohibited by state laws. This section establishes the rules and regulations to aid the designer and installer on dual plumbing projects; and to provide information on permit and inspection requirements.

5.2 RECYCLED WATER SITE SUPERVISOR

The recycled water user shall designate a Recycled Water Site Supervisor who is responsible for the recycled water system at each area under the user's control. Specific responsibilities of the Recycled Water Site Supervisor include the proper installation, operation, and maintenance of the recycled water system; compliance of the project/facility with the recycled water laws, rules and regulations, prevention of potential hazards and preservation of the recycled water distribution system plans in "as built" form. Designated Recycled Water Site Supervisors shall obtain instruction to use recycled water from the City of San Diego Water Department or other approved institutions.

5.3 DESIGN GUIDELINES OF DUAL PLUMBING SYSTEMS

The design of the dual plumbing systems, including the preparation of plans and specifications, shall be under the responsibility of a mechanical engineer registered with the State of California. A registered architect or a registered civil engineer can stamp and sign the drawings if he/she is directly responsible for the plumbing system design of the building.

The plans shall be reviewed by the City of San Diego Water Department's Recycled Water Program and the County DEH. Additionally, it is essential to obtain the approval of the California Department of Public Health (DPH). For dual plumbing, an additional engineering report and set of plans shall be added to the submittal package to the City of San Diego. The City of San Diego Recycled Water Program staff will forward the additional copy to the California DPH.

The recycled water portion of the dual plumbing system shall comply with:

- a. The recycled water Chapter 16 of the Uniform Plumbing Code

- b. The Guidelines for Distribution of Non-potable Water developed by the American Water Works Association (AWWA) California-Nevada Section
- c. The State of California Guidelines for Use of Recycled Water
- d. The conditions and standards set forth in the current edition of the Standard Specifications for Public Works Construction including the Regional Amendments of the County and City of San Diego
- e. The Recycled Water System Guidelines Book 7 Standard Drawings of the City of San Diego
- f. California Health Laws Related to the latest edition of the Recycled Water (“The Purple Book”)
- g. The provisions of these Rules and Regulations, and other related design standards and construction specification guidelines.

The recycled water system shall be separate and independent of any potable water system. Separate means physically separate with absolutely no direct connection or no connection through devices such as backflow prevention devices.

The user shall notify the City of any proposed facility modifications and/or proposed recycled water use changes for City’s review and approval. All facility modifications must be inspected by the City upon completion of construction and customer shall submit revised as-built drawings to the city.

The user shall implement on-site controls which meet the requirements established by City, County, State, Federal, and local regulatory agencies to protect the health of customer’s employees and the public.

Service pressure requirements shall be determined by the City. The user shall design for available pressure. The pressure setting and pipe sizing shall be as per the requirement of the current California Plumbing Code’s potable water requirements.

5.4 SEPARATION BETWEEN POTABLE WATER AND RECYCLED WATER SYSTEMS

Physical separation between all recycled water and potable water piping and appurtenances is essential. Separation between the above mentioned systems shall be maintained. No modification or any type of plumbing work can be done without the approval of the City of San Diego Water Department’s Recycled Water Program, the County of San Diego Department of Environmental Health (DEH), and the California Department of Public Health (DPH).

All recycled water piping and devices, valves and other appurtenances shall either be colored purple and embossed, or be integrally stamped/marked "CAUTION: RECYCLED WATER - DO NOT DRINK", and "CUIDADO: AGUA RECICLADA –

NO TOME EL AGUA", or be installed with a purple identification tape, or a purple polyethylene or vinyl wrap. Color coded identification (caution) tape differentiating the recycled water piping from PW lines shall be consistent throughout the building.

When converting an existing building from a single potable system to a dual plumbing system, a new separate recycled water piping system shall be installed, or the existing system shall be modified to have a separate recycled water system with appropriate identification to distinguish between recycled water and potable water. The recycled water piping shall be accurately located and tested in coordination with the City of San Diego, Recycled Water Program, the County DEH, and DPH. Correction actions as instructed by the same regulatory agencies maybe taken to bring the recycled water system and related appurtenances in compliance with these Rules and Regulations.

