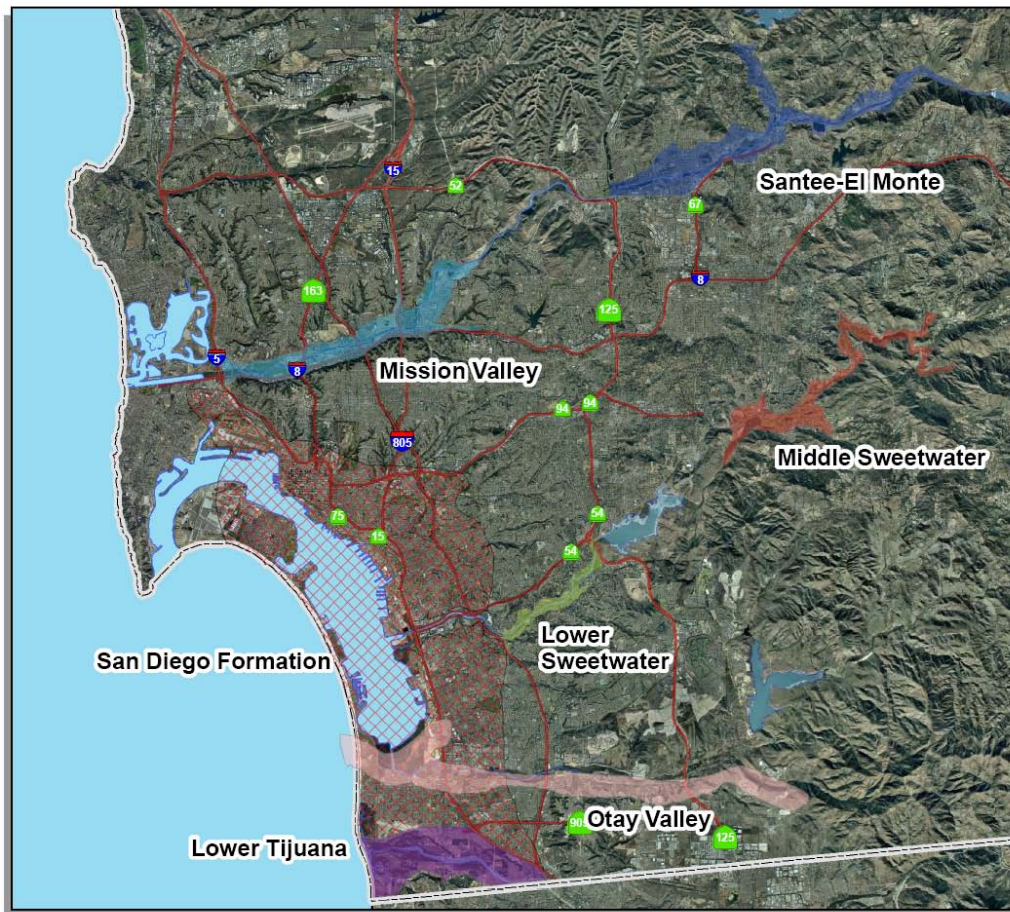


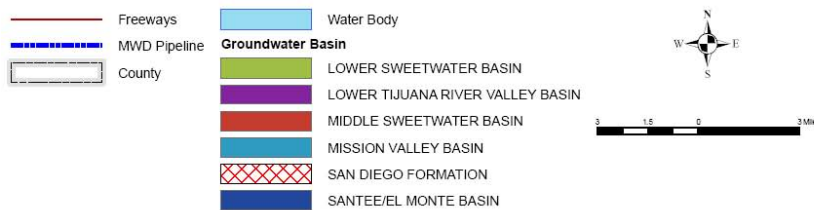
Chapter IV – Groundwater Basin Reports South San Diego County Basins

The groundwater basins in south San Diego County discussed in this section include: Lower Sweetwater Basin, Middle Sweetwater Basin, San Diego Formation, Santee-El Monte Basin, Mission Valley Basin, Otay Valley Basin, and Lower Tijuana River Valley Basin. Because available data are limited for several of the smaller basins, basin descriptions are combined where applicable. The South San Diego County Basins underlie the service area of the San Diego County Water Authority (SDCWA). A map of the South San Diego County Basins is presented in **Figure 23-1**.

Figure 23-1
Map of the South San Diego County Basins



South San Diego County Basins



Source: SDCWA

BASIN CHARACTERIZATION

The following section provides a physical description of the Sweetwater Basins, the San Diego Formation, and the Santee-El Monte Basin including its geographic location and hydrogeologic character.

