June 3, 2013

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TO: Local Agency Formation Commission

FROM: Executive Officer
Local Governmental Analyst III

SUBJECT: *Continued Public Hearing Item for*: Five-Year Sphere of Influence and Service Review: North County Coastal (San Dieguito) Water and Wastewater Agencies: Carlsbad Municipal Water District (MSR13-20,SR13-20); Fairbanks Ranch Community Services District (MSR13-21, SR13-21); Leucadia Wastewater District (MSR13-22, SR13-22); Olivenhain Municipal Water District (MSR13-23, SR13-23); Rancho Santa Fe Community Services District (MSR13-24, SR13-24); San Dieguito Water District (MSR13-25, SR13-25); Santa Fe Irrigation District (MSR13-26, SR13-26); and Whispering Palms Community Services District (MSR13-27, SR3-27)

At the May 6, 2013 meeting, your Commission continued the above reference Sphere of Influence and Service Review to allow the subject agencies additional time for review and comment. As of the time of printing the June 3, 2013 agenda, the following information has been submitted from the subject agencies:

- Santa Fe Irrigation District provided clarifying language to replace text in the staff report that referenced its operational relationship with the San Dieguito Municipal Water District. The replacement text has been inserted in the attached staff report. The District's letters with the recommended corrections are attached.

- Carlsbad Municipal Water District has provided information regarding previous jurisdictional changes to the district service area and sphere, which should be reflected in the current

LAFCO sphere map. These technical GIS corrections will be applied to the district sphere and the sphere map will be updated to reflect the changes.

- Olivenhain Municipal Water District provided a letter containing general comments and non-substantive technical corrections. The general comments indicate the District's approval of the Sphere of Influence and Service Review and recommendations. The District's suggested technical corrections will be reviewed in collaboration with the district and integrated into the report where appropriate. Olivenhain Municipal Water District provided suggestions regarding consolidation. LAFCO staff will discuss this topic with the District in greater detail after approval of the sphere and service review. The District's comment letter is attached.

Any additional comments that are subsequently received from the subject agencies will be distributed to the Commission at the June 3rd meeting.

Respectfully Submitted,

MICHAEL D. OTT
Executive Officer

ROBERT BARRY, AICP
Local Governmental Analyst III

MDO:RB:trl

Attachments

Revised May 6, 2013 staff report and subject agencies maps
Santa Fe Irrigation District letters, May 1, 2013 and May 17, 2013
Olivenhain Municipal Water District letter, May 16, 2013

May 6, 2013

REVISED: JUNE 3, 2013

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TO: Local Agency Formation Commission

FROM: Executive Officer
Local Governmental Analyst III

SUBJECT: Five-Year Sphere of Influence and Service Review: North County Coastal (San Dieguito) Water and Wastewater Agencies: Carlsbad Municipal Water District (MSR13-20,SR13-20); Fairbanks Ranch Community Services District (MSR13-21, SR13-21); Leucadia Wastewater District (MSR13-22, SR13-22); Olivenhain Municipal Water District (MSR13-23, SR13-23); Rancho Santa Fe Community Services District (MSR13-24, SR13-24); San Dieguito Water District (MSR13-25, SR13-25); Santa Fe Irrigation District (MSR13-26, SR13-26); and Whispering Palms Community Services District (MSR13-27, SR3-27)

EXECUTIVE SUMMARY

The North County Coastal (San Dieguito) Sphere of Influence and Service Review (MSR) covers the public agencies in the San Dieguito area providing water, wastewater, and/or recycled water services: Carlsbad Municipal Water District (MWD); Fairbanks Ranch Community Services District (CSD); Leucadia Wastewater District (WWD); Olivenhain MWD; Rancho Santa Fe CSD; San Dieguito Water District (WD); Santa Fe Irrigation District (ID); and the Whispering Palms CSD.

The subject agencies' spheres are being evaluated as part of the comprehensive *2012-2013 Sphere of Influence and Service Review* that will sequentially address all local agency spheres in San Diego County and is required by State Law and San Diego LAFCO Policy. Portions of the subject local area were previously reviewed in the *North Central San Diego County Municipal Service Review* (MSR) *and Sphere of Influence Update Study* that was adopted in 2005 (MSR02-18; SR02-18 [A-D]).