5.5 DESIGN PROCEDURE

Dual plumbing system design drawings and specifications shall be provided by the applicant, owner or customer at his/her expense. The customer shall make, at his/her expense, any modification to the potable water system on the premises which is required by the City, DEH and DPH in order to permit recycled water service, including but not limited to the separation of the piping system. A dual plumbing system shall be designed to accommodate the use of recycled water in those areas where the City has determined that recycled water will be supplied in the future, even though recycled water service is not immediately available when the design area is ready for construction. Provisions shall be made for connection to the recycled water system when it becomes available. In the interim, potable water will be supplied to the onsite facilities through an approved temporary potable water connection. Such temporary connection to the potable water system shall be provided with an approved reduced pressure backflow prevention device installed by the user to the satisfaction of the City, DEH, and DPH.

Plans and specifications for customer recycled water facilities shall be submitted to the City as specified in these Rules and Regulations.

5.6 IDENTIFICATION OF ONSITE PIPES AND FITTINGS

New onsite pipelines shall be identified as recycled water pipes by using a purple color code differentiating them from potable water piping. All piping and valves must also be appropriately labeled or continuously taped with appropriate identification.

Approved use areas for recycled water service shall also be posted with precautionary notices to warn the public.

When converting an existing potable water line to recycled water usage the water line shall be accurately located and tested in coordination with the City and the regulatory agencies, and the necessary actions taken to bring the water line and appurtenances in

compliance with these Rules and Regulations. Approval of the existing line may be granted if the existing line meets the Water Department and the regulatory agencies approval conditions. If verification of the existing line is not possible, the line shall be uncovered, inspected, and identified prior to use. However, all replacements of an existing recycled water system shall be color-coded for identification in accordance with the provisions of these Rules and Regulations.

5.6.1 Warning Tapes

A warning tape or tag with metallic backing shall be installed on all recycled water pressure and/or non-pressure service pipelines. A purple tape with black lettering stating "CAUTION: RECYCLED WATER - DO NOT DRINK" and "CUIDADO: AGUA RECICLADA - NO TOME EL AGUA" shall be fastened to the top of the pipe. The tape shall run continuously the entire length of the pipe and shall be at least 3 inches in width.

5.6.2 Color-Code For Recycled Water Pipes

The use of purple colored pipe, with the words "CAUTION: RECYCLED WATER – DO NOT DRINK" and "CUIDADO: AGUA RECICLADA - NO TOME EL AGUA" embossed or integrally stamped/marked on the pipe as an acceptable alternative to the tape as mentioned in these Rules and Regulations. The warning should be stamped on opposite sides of the pipe, repeated every three feet.

All connections, temporary and permanent, to a recycled water system shall be identified in such a manner as to differentiate them from connections to a potable water system.

When potable water is being supplied to an area which is also being supplied with recycled water, the potable water main shall also be identified. A color-coded tape, as determined by Water Department, with the words "CAUTION: DRINKING WATER LINE" and "CUIDADO: LA LINEA DEL AGUA" shall be fastened directly to the top of the potable water pipe and run continuously the entire length of the pipe. This tape shall be at least 3 inches in width. The color code for potable water is blue to differentiate it from recycled water.

5.7 RECYCLED WATER NOTES FOR INCLUSION ON CUSTOMER'S PLANS

Provide the following notes, as applicable, on the recycled water improvement and irrigation plans under the heading "City of San Diego Recycled Water Notes":

1. Two (2) working days prior to commencement of any excavation on site improvements, contractor shall notify the Recycled Water Program at 619.533.7485.
2. All work shall be done in accordance with the "City of San Diego Rules and Regulations for Recycled Water Use and Distribution within the City of San Diego" and the County of San Diego Department of Environmental Health requirements.