Basin Producing Zones and Storage Capacity

Table 23-1 provides a summary of hydrogeologic parameters of the South San Diego County Basins. Each basin is discussed separately in the following section.

Sweetwater Basins-San Diego Formation

The Sweetwater Basins underlie an alluvial valley of the Sweetwater River that empties into the San Diego Bay near the cities of National City and Chula Vista. The basins include the Lower Sweetwater Basin and the Middle Sweetwater Basin. The San Diego Formation is part of a thick wedge of sediments that was deposited along the coast in the San Diego Bay area in southwestern San Diego County. The San Diego Formation is believed to be at least 1,000 feet thick in an area that underlies the cities of Imperial Beach, Chula Vista, and National City, and southern portions of the city of San Diego.

The Sweetwater Basins within the alluvial plain of the Sweetwater River are unconfined. The San Diego Formation is confined, with a basin ground surface area of 79,724 acres. San Diego County Water Authority estimates a groundwater storage capacity of 13,000 AF in the Lower Sweetwater Basin, 28,900 AF in the Middle Sweetwater Basin, and about 960,000 AF in the San Diego Formation. These values suggest a total storage capacity of about 973,000 AF for the Sweetwater Basins-San Diego Formation. DWR (1986) estimated that between 17,000 and 20,000 AF of groundwater was in storage. Based upon current understanding of the hydrogeology of the San Diego Formation, the usable and more cost-effective storage in the formation has been approximated to be on the order of 40,000 to 90,000 AFY.

Santee-El Monte Basin

The Santee-El Monte Basin is an unconfined groundwater basin located in the eastern portion of the San Diego River watershed near the cities of Santee, La Mesa, El Cajon, and Lemon Grove. The groundwater basin is comprised of commingling alluvial valleys of the San Diego River, San Vicente Creek, Forester Creek, Los Coches Creek, and Sycamore Canyon Creek.

The alluvial aquifer ranges in thickness up to 230 feet or more and is thickest in the eastern portion of the basin. In Santee, the alluvium thickness is limited, ranging from less than 10 feet to approximately 30 feet. According to Helix Water District (Helix WD), a water purveyor in the basin, numerous studies have been performed on the El Monte Basin with estimates of total storage capacity ranging from 18,000 to 50,000 AF. Other reports suggest a range from 70,000 to 97,000 AFY (Anchor Environmental, 2004). The basin yield during a drought period, with an initially full basin, was modeled to be approximately 24,000 AF.

Table 23-1
Summary of Hydrogeologic Parameters for South San Diego County Basins

Parameter	Sweetwater Basins and San Diego Formation	Santee-El Monte Basin	Other South San Diego County Basins
Structure			
Aquifer(s)	Sweetwater Basins Unconfined San Diego Formation Confined	Unconfined	Unconfined
Depth of groundwater basin	Up to 1,200 feet	Up to 405 feet	Data not available
Thickness of water-bearing units	Data not available	10 to 230 feet	
Yield and Storage			
Natural Safe Yield	Lower Sweetwater 2,400 AFY Middle Sweetwater 3,000 AFY San Diego Formation 3,000 to 5,000 AFY	3,000 to 4,000 AFY	Mission Valley 2,000 to 4,000 AFY Lower Tijuana River 5,000 to 6,800 AFY Otay Valley Unknown
Total Storage	Lower Sweetwater 13,000 AF Middle Sweetwater 28,900AF San Diego Formation 960,000 AF	18,000 to 57,000 AF	Mission Valley 40,000 to 42,000 AF Lower Tijuana River 50,000 to 80,000 AF Otay Valley Unknown
Unused Storage Space	Unknown	20,000 AF	Unknown
Portion of Unused Storage Available for Storage	Unknown	18,860 AF	

Source: Helix Water District, 2006; Sweetwater Authority, 2006; City of San Diego, 2006

Historically, agricultural users have been the greatest private consumers of groundwater in the basin. Since 1960, groundwater use in the basin has declined. A major reason for the decline in groundwater use is the shift in land use from predominantly agricultural and rural residential to urban land use, particularly in Santee and Lakeside and as water agencies began distributing imported water.

Other South San Diego County Basins

There are three other alluvial basins in the south county region: Mission Valley Basin, Otay Valley Basin, and the Lower Tijuana River Valley Basin that are smaller, with less groundwater development potential. Limited data are available for these basins.