The San Dieguito Sphere and MSR recommendations conclude that the subject agencies are adequately providing water and wastewater services to the study area. The report recommends your Commission affirm the current *larger-than dist*rict spheres of influence for the Leucadia WWD, Olivenhain MWD, Rancho Santa Fe CSD, and the Whispering Palms CSD; affirm the current *smaller-than district* spheres for the San Dieguito WD, and the Santa Fe ID; affirm the *coterminous* spheres for the Carlsbad MWD, and the Fairbanks Ranch CSD; affirm the existing *service-specific* spheres for the Olivenhain MWD (Wastewater), and the Rancho Santa Fe CSD (Utility Undergrounding); remove the existing special study area designations from the Olivenhain MWD sphere; retain the special study area designations for the sphere of the Rancho Santa Fe CSD (Sun Valley, Bridges Project), and discuss the potential expansion of the Sun Valley special study area to include the unincorporated portion of the adjacent Flower Hill development area. Municipal Service Review and Sphere of Influence Determinations will be finalized for the San Dieguito local agencies following the Commission's consideration of this report. This staff report also contains recommendations regarding the need to update LAFCO's Rules regarding special district functions and services.

SPHERE OF INFLUENCE BACKGROUND

Over thirty years ago, the State Legislature directed LAFCOs to establish a sphere of influence for each local governmental agency under LAFCO jurisdiction. Spheres, which are defined in State Law as…*a plan for the probable physical boundaries and service area of a local agency,* promote logical and orderly development and coordination of local agencies, inhibit duplication of services, and support efficient public service delivery.

Accordingly, San Diego LAFCO has established and maintained spheres for each city and all independent and dependent special districts in San Diego County. Local agency spheres must be periodically reevaluated to ensure that they reflect current conditions and remain effective planning tools. Changes such as general plan updates and zoning amendments or new legislation concerning revenue streams can positively or negatively affect agencies' abilities to extend service into new territory. It is important to note that, while inclusion within an agency's sphere is required for annexation, this is only one of several factors that the Commission must consider in their discretionary review of proposed jurisdictional changes.

State Law requires that LAFCOs shall, as necessary, review and update each sphere of influence [Government Code 56425(g)]. LAFCOs are also required to prepare a MSR to analyze information regarding the efficiency and effectiveness of municipal services when adopting a new sphere or updating an existing sphere. MSRs are not required when an existing sphere can be affirmed or adjusted slightly and then affirmed.

In 1990, San Diego LAFCO adopted Policy L-109 which coupled with adopted implementing procedures, require spheres be revisited at five-year intervals. And commencing in 2008 and every five years thereafter, Policy L-102 discourages major amendments to a sphere that has been adopted, affirmed or updated—with noteworthy exceptions to accommodate: (1) a public health or safety risk such as septic system failure; (2) a proposal involving property that is split by a sphere boundary; (3) a reorganization between two consenting districts; and

(4) a situation where the sphere review failed to anticipate a need for public services—and conditions have significantly changed.

Since your Commission initiated the first sphere review and MSR program in 2001, all local agency spheres have been included in at least one cycle of review and affirmation or update. Selected categories of local agencies, such as Fire Protection Districts, or County Sanitation Districts have been addressed in multiple review cycles. MSRs have been prepared for numerous complex projects and, when warranted, sphere updates have been approved. The chronology of sphere review and MSR activity is annually updated and made available in the Commission's *Directory of Sphere of Influence and Municipal Service Review Actions.*

The current *Five-Year Sphere of Influence and Service Review Program*, which conforms to the five-year cycle requirements of State Law and Commission Policy L-102, was initiated by sending a service-specific questionnaire to each of the 100 local agencies under San Diego LAFCO's jurisdiction. Every agency responded. The information submitted is being analyzed and LAFCO data bases updated. All spheres will be reviewed and recommendations for affirmation, adjustment, or comprehensive update of groups of agencies will be presented to the Commission as completed.

NORTH COUNTY COASTAL (SAN DIEGUITO) WATER AND WASTEWATER SERVICE REVIEW

Since the previous five-year cycle of LAFCO sphere of influence reviews/affirmations, the national economic downturn combined with persistent state-wide emergency drought conditions have significantly impacted local water and wastewater service providers through increased regulatory requirements and water supply source costs, as well as reductions in water supply, water sales, development-related fees/charges, and property tax revenues. Subsequent legislative changes have both required and incentivized regional and sub-regional water and wastewater supply and infrastructure planning.

In response, the local special district water and wastewater service providers have made significant progress towards better emergency service planning, and increased collaboration in local and regional water and wastewater infrastructure planning. The 2010 Urban Water Management Plans produced by the local water service providers include 2020 per capita consumption targets that represent 20% reductions from 2007 base levels. An increased focus on development of alternative water supply sources such as desalination and recycled/reclaimed water, will also serve to create better regional operational efficiencies and more sustainable local service levels.