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3. All backflow preventer installations and locations shall be subjected to approval by the City of San Diego Water Department.
4. All public facilities such as comfort stations, drinking fountains, etc. shall be protected from spray and/or misting by recycled water.
5. No ponding, run-off, or over-spray is permitted. Adjust all sprinkler heads to prevent over-spraying onto sidewalks, streets and private lots.
6. Hose bibs on recycled water systems are prohibited.
7. Onsite cross-connection between recycled water lines and potable water lines is strictly prohibited.
8. Quick coupling valves used in recycled water systems shall conform to the following:
 - a. A type approved for recycled water use with a normal working pressure of 150 p.s.i.
 - b. Recycled water quick coupler must be different from potable water quick coupler valves.
 - c. In order to prevent unauthorized use, the valve shall be operated only with a special coupler key with an acme thread for opening and closing the valve.
 - d. The cover shall be permanently attached to the quick-coupling valves. It shall be purple rubber or vinyl.
 - e. Locking covers are required.
9. No substitution of pipe materials will be allowed without prior approval by the City of San Diego.
10. Install approved, metallic backed and stenciled warning tape over all pressure recycled water lines. Stencil and color code (purple pantone 522) all irrigation pipe. Orient the stenciling to the top of the trench.
11. Provide a minimum of at least 18 inches of covering over all wiring and piping.
12. Operate the irrigation system only between 9:00 pm and 6:00 am, unless the certified Site Supervisor is present at the site during the irrigation period.
13. When potable water lines and recycled water lines cross, the recycled line shall be installed within a protective sleeve. The sleeve shall extend 10 feet from each side, from the center line of potable line, for a total of 20 feet.

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14. Maintain a 10 foot horizontal separation between potable water and recycled water or sewer lines. Install sewer line below recycled water line and recycled water line below the potable water line.
15. Provide a minimum of 12 inches of vertical separation between potable/recycled water/sewer.
16. The site irrigation systems as shown on these documents will utilize potable water until such time as the City of San Diego makes recycled water available to the site.
17. Install purple colored pantone #522 material for all above ground irrigation facilities:
 - a. Valve and other on grade boxes - integral color
 - b. Backflow devices - painted 2 coats of enamel
 - c. Sprinkler heads - integral color plastic
18. Tag all valves and other below grade appurtenances within boxes with permanent recycled water labels in both English and Spanish that identify recycled water in use (“Recycled Water-Do Not Drink”). Attach the label with either stainless steel wire or self locking plastic ties.
19. The required cross-connection test shall be done by the City of San Diego Water Department and monitored by the County of San Diego Department of Environmental Health. Copies of inspection reports will be forwarded to the non-inspecting party.
20. The design locations proposed for recycled water “do not drink” signs shall be called out on the plans.
21. An annual cross-connection inspection will be done by the City of San Diego subject to approval by the County of San Diego Department of Environmental Health. Copies of the inspection reports will be forwarded to the non-inspection party. A cross-connection shutdown test will be performed every four years.
22. Prior to conversion to recycled water, an onsite Recycled Water Site Supervisor shall be designated in writing. This individual shall be familiar with plumbing systems within the property and with the basic requirements of recycled water systems. The designated Site Supervisor shall be certified by attending a class for recycled water site supervisors. Site Supervisor must be re-certified every five years. Copies of the Site Supervisor’s certificate, with a 24-hour contact number, shall be provided to the City of San Diego and the County Department of Environmental Health with the following information:

In case of emergency contact: _____ at _____

After hours contact: _____ at _____.

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23. A physical separation shall be provided between adjacent areas irrigated with recycled water and potable water. Separation shall be provided by distance, concrete mow strips, or other approved methods.
24. Call out on the plans if there are or are not any drinking fountains and/or designated outdoor eating areas on the site.
25. All public and private potable water mains including fire mains and any water wells and water courses within the recycled water project shall be shown on the plans.
26. Educate all maintenance personnel on a continuous basis of the presence of recycled water. Personnel must be informed that recycled water is meant for the site's designated purposes only, and is not approved for drinking purposes, hand washing, cleaning of tools, etc. Given the high turnover rate of employees in the landscape industry, it is important this information be disseminated on an almost daily basis.
27. Prior to installation of any recycled water work, it must be inspected by the City's Recycled Water Program personnel. The initial cross-connection shutdown test should be performed using potable water from a fire hydrant and through a construction meter with an approved backflow device issued by the City Water Department.
28. All initial irrigation shall use potable water. No recycled water shall be used until the site has passed the initial shutdown cross-connection test and has been approved by the City of San Diego and County of San Diego.

Declaration of Responsible Charge:

I hereby declare that I am the licensed design professional of the work for this project and that I have exercised responsible charges over the design of this project as defined in Section 6703 of the Business and Professions Code and the design is consistent with current standards.