The Mission Valley underlies an east-west trending valley, which is drained by the San Diego River to Mission Bay in the city of San Diego. Storage capacity estimates range from 40,000 to 42,000 AF (DWR, 2004).

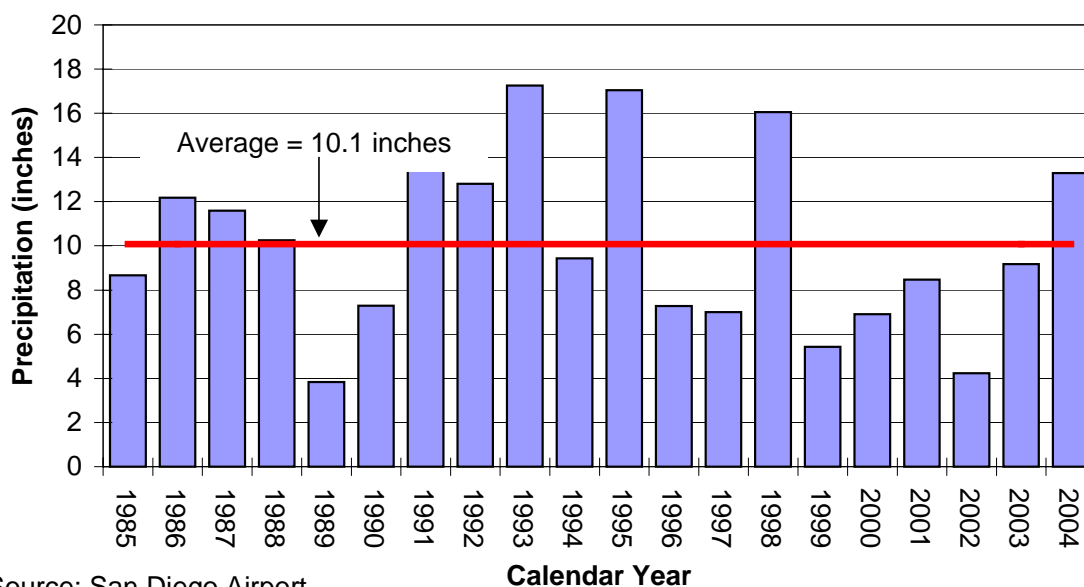
The Otay Valley is adjacent to the Pacific coast in southwestern San Diego County along the Otay River. Storage capacity is unknown.

The Lower Tijuana River Valley underlies the Tijuana River along the California-Mexico Border. Storage capacity is unknown.

Safe Yield/Long-Term Balance of Recharge and Discharge

South San Diego County is relatively dry with average precipitation of 10.1 inches per year. **Figure 23-2** presents the historical precipitation data from San Diego Weather Service Office (WSO) at Lindbergh Field. These data suggest below average precipitation in 1985, 1989, 1990, 1996, 1997, and the period from 1999 to 2003. Above average precipitation occurred in 1986, 1987, 1991 to 1993, 1995, 1998, and 2004.

Figure 23-2
Historical Precipitation in the South San Diego County Basins



Sweetwater Basins-San Diego Formation

SDCWA reports the safe yield of the Lower Sweetwater Basin at 2,400 AFY, the Middle Sweetwater Basin at 3,000 AFY, and the San Diego Formation at 3,000-5,000 AFY.

Santee-El Monte Basin

The primary source of recharge to the Santee-El Monte Basin is infiltration from the San Diego River. Recharge to the alluvial aquifer is greatest in the eastern portion of the basin where precipitation is greater and runoff is generated on the steep bedrock slopes adjacent to the river valley. Based on water level trends, it was concluded that recharge occurs infrequently, during only the wettest periods. The most significant recharge only occurs in response to large spills from El Capitan and San Vicente Reservoirs. Numerous studies have been performed on the safe yield for the Santee-El Monte Basin. Estimates of safe yield range from 3,000 to 4,000 AFY.

Other South San Diego County Basins

The city of San Diego reports that the safe yield of the Mission Valley Basin is estimated at 2,000 to 4,000 AFY. Additionally, the city reports that the safe yield of the Lower Tijuana River Valley Basin is estimated at 5,000 to 6,800 AFY. Information was not available on the safe yield for the Otay Valley Basin.

GROUNDWATER MANAGEMENT

The following section describes the status of groundwater management in the Sweetwater Basins, the San Diego Formation and the Santee-El Monte Basin, and the smaller basins of Mission Valley, Otay Valley and Lower Tijuana River Valley.