Recycled/reclaimed water and development of alternate water supply sources may also serve to replace or supplement the local water districts' diminished potable water sales. The recent state-wide drought emergency resulted in the implementation of effective conservation efforts that exceeded water use reduction expectations and, in some cases, resulted in significant budget shortfalls that have forced the districts to consider reductions in services or use of reserve funds to sustain needed capital improvements or standard levels of service.

Drought-related restrictions and cancelations of agricultural water discount programs have continued to put financial pressure on local agricultural producers. Increased irrigation water costs can serve to induce the conversion of prime agricultural lands for residential development purposes. While market demands for housing may support the proposed land use conversions, the potential use of reclaimed/recycled water to substitute for previously-discounted potable irrigation water may provide a sustainable irrigation source for local agricultural producers to continue to successfully operate in difficult economic circumstances.

The San Diego region's demographic data from the 2010 Census has been integrated by the San Diego Association of Governments (SANDAG) into its regional and local population and housing projections. Recent comprehensive general plan updates have been completed for the County of San Diego and several of the North County incorporated cities. These updates of local land use planning and growth projections are then utilized by the local water and wastewater service providers to estimate future demands, and to update their respective master service plans and capital improvement programs.

San Dieguito Review Area

The San Dieguito MSR study area can be geographically described as the combined territory within the Carlsbad and San Dieguito subregional areas of San Diego County, including zip codes: 92007-9211, 92024, 92067, and 92075. Portions of zip codes 92029, 92091, and 92127 are also included. The study area territory is comprised of the western-most area of the Carlsbad and San Dieguito Hydrologic Units (Watersheds). SANDAG's current estimate of the total population within the San Dieguito MSR study area (2010) is 208,840. SANDAG projects the 2020 study area population to be 235,192, and the 2040 population to be 256,888.

The San Dieguito MSR study area includes both unincorporated and incorporated territory. The incorporated territory involves portions of the Cities of Del Mar, Carlsbad, Encinitas, San Diego, San Marcos, and Solana Beach. The unincorporated territory includes the communities of Rancho Santa Fe, Elfin Forest, Fairbanks Ranch, and Rancho Santa Fe Valley. The study area is bordered by the City of Oceanside to the north, the cities of Vista, San Marcos, Escondido, and San Diego to the west, and the City of Del Mar to the south.

Local water service is regionally coordinated by the San Diego County Water Authority (CWA) and implemented by the local member water agencies and cities; wastewater and recycled water are regionally and sub-regionally coordinated through JPAs and joint infrastructure sharing agreements. Local land use planning is established by the cities for their respective incorporated territory and the County of San Diego for the unincorporated communities.

Subject Services

According to the San Diego LAFCO Rules, a "service" means a class established within a single local agency function including the public facilities necessary to perform the function. The San Diego LAFCO's service classification system adopted per Government Code

Section 56074 is applicable to all local agencies for purposes of defining functions and services.

The following functions and services are the primary focus of the North County Coastal (San Dieguito) Water and Wastewater Service Review:

- **Water:** *Wholesale, Retail, Replenishment, Injection*

  Providing Agencies: Carlsbad MWD; Olivenhain MWD; San Dieguito WD; and Santa Fe ID.

- **Sewer (Wastewater):** *Collection, Transportation, Treatment, Reclamation, Disposal*

  Providing Agencies: Carlsbad MWD; Fairbanks Ranch CSD; Leucadia WWD; Olivenhain MWD; Rancho Santa Fe CSD; and Whispering Palms CSD.

- **Reclaimed/Recycled Water:** *Not classified as an individual service/function*

  Providing Agencies: Carlsbad MWD; Leucadia WWD; Olivenhain MWD; San Dieguito WD; and Santa Fe ID.

Additional local agencies that provide the subject services, but are not part of the North County Coastal MSR study area are: the Cities of Del Mar, Encinitas, Oceanside, Solana Beach, San Diego, and Vista; as well as the Buena Sanitation District, Rincon Del Diablo MWD, San Elijo Joint Powers Authority, Vallecitos WD, and Vista ID.

Disadvantaged Unincorporated Communities (SB 244)

Senate Bill 244 (Wolk) (Govt. Code § 56425 and 56430) requires LAFCOs to evaluate the present and probable need for public facilities and services within *disadvantaged unincorporated communities* (DUC) that are **within or contiguous to** the spheres of influence of those cities or special districts that provide wastewater, municipal and industrial water, or structural fire protection services.

LAFCOs are required to make additional determinations specific to DUCs when updating spheres of influence and conducting Municipal Service Reviews. A DUC is defined as an unincorporated area, containing at least 12 registered voters where the annual median household income is 80 percent or less of the statewide annual median. In 2010—which is the most recent year with available data—a potentially qualifying DUC had an annual median household income of $46,166 or less.