I understand that the check of project drawings and specifications by the City of San Diego and San Diego County Department of Environmental Health is confined to a review only and does not relieve me, as the licensed design professional of the work, of my responsibilities for project design.

Firm Name _____

Responsible Party Name _____

Address _____

Phone _____ Email _____

Signature _____ Date _____

Registration Number _____ Expiration Date _____

5.8 INSPECTIONS

5.8.1 Installation Inspection

In addition to other inspections performed by building and plumbing inspectors, piping and devices shall be kept exposed until the recycled water cross-connection control inspection is completed.

5.8.2 Annual Inspection

An annual cross-connection inspection will be done by the City of San Diego subject to approval by the County DEH. Copies of the inspection reports will be forwarded to the non-inspection party.

5.8.3 Quadrennial Shutdown Test

Every four years a cross-connection shut-down test will be done by the City of San Diego subject to approval by the DEH, and the DPH. Copies of the test reports will be forwarded to the non-inspection party.

5.9 ACCESS TO CUSTOMER'S PREMISES

City and/or other authorized regulatory personnel showing proper identification shall have the right to enter customer's premises for the purpose of: a) monitoring and inspecting all recycled water systems to ascertain compliance with these Rules and Regulations and other regulatory requirements; and b) installing, maintaining, repairing, and reading City owned facilities serving the customer's premises. Where necessary, keys and lock combinations shall be provided to the City for site access during business hours.

5.10 FIELD OPERATIONAL RECORD (LOG BOOK)

A log book shall be maintained throughout the life of the dual-plumbed system consisting of a schematic numbering of each valve. A table that includes a list of valves with the corresponding description of the location of each valve and plumbing fixture served by that valve shall be maintained.

The table shall note the current valve seal number and any previous valve seals for each valve. When a valve seal is broken, the cause for breaking the seal must be noted, dated, and signed off by the Site Supervisor and a Cross-Connection Control Specialist from the City or San Diego County DEH. A copy of the most recently updated and approved as-built drawing shall be kept with the logbook.

5.11 RECYCLED WATER CONVERSION PROCEDURE

Prior to conversion to recycled water, an onsite Recycled Water Site Supervisor shall be designated in writing. This individual shall be familiar with plumbing systems within the property and with the basic requirements of recycled water systems.

The designated Site Supervisor shall attend the Recycled Water Site Supervisor Certification Workshop sponsored by the County Water Authority or the City of San Diego. Copies of the Site Supervisor's certificate, with a 24 hour contact number, shall be provided to the City of San Diego and the County of San Diego Department of Environmental Health. Site Supervisor must be re-certified every five years.

All maintenance personnel must be educated on a continual basis regarding the proper usage of recycled water. Personnel must be informed that recycled water is used for toilet and urinal fixtures only, and is not approved for drinking, hand washing, cleaning of tools, etc. It is important that this information be disseminated on a regular basis.

5.12 RECYCLED WATER SYSTEM FACILITIES

5.12.1 Tampering with or Obstructing Recycled Water System

It is unlawful to break, disassemble or otherwise tamper with a water meter, or other equipment or appurtenances of the City's recycled water system.

5.12.2 Unauthorized Use of Recycled Water and Property Damage

It is unlawful to use City recycled water which does not pass through a City meter, regardless of knowledge or intent. It is unlawful to make, maintain, or permit any bypass or connection between the City meter and the main, regardless of knowledge or intent.

Section 5: Dual Plumbing

Any unauthorized person entering, breaking, damaging, destroying, uncovering, defacing, or tampering with any structure, equipment or appurtenance which is a part of the City's recycled water system shall be in violation of these Rules and Regulations.

Any person who causes obstruction, damage, or any other impairment to the City's facilities, shall become liable to the City for all expense, loss, or damage.

SECTION 6: FACILITIES OPERATION

6.1 OFFSITE RECYCLED WATER FACILITIES

Operation, maintenance, and monitoring of all of the City's offsite recycled water systems including, but not limited to, recycled water transmission and distribution main, service lines, valves, connections, storage facilities, and other appurtenances and properties up to and including the City's meter, shall be under the management and control of the City. No other person except authorized representatives of the City shall have any right to operate, adjust, repair, change, alter, move or relocate any portion of the offsite recycled water system.