Basin Governance

The following describes the governing structure within the Sweetwater and Santee-El Monte Basins.

Sweetwater Basins-San Diego Formation

The Sweetwater Basin and the San Diego Formation are unadjudicated and do not have an adopted groundwater management plan. However, these basins are managed by the Sweetwater Authority. The basin does not have a formal governance structure or process. There is a self-imposed constraint of limiting groundwater production so seawater intrusion and land subsidence does not occur. This is accomplished through the Sweetwater Authority Interim Groundwater Management Plan that was adopted in November of 2001.

Santee-El Monte Basin

The Santee-El Monte basin is an unadjudicated basin and there is no formal governance structure. There are no constraints or limitations imposed upon the basin's operation. The Santee-El Monte Basin is largely within the property owned by the Helix WD. In addition to

potentially competing institutional interests, water rights issues are not resolved. The City of San Diego maintains Pueblo rights to the surface flow of the San Diego River and the associated "underground flow". Helix WD also claims long-standing rights to groundwater in the Santee-El Monte basin.

Other South San Diego County Basins

The city of San Diego reports that a conceptual Groundwater Management Plan has been prepared for the Mission Valley Basin and there is an adopted Groundwater Management Plan for the Lower Tijuana River Valley Basin. Information was not available on groundwater management in the Otay Valley Basin.

Table 23-2
Summary of Management Agencies in the Santee-El Monte Basin

Agency	Role
Helix WD	Primary producer from basin
City of San Diego	Maintain several wells for emergency supply
Riverview Water District	Use groundwater and imported supply. Agencies connect with Helix WD treatment plant
Lakeside Water District	

Source: SDCWA Groundwater Report, 1997; Riverview Water District, 2005

Interactions with Adjoining Basins

There are no governing agreements regarding flow into or from the South San Diego County Basins.

WATER SUPPLY FACILITIES AND OPERATIONS

The following provides a summary of the facilities within the Sweetwater Basins, the San Diego Formation and the Santee-El Monte Basin.

Active Production Wells

The following provides a description of the existing active municipal production wells in the Sweetwater-San Formation and the Santee-El Monte Basins. Data are summarized in **Table 23-3**.

Table 23-3
Summary of Production Wells in the South San Diego County Basins

Category	Number of Wells	Estimated Production Capacity (AFY)	Average Production (AFY)	Well Operation Cost (\$/AF)	
Municipal Production					
Lower Sweetwater	13	Data not available	4,590	Data not available	
Middle Sweetwater					
San Diego Formation					
Santee-El Monte Basin	18 (9 inactive)	0.7 cfs	1,600		
Mission Valley	Data not available		807		
Otay Valley			Data not available		
Lower Tijuana River Valley			887		
Other Production					
Lower Sweetwater	Data not available		900		Data not available
Middle Sweetwater			2,000		
San Diego Formation			-		
Santee-El Monte Basin	19	Data not available	4,000		
Mission Valley	Data not available				
Otay Valley					
Lower Tijuana River Valley					
Total Production					
Sweetwater and S.D. Formation	13	Data not available	7,490	Data not available	
Santee-El Monte	37	>0.7 cfs	5,600		
Mission Valley	Data not available		807		
Otay Valley			Data not available		
Lower Tijuana River Valley			887		
Total with available data	>50		14,784		

Sources: Sweetwater Authority, 2006; Helix Water District, 2006; SDCWA Groundwater Report, 1997; City of San Diego, 2006

Sweetwater Basins-San Diego Formation

There are 13 municipal wells in the basin serving the cities of Chula Vista and National City and the unincorporated area of Bonita. The total production capacity of these wells is 16.4 cfs. At its National City wells, Sweetwater obtains fresh water from the San Diego Formation. At its Reynolds Groundwater Desalination Facility in Chula Vista, Sweetwater Authority extracts brackish water from the alluvium of the Sweetwater River, and from the San Diego Formation. Total average municipal production from the Lower Sweetwater, Middle Sweetwater, and San Diego Formation basins is reported at 4,590 AFY (Sweetwater Authority, 2006).

Santee-El Monte Basin

Prior to the importation of water into the San Diego region, Helix WD operated as many as a dozen wells in the El Monte Basin. When imported water became available, Helix WD reduced groundwater production from the basin to several hundred AFY. The final remaining Helix WD well, Well No. 100, failed in 1994. Helix WD constructed a new well, Well 101, to replace Well No. 100. The production goal for the new well is 400 to 500 AFY. Because of high concentrations of iron and manganese in the groundwater, Helix WD intends to blend the recovered groundwater with its surface water supply. Existing production is reported by Helix WD to be about 250 AFY.