SANDAG, as the Regional Census Data Center, assisted San Diego LAFCO in identifying census tracts that contain potentially qualifying unincorporated communities. LAFCO sphere maps have been updated to include potentially qualifying census tracts. Census tracts that are **within or contiguous to** spheres of local agencies, which provide wastewater, municipal or industrial water, and fire protection services, are subject to SB 244 evaluation.

By previous action, your Commission reviewed and accepted the staff recommendations complying with SB 244. Therefore, the North County Coastal (San Dieguito) Sphere and MSR report will not address SB 244 related issues.

Municipal Service Review and Sphere Review Determinations

Municipal Service Review and Sphere of Influence Determinations will be developed for the subject North County Coastal (San Dieguito) Sphere and MSR agencies following the Commission's acceptance of this report. The San Dieguito Sphere and MSR study data will serve as the basis of the MSR and Sphere determinations for the eight subject agencies.

Subject Agencies Providing Water and/or Wastewater Services

The North County Coastal (San Dieguito) Sphere and MSR study area is comprised of the service areas of the eight special districts providing water and/or wastewater services to the San Dieguito local community area:

- Carlsbad Municipal Water District
- Fairbanks Ranch Community Services District
- Leucadia Wastewater District
- Olivenhain Municipal Water District
- Rancho Santa Fe Community Services District
- San Dieguito Water District
- Santa Fe Irrigation District
- Whispering Palms Community Services District

The following discussion provides service, governance, financial, and sphere summaries of the eight subject public agencies within the San Dieguito MSR study area:

1. Carlsbad Municipal Water District (MSR13-20; SR13-20)

Abstract: Carlsbad Municipal Water District (MWD) became a subsidiary district to the City of Carlsbad in 1990. The District was formed as the Carlsbad MWD in 1954 and renamed the Costa Real MWD in 1979. The name was changed back to the original Carlsbad MWD when the District was made subsidiary to the City of Carlsbad.

Services: The Carlsbad MWD is authorized to provide potable water, wastewater, and recycled/reclaimed water services within approximately 85% of the City of Carlsbad. The District purchases 100% of its potable water as treated water from the San Diego County Water Authority. The District obtains recycled water from the District's Phase II Recycled Water Plant, and from recycled water purchased from the Leucadia Wastewater District and Vallecitos Water District.

Carlsbad MWD operates and maintains the wastewater system within approximately 65% of City of Carlsbad. Wastewater is treated by the Encina Wastewater Treatment Plant, a facility jointly owned by the cities of Carlsbad and Vista, the Leucadia WWD, the Vallecitos WD, the Buena Vista SD, and the Encinitas Sanitary District.

Governance: Subsidiary District to City of Carlsbad, Carlsbad Council presides as Carlsbad MWD Board of Directors.

District Area: 32.32 square miles / 20,682 acres *(2010 Urban Water Management Plan)*

Population: 81,158 (2010 SANDAG Special District Population Estimates)

Financial: Preliminary FY 2012-13 City of Carlsbad Operating Budget and Capital Improvement Program:

Enterprise Fund Expenditures (Projected):

Water operations	$32,013,625
Recycled water operations	$7,409,233
Wastewater operations	$10,408,759

Capital Budget:

Wastewater project	$5,843,646
Water projects	$3,480,000
Recycled water projects	$2,396,490

Financial audits frequency: *Annually*

Financing capital replacement method:

Water and wastewater replacement funds

Enterprise Fund Revenue (Estimated):

Water operations	$35,901,800
Revenue from property taxes	$2,930,000
Recycled water operations	$7,265,650
Wastewater operations	$11,941,000
Total Enterprise Fund Revenue: (Water/Recycled water and Wastewater)	$51,121,450

Current Planning Documents: 2010 Urban Water Management Plan, 2012 Water Master Plan, 2012 Sewer Master Plan, 2012 Recycled Water Master Plan.

District Sphere of Influence: LAFCO approved a sphere of influence for the Carlsbad MWD in 1985 that was larger than the district boundary. Annexation of territory within the district sphere rendered the sphere coterminous with the district boundary and a coterminous sphere was affirmed in 2007.

Special Study Areas: None

Status of current sphere: No sphere or jurisdictional changes have occurred since the 2007 affirmation of the coterminous sphere and no new information that would warrant a sphere change has been presented. District responses to the *2012 Sphere of*

Influence and Service Review indicate that no proposals for a sphere change or jurisdictional change are anticipated.

RECOMMENDATION: It is recommended that the existing coterminous sphere for the Carlsbad MWD be affirmed.