6.2 ONSITE RECYCLED WATER FACILITIES

6.2.1 Customer's Responsibilities

The customer or owner shall be responsible for the safe and efficient operation, maintenance, and upkeep of his onsite facilities. However, the City shall also have the right to monitor and inspect the onsite operation of the customer's facilities. Pursuant to Section 6 of these Rules and Regulations, the City or authorized representatives of the City shall monitor and inspect the entire recycled water distribution facility, including customer facilities and for these purposes shall have the right to enter the customer's premises during reasonable hours. Reasonable hours shall include hours when irrigation is being performed.

Except in emergencies, the City and other parties authorized by the City shall be entitled to enter the customer's premises with reasonable notice to the user for onsite inspection during reasonable hours to verify that the customer's facilities are in conformance with the provisions of these Rules and Regulations and all applicable permits.

The customer shall notify the City of any and all updates or proposed changes, modifications or additions to the onsite facilities. Changes shall be approved by the City and shall be designed and constructed according to the requirements, conditions, and standards set forth in these Rules and Regulations and other City requirements.

The customer shall comply with any and all applicable Federal, State, and local statutes, ordinances, regulations, contracts and requirements prescribed by the City.

In the event of violations, charges and penalties shall be applied by the City in accordance with Section 11 of these Rules and Regulations.

It shall be the responsibility of the customer to notify the City of any and all failures in a recycled water system whether or not in the user's opinion the failures resulted in violations. It shall also be the responsibility of the customer to notify the City of any and all violations which occur as a result of the user's action or the action of his operations personnel.

The user shall keep a written log of all system failures and violations including corrective action taken. The log shall be reviewed by the City regularly.

6.2.2 Designation/Responsibility of the Recycled Water Site Supervisor

Each recycled water customer shall designate a Recycled Water Site Supervisor. The Recycled Water Site Supervisor shall be a person accepted and approved by the City to operate and maintain the onsite facilities and irrigation systems, and to assume the responsibilities outlined below. The City shall require that the designated Recycled Water Site Supervisor obtain instruction in the use of recycled water, such instruction being provided or approved by the City. A Site Supervisor must be re-certified every five years. The Recycled Water Site Supervisor shall be the contact person for the user in all matters between the user and the City concerning the operation of the onsite system and the use of recycled water (see Section 3.10.4). It shall be the responsibility of the customer to notify the City whenever a change of the Recycled Water Site Supervisor occurs. Subsequently the customer shall be responsible to obtain the City's acceptance and approval of his newly designated supervisor. The Recycled Water Site Supervisor will have the following responsibilities:

- a. To oversee recycled water service and maintain onsite facilities.
- b. To ensure that all operations personnel are trained and familiarized with the use of recycled water, including all pertinent information contained in these Rules and Regulations and those applicable portions of the California Code of Regulations. This information shall be supplied by the City upon request by the user, customer, owner, or applicant.
- c. To furnish operations personnel with operating instructions, maintenance instructions, controller charts, and record drawings to ensure proper operation in accordance with the facilities design and these Rules and Regulations and all applicable permits. At least one complete set of this information shall be kept onsite or in the nearest field office or maintenance building.
- d. To operate and control the customer's recycled water system in order to prevent direct human consumption of recycled water and to control and prevent run-off.

- e. To provide a preventative maintenance program and carry out ongoing regular maintenance and upkeep to ensure the continued operation of all system elements within the requirements of these Rules and Regulations.
- f. To prevent cross-connections to potable water systems, and also to protect the recycled water system from contamination from cross-connections to other sources.
- g. To ensure that maintenance and inspection of backflow prevention assemblies is done regularly on an annual basis as per requirements of regulatory agencies, or more often in those instances where successive inspections indicate repeated failures.
- h. To report to the City any and all failures (potential or actual cross-connections, large spills, misuse or other violations, etc.) in the onsite facilities whether or not such failures may result in violations.
- i. To ensure that Site Supervisor certification is valid. A Site Supervisor must attend one of the certification classes every five years. Certification classes are offered by the San Diego County Water Authority (CWA) and The City of San Diego.

6.2.3 Operation and Control of Onsite Recycled Water System

To the extent possible, the operation of the irrigation system shall be during periods of minimal public use of the approved area. Such periods of operation shall remain within any general period of recycled water irrigation operation specified by the City - generally this is between 9 p.m. and 6 a.m.