Under an agreement between Helix WD and the city of San Diego, Helix WD maintains 10,000 AFY of surface water storage rights in the El Captain Reservoir. This same agreement, however, states that groundwater taken from the El Monte Basin by Helix WD is subtracted from the 10,000 AF of local runoff storage rights.

Other average municipal production in the Santee-El Monte basin includes Lakeside Water District at 1,000 AFY and Riverview Water District at 350 AFY (SDCWA, 1997). Thus, total average municipal production for the Santee-El Monte basin is estimated at 1,600 AFY.

Other Production

There are an indeterminate number of other wells in the South San Diego County Basins that serve agricultural, industrial and private users throughout the various basins. Known information from each basin is discussed below.

Sweetwater Basins-San Diego Formation

There are an unknown number of other wells serving agriculture, industrial, and domestic uses. The SDCWA estimates annual groundwater production at 900 AFY from the Lower Sweetwater Basin and 2,000 AFY from the Middle Sweetwater Basin.

Santee-El Monte Basin

According to Helix WD, there are 19 non-municipal wells in the Santee-El Monte Basin. These wells serve 90 percent private domestic, five percent industrial and five percent agricultural users. SDCWA reports this production at 4,000 AFY.

Mission Valley Basin, Lower Tijuana River Valley Basin, and Otay Valley Basin

The City of San Diego reports the average production in the Mission Valley Basin at 500 gpm, or 807 AFY, and the average production in the Lower Tijuana River Valley Basin at 550 gpm, or 887 AFY. Production information on the Otay Valley Basin was not available.

ASR Wells

There are currently no ASR wells in the South San Diego County Basins. However, future plans include the use of ASR wells. These future plans are discussed below.

Sweetwater Basins-San Diego Formation

There are currently no ASR wells in the Sweetwater Basins or the San Diego Formation. A 1999 report on aquifer storage and recovery in the San Diego Formation recommended four potential ASR projects for further study.

Santee-El Monte Basin

There are no ASR wells in the Santee-El Monte Basin. Helix WD is currently evaluating a put-and-take groundwater recharge project using recycled water on Helix-owned land.

Spreading Basins

The following section describes current spreading basin facilities in the Sweetwater and Santee-El Monte Basins.

Sweetwater Basins-San Diego Formation

There are no spreading basins in the Sweetwater Basins and San Diego Formation. Recharge is derived from the runoff of seasonal precipitation in the upper reaches of the Sweetwater River Valley, discharge from the Sweetwater Reservoir, and underflow from the reservoir. Subsurface flow may also contribute recharge.

Santee-El Monte Basin

No spreading grounds currently exist in the El Monte Basin. However, as part of Helix's proposed El Monte Groundwater Recharge Project, spreading basins are proposed.

Seawater Intrusion Barriers

There are no seawater intrusion barriers in the South San Diego County Basins.

Desalters

The following section describes the desalters in the South San Diego County Basins.

Sweetwater Basins-San Diego Formation

The Richard A. Reynolds Groundwater Desalination Facility, formerly known as a Demineralization Facility, uses reverse-osmosis treatment (RO) to remove dissolved salts and microscopic particles, such as bacteria and other contaminants which could be found in alluvial groundwater. The TDS of the feedwater is approximately 2,500 mg/L. Four alluvial wells and six deep formation wells, located along the north side of the Sweetwater River, provide source water for the facility. Whenever alluvial wells are in use, at least one formation well must operate for blending. The RO product water is blended with untreated well water to raise the TDS to prevent corrosion, and chlorine and ammonia are added to further assure disinfection. The facility, completed in 1999, can produce four million gallons of drinking water per day.

Santee-El Monte Basin

There are no desalters in the Santee-El Monte Basin.

GROUNDWATER LEVELS

Groundwater in the South San Diego County Basins is generally shallow with depths to groundwater ranging from less than five feet in the Santee-El Monte Basin to about 100 feet in the San Diego Formation. Limited water level data are available – available data for each basin is discussed below.

Sweetwater Basins-San Diego Formation

Historical analysis of groundwater level data by DWR showed that the groundwater surface in the early 1980s was relatively stable, and higher than in the years preceding 1959. This is attributed to decreased groundwater pumping due to the importation of Colorado River water. A study by the Sweetwater Authority indicates that water levels in production wells near National City have remained stable since about 1957. Groundwater flow follows surface flow of the Sweetwater River.