2. Fairbanks Ranch Community Services District (MSR13-21; SR13-21)

Abstract: Fairbanks Ranch Community Services District (CSD) was formed in 1987 as the result of a reorganization involving the dissolution of the Fairbanks Ranch Sanitation District. As a successor agency, the Fairbanks Ranch CSD encompasses the boundaries of the dissolved district.

Services: Fairbanks Ranch CSD is authorized to provide wastewater treatment, water reclamation, street light maintenance, and roadside landscape maintenance services within the unincorporated community of Fairbanks Ranch.

Fairbanks Ranch Water Pollution Control Facility (WPCF) has a capacity of 0.28 million gallons (MG) per day; treated water is discharged into percolation ponds. The facility treats an average wastewater flow of 0.16 MG per day, and serves approximately 610 homes, along with the Fairbanks Plaza, the Solana Santa Fe Elementary School, and the Fairbanks Ranch Fire Station. District services are funded by an annual sewer service charge levied on parcels receiving sewer service.

Governance: Elected five-member Board of Directors

District Area: 1.93 sq. miles / 1,227 acres

Population: 1,548 (2010 SANDAG Special District Population Estimates)

Financial: Annual District adopted budget (FY 2012-13):

Operating budget	$349,280
Capital budget	$270,000

Financial audits frequency: *Annually*

Financing capital replacement method:

Net Gain on Operations

Agency revenue:

Revenue derived from charges/fees	$675,000
Revenue derived from property taxes	$0
Other revenues	$10,300
Total Agency revenue:	**$685,300**

Current Planning Documents: Adopted FY 2012-13 Budget, Five-year Capital Improvement Program, Asset Management Plan.

District Sphere of Influence: LAFCO approved a sphere of influence for the Fairbanks Ranch CSD in 1987 that was coterminous with the district boundary. The coterminous sphere was affirmed in 2007.

Special Study Areas: None

Status of current sphere: No sphere or jurisdictional changes have occurred since the 2007 affirmation of the coterminous sphere and no new information that would warrant a sphere change has been presented. District responses to the *2012 Sphere of Influence and Service Review* indicate that no proposals for a sphere change or jurisdictional change are anticipated.

RECOMMENDATION: It is recommended that the existing coterminous sphere for the Fairbanks Ranch CSD be affirmed.

3. Leucadia Wastewater District (MSR13-22; SR13-22)

Abstract: Leucadia (County Water) Wastewater District (WWD) was formed in 1959 as a County Water District with an original service area that contained unincorporated community of Leucadia and surrounding unincorporated areas. The community of Leucadia was included in the 1986 incorporation of the City of Encinitas. Over time, all district territory has annexed to either the City of Encinitas or the City of Carlsbad.

Services: Leucadia WWD is authorized to provide wastewater and reclaimed water services within a 15-square mile area that includes the northern portion of the City of Encinitas and the south easterly portion of the City of Carlsbad. As a member of the Encina Joint Powers Authority, the District owns approximately 20% of the treatment capacity at the Encina Water Pollution Control Facility and presently transports an average of 4.5 million gallons of wastewater per day (MGD) to the facility. The District operates the Gafner Water Recycling Facility, which produces up to 86 MGD of recycled water per year.

Governance: Elected five-member Board of Directors

District Area: 15.33 sq. miles / 9,814 acres

Population: 58,203 (2010 SANDAG Special District Population Estimates)

Financial: Annual District adopted budget (FY 2013):

Wastewater operating budget	$6,016,955
Recycled water operating budget	$171,118
Capital budget	$4,274,856

Financial audits frequency: *Annually*

Financing capital replacement method:

Wastewater service charges

Agency revenue:

Revenue derived from charges/fees	$7,290,174
Revenue derived from property taxes	$171,118
Other revenues	$1,028,085
Total Agency revenue:	**$9,519,699**

(Note: FY 2013 Budget includes a transfer from Wastewater Enterprise reserves of $2,399,637 for CIP expense)

Current Planning Documents: 2009 Sewer System Master Plan, 2008 Asset Management Plan.

District Sphere of Influence: LAFCO approved a sphere of influence for the Leucadia WWD in 1984 that was larger than the district boundary. The larger-than district sphere was affirmed in 2007.

Special Study Areas: None

Status of current sphere: No sphere or jurisdictional changes have occurred since the 2007 affirmation of the larger-than-district sphere and no new information that would warrant a sphere change has been presented. District responses to the *2012 Sphere of Influence and Service Review* indicate that no proposals for a sphere change or jurisdictional change are anticipated.

RECOMMENDATION: It is recommended that the existing larger-than-district sphere for the Leucadida WWD be affirmed