Operation and control measures of onsite recycled water systems shall include, but not be limited to, the following:

- a. Onsite recycled water facilities shall be operated in such manner to prevent or control surface flows or windblown sprays of recycled water across boundary lines, or into areas not approved for recycled water use. The system design shall avoid spray patterns that tend to accumulate recycled water to produce ponding and/or run-off on public rights-of-way or adjoining areas not approved for recycled water use.
- b. Recycled water shall be applied at a rate that does not exceed the infiltration rate of the soil. Where varying soil types are present, the design and operation of the recycled water facilities shall be compatible with the lowest infiltration rate anticipated or designed appropriately for the soil type to prevent run-off.

- c. No sprinkler system shall be allowed to operate for a time longer than the landscape's water requirements. The intent is to control and limit run-off and ponding.
- d. The user shall enforce the following prohibitions per these Rules and Regulations:
 - Cross-connections
 - Disposal of recycled water in unapproved areas
 - The use of hose bibs
 - Ponding and run-off
 - Windblown sprays
 - Unapproved uses of recycled water

6.3 POSTING APPROVED USE AREAS

Posting the use areas of recycled water is required to inform the public that recycled water is being used. Posting shall be required at any customer field office, maintenance building, or yard within the approved use area, except as required by the regulatory agencies on a case-by-case basis. Warning notices and labels shall be posted on designated facilities such as controller panels, wash downs, or blow off valves on trucks, and temporary construction facilities. The labels shall indicate that the system contains recycled water that is unsafe to drink or whatever other restrictions may apply. It shall be the responsibility of the Recycled Water Site Supervisor to ensure the required bilingual postings in English and Spanish are installed and maintained, and so placed that they can be readily seen by all personnel or public utilizing the facilities.

Where recycled water is used for recreational impoundments, warning signs shall be installed to notify that the water in the impoundment is unsafe to drink. The agency responsible for the impoundment shall prepare a detailed plan showing placement and spacing of proposed signs. The signs shall include the international warning sign of "do not drink" for all recycled water systems.

A signage plan shall be prepared and forwarded to the County of San Diego Department of Environmental Health and the City of San Diego for approval prior to the use of recycled water.

SECTION 7: MONITORING AND INSPECTION

The City of San Diego, the County of San Diego Department of Environmental Health, and/or the Regional Water Quality Control Board, or authorized representatives of any of these agencies shall have authority to monitor and inspect the entire recycled water system including both onsite and offsite facilities.

The City shall conduct monitoring programs, as it deems necessary, to ensure that customer's recycled water facilities are being operated in accordance with these Rules and Regulations, including the provision that cross-connections between potable water facilities and the recycled water facilities do not exist.

In carrying out these functions the City, the County of San Diego Department of Environmental Health, and/or the Regional Water Quality Control Board, or authorized representatives of any of these agencies shall have the right to enter any customer's premises during reasonable hours upon presentation of proper credentials. Reasonable hours shall include hours when irrigation is being performed to ascertain whether the user is complying with these Rules and Regulations. The customer shall indemnify and hold the City harmless for any damage, loss, or injury alleged to have been caused by City personnel while inspecting on-site facilities, except where the City's sole negligence is duly established.

Each time there is a change of either owner or customer on any commercial or industrial premises, the owner or customer shall notify the City immediately. The City will then reassess the level of protection required. Also, any alterations to existing onsite facilities that may affect required protection levels must be reported immediately to the City.

At their discretion, the City or representatives of any health agency having jurisdiction may conduct surveys of any property where recycled water service is provided by the City. These surveys are to determine if any actual or potential cross-connection exists. The applicant, owner, or customer shall provide full cooperation to facilitate these surveys.

An annual cross-connection control site inspection will be required at all recycled water use sites. The annual inspection will be performed by the City of San Diego, the County of San Diego Department of Environmental Health, or an authorized and certified cross-connection specialist. At the discretion of the City, cross-connection control inspections may occur more frequently, especially on potable irrigation systems which have been converted to a recycled water irrigation system. A copy of the inspection report will be forwarded to the non-inspecting agency.