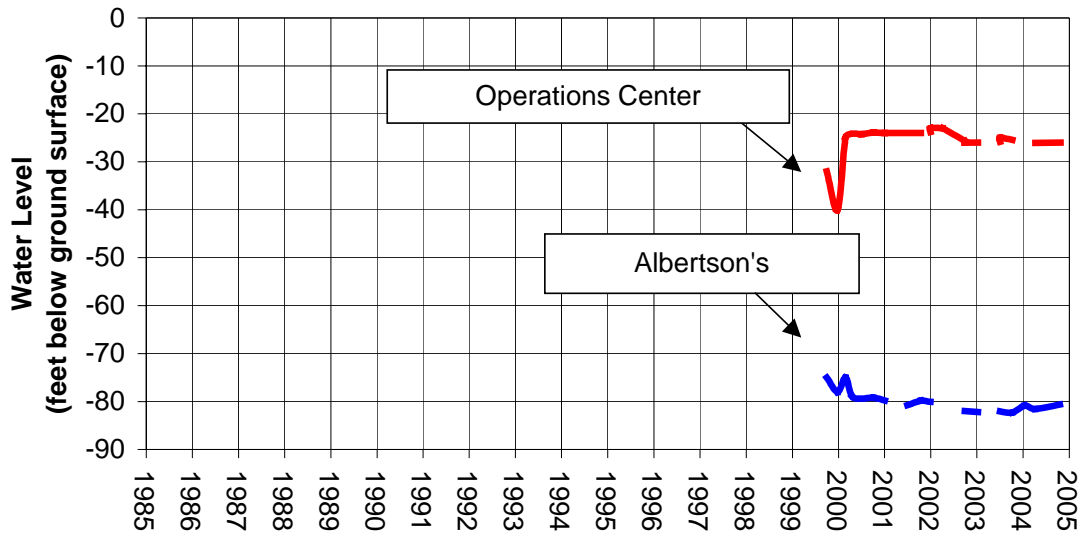
Basin water levels are closely monitored and managed by the Sweetwater Authority to avoid overpumping of the San Diego Formation. Sweetwater Authority monitors nine wells within the alluvial deposits of the Sweetwater Basins and seven wells in the San Diego Formation. Water levels in the San Diego Formation range from about 20 to 100 feet below ground surface (bgs). Historical groundwater levels monitored by Sweetwater Authority are shown in **Figure 23-3**.

Santee-El Monte Basin

According to Helix WD, depth to groundwater in the Santee-El Monte Basin ranges from less than five to 70 feet bgs. Without recharge, water levels drop at a steady pace in the El Monte portion of the basin in response to pumping, evapotranspiration, and down gradient flow. Water levels in the Santee portion of the basin appear to be maintained over time due to urban runoff, sub-basin inflow from El Cajon and Sycamore Canyon, and groundwater flow from the east. Between 1984 and 1993, water levels gradually declined in response to below-average

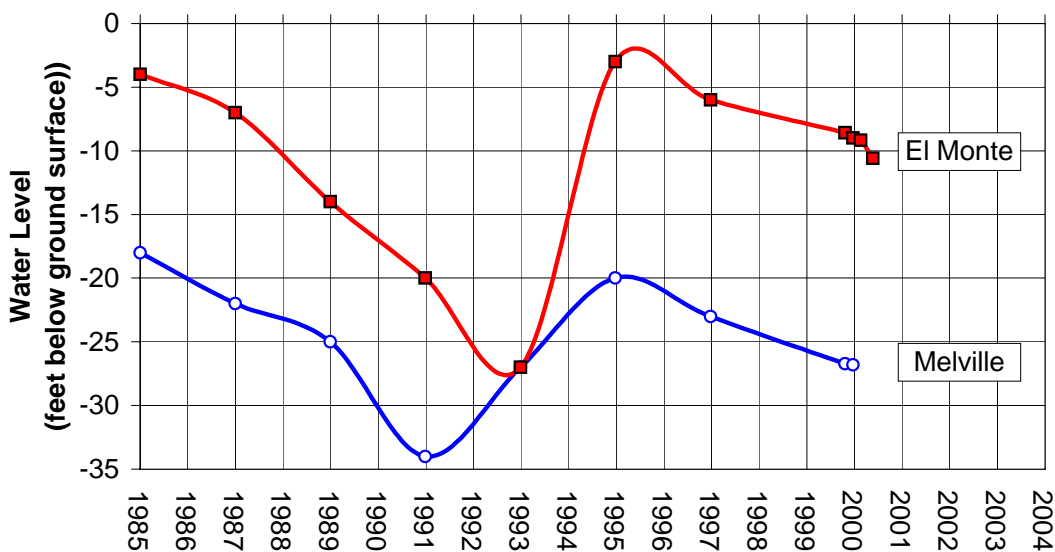
precipitation and ongoing pumping. In 1993, water levels rose to pre-1984 levels in response to above-average precipitation. Historical groundwater levels monitored by Helix WD are shown in **Figure 23-4**.

Figure 23-3
Historical Water Levels in the San Diego Formation



Source: Sweetwater Authority, 2006 **Calendar Year** Data not available prior to 1999

Figure 23-4
Historical Water Levels in the Santee-El Monte Basin



Source: Helix Water District, 2006 **Calendar Year**

GROUNDWATER QUALITY

The following section describes the water quality issues in the Sweetwater Basins, San Diego Formation and the Santee-El Monte Basin.

Groundwater Quality Monitoring

Groundwater quality is monitored as required under Title 22. No additional monitoring program is utilized in the South San Diego County Basins.

Groundwater Contaminants

Constituents of concern in the South San Diego County Basins include: total dissolved solids (TDS), chloride, iron and manganese. Other constituents of regional concern including nitrate, volatile organic compounds (VOCs) and perchlorate are also summarized in **Tables 23-4 and 23-5**.

Sweetwater Basins-San Diego Formation

The San Diego Formation historically has been a brackish groundwater basin. The high TDS is not from overpumping, but is a characteristic of the groundwater when it was deposited in the formation. There are no maps on the extent and concentration of TDS in the San Diego Formation. Contaminants of concern are summarized in **Table 23-4**.

Santee-El Monte Basin

Contaminants of concern for the Santee-El Monte Basin are summarized in **Table 23-5**. Groundwater quality in the eastern portion of the Santee-El Monte Basin is excellent, with low TDS concentrations, and low concentrations of iron and manganese. Groundwater quality in the central portion of the Santee-El Monte Basin is variable. Groundwater TDS concentrations range from 500 to 900 mg/L in this portion of the basin. Iron and manganese treatment is required in this area with concentrations exceeding secondary drinking water standards. Nitrate concentrations in the central portion of the basin also exceed drinking water standards with maximum concentrations of 17.8 mg/L (Regional Board, 2006). Groundwater quality in the western portion of the Santee-El Monte Basin contains high concentrations of TDS (~3,000 mg/L). Treatment is required in this area to meet drinking water standards.

Other South San Diego County Basins

Groundwater quality in the Mission Valley, Otay Valley and Lower Tijuana Basins is generally poor. Groundwater quality in the Mission Valley Basin is generally poor with concentrations of TDS ranging from 520 to 4,089 mg/L, chloride concentrations ranging from 80 to 1,640 mg/L, sulfite concentrations ranging from 68 to 607 mg/L, and nitrate concentrations ranging from 0 to 105 mg/L (City of San Diego, 2006). Groundwater quality in the Lower Tijuana River Valley Basin also has poor quality as the basin experiences problems with seawater intrusion. In this basin, TDS concentrations range from 379 to 1,749 mg/L and chloride concentrations range from

83 to 650 mg/L (City of San Diego, 2006). Groundwater in the Otay Valley is fair to poor with concentrations of TDS ranging from 500 to 2,000 mg/L (DWR, 2004).

Blending Needs

There is no blending in the Sweetwater, Santee-El Monte Basins, or other South San Diego County Basins.

Groundwater Treatment

As discussed above, treatment is required for TDS, iron and manganese.

**Table 23-4
 Summary of Constituents of Concern in the Sweetwater Basins-San Diego Formation**

Constituent	Units	Range		Description
		Sweetwater Basins	San Diego Formation	
TDS Secondary MCL = 500	mg/L	300 to 50,000	600 to 1,600	Data from 13 public supply wells shows TDS concentration ranging from 600 to 3,320 mg/L, with an average of approximately 2,114 mg/L. Groundwater in the alluvium of the Sweetwater Basins is of a sodium-calcium chloride character.
Nitrate (as N) Primary MCL = 10	mg/L	ND to 1.2	ND	Nitrate concentrations are low in this basin
VOCs TCE and PCE Primary MCL for TCE = 5 Primary MCL for PCE = 5	µg/L	ND	ND	VOCs not detected in this basin
Perchlorate Notification level = 6	µg/L	ND	ND	Perchlorate is not detected in this basin.
Chloride Secondary MCL = 250	mg/L	692 to 1,192	359 to 1,590	Generally exceeds the recommended limits for drinking water.