In situations where potable water lines are on the same property and located in the same area as recycled water lines, a quadrennial (every four years) cross-connection control shutdown test is required at all recycled water use sites. The quadrennial test shall be performed by the City of

Section 7: Monitoring and Inspection

San Diego and the County of San Diego Department of Environmental Health, or an authorized and certified cross-connection control specialist.

At the discretion of the City, quadrennial cross-connection control shutdown tests may occur more frequently, especially on potable irrigation systems which have been converted to a recycled water irrigation system. A copy of the test report will be forwarded to the non-inspecting agency.

SECTION 8: CONNECTION, METER, AND SERVICE LINE CHARGES

The City shall make charges for the installation, and perpetual maintenance of all recycled water services, meters, and appurtenances thereto, and these shall remain the property of the City. Said charges, in addition to all other usual and regular charges of the City must be paid before work will be performed. Any backflow prevention devices on potable water services and flow or pressure control devices required due to application for recycled water service shall be downstream of the meter and shall be provided by the applicant, owner, or customer at his/her expense.

Whenever an installation is required by a customer that is not covered by the schedule of rates established from time to time by the City, such work will be done with charges based upon a statement of costs made by the City. If the required installation, for any valid reason, cannot be installed for the amount stated in the appropriate schedule of rates established by the City, owing to the peculiarity of the proposed service, the City reserves the right to make said installation on the basis of a statement of cost.

Whenever recycled water service lines, meters or other appurtenances are requested to be removed by the customer for any reason whatsoever, the charges shall be made on the basis of a statement of costs by the City.

Section 8: Connection, Meter, and Service Line Charges

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SECTION 9: RECYCLED WATER SERVICE RATES

Recycled water service rates, capacity charges, and meter fees within the City shall be established by the Municipal Code. The establishment of the above mentioned rates is beyond the scope of these Rules and Regulations.

For further information please refer to the City of San Diego Information Bulletin 104 “Schedule for Water and Sewer Fees”.

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SECTION 10: SEVERABILITY

If any section, subsection, sentence, clause, phrase, part or portion of these Rules and Regulations is for any reason held to be invalid or unconstitutional, such invalidity shall not affect any of the remaining portions of these Rules and Regulations.

The City declares that each section, subsection, sentence, clause, phrase or part of these Rules and Regulations would have been adopted irrespective of the invalidity of any part. These Rules and Regulations shall be interpreted so as to comply with applicable Federal, State, and County laws and regulations.

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SECTION 11: ENFORCEMENT, REMEDIES, AND PENALTIES

11.1 GENERAL

Any person, firm, corporation, association, or agency found to be violating any provision of these Rules and Regulations or the terms and conditions of the customer's service agreement, permit or any applicable Federal, State, County, or City statute, regulation, resolution, ordinance or other requirement shall be served by the City with written notice, stating the nature of the violation and providing a reasonable time limit for the satisfactory correction thereof. The offender shall, within the period of time stated in such notice, permanently cease all violations. This provision is in addition to, and not by way of, derogation of any other remedies or procedures available to the City by law, regulation, or pursuant to any of the provisions of these Rules and Regulations.

Failure to permanently cease all violations within the time stated will result in revocation of the permit by the City and termination of recycled water service.

Any person, firm, corporation, association, or agency who violates any penal provision of these Rules and Regulations and who fails to comply with the requirements of the written notice by the City, shall be subject to any penalties and/or remedies, provided in the City of San Diego Municipal Code, including but not limited to Chapter 1, Articles 1-3 inclusive.

11.2 USE PERMIT

Use Permit shall be required as per Section 64.0807(e) SDMC. All remedies available under the Municipal Code apply to violations of the Use Permit.

The City of San Diego reserves the right to make additional requirements in the Use Permit where it deems necessary to protect public health and safety. Any exceptions to these regulations must be approved by the City and specifically detailed in the Use Permit. Exceptions cannot violate applicable State of California, County of San Diego or City of San Diego Codes.

A copy of the current Use Permit must be available for review at all times clearly posted at the use site, and/or on file at the user's office.

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SECTION 12: APPLICABILITY OF GENERAL WATER SYSTEM ORDINANCES

To the extent that the provisions of the San Diego Municipal Code do not conflict with these Rules and Regulations for the use of recycled water, said provisions shall be and hereby are incorporated herein by reference and shall be applicable to recycled water facilities and use.