Source: DWR, Bulletin 118, updated 2004; Regional Board, 2006

Table 23-5
Summary of Constituents of Concern in the Santee-El Monte Basin

Constituent	Units	Range	Description
TDS Secondary MCL = 500	mg/L	260 to 2,870	Groundwater quality in the basin is generally good in the eastern portion of the basin (<1,000 mg/L TDS) and generally poor in Lakeside and Santee (~ 3,000 mg/L TDS).
Nitrate (as N) Primary MCL = 10	mg/L	ND to 17.8	Concentrations in 4 wells exceed nitrate MCL in central portion of basin.
VOCs TCE and PCE Primary MCL for TCE = 5 Primary MCL for PCE = 5	µg/L	ND to 2.2 for PCE ND for TCE	Concentrations do not exceed drinking water standards
Perchlorate Notification level = 6	µg/L	ND	Perchlorate is not detected in any known well.
Iron Secondary MCL = 0.3	mg/L	ND to 4.4	Iron concentrations exceed secondary drinking water standards in central portion of basin
Manganese Secondary MCL = 0.05	mg/L	ND to 6.02	Manganese concentrations exceed secondary drinking water standards in central portion of basin

Sources: DWR, Bulletin 118, updated 2004; SDCWA, Groundwater Management Planning Study, Santee-El Monte Basin, Phase III Report, 2001; Regional Board, 2006

In general, VOCs and perchlorate are not detected in the Santee-El Monte Basin.

Sweetwater Basins-San Diego Formation

Sweetwater Authority provided information on groundwater treatment and associated costs as shown in **Table 23-6**.

Table 23-6
Summary of Groundwater Treatment in the Sweetwater Basins-San Diego Formation

Treatment Type	Number of Wells	Constituents(s) of Concern	Treatment Target	Treatment Cost (\$/AF)	Amount Treated (AFY)
Reverse Osmosis	10	TDS	500 mg/L	\$430	2,000

Source: Sweetwater Authority, 2006

Santee-El Monte Basin

Well production from Helix WD’s municipal production well is connected to an imported water pipeline that delivers raw water to their R.M. Levy Water Treatment Plant. All water (imported and blended groundwater from the municipal well) is treated at the R.M. Levy Water Treatment Plant to meet drinking water maximum contaminant levels (MCLs.)

Iron and manganese treatment groundwater treatment facilities in the Santee-El Monte Basin were online in 1996.

CURRENT GROUNDWATER STORAGE PROGRAMS

The following section describes the current groundwater storage programs in the South San Diego Basins.

Sweetwater Basins-San Diego Formation

There are no groundwater storage agreements in the basins.

Santee-El Monte Basin

There are currently no groundwater storage programs in the Santee-El Monte basin. The Padre Dam Municipal Water District (PDMWD) and Helix WD have investigated a groundwater conjunctive use program that could develop approximately 8,500 AFY of potable water supply from the basin by groundwater recharge with PDMWD reclaimed water and a program of injection/recharge wells for imported water developing approximately 1,300 AFY of potable water supply.

BASIN MANAGEMENT CONSIDERATIONS

The following section describes the basin management considerations for the South San Diego Basins.

Sweetwater Basins-San Diego Formation

- There are no pumping limitations relating to the use of additional available storage capacity in the Sweetwater Basins or the San Diego Formation. However, water quality is fair to poor and limits the ultimate use of this basin.

Santee-El Monte Basin

- As an unadjudicated basin, there are no constraints or limitations imposed on the basin's operation. The potential for groundwater storage and production from the Santee portion of the aquifer is extremely limited due to the limited ability to store and transmit water as well as poor water quality. The eastern portion of the basin was found to have the thickest alluvial deposits and the greatest recharge rates. Based on this observation and the modeling simulations, it appears that the greatest potential for groundwater storage and development projects are in the eastern portion of the basin, particularly in El Monte, where groundwater storage is the greatest and TDS is low.

Other South San Diego County Basins

- The ability to store and extract water in the South San Diego County Basins is limited primarily by water quality. As such, there are virtually no municipal supply wells in these basins.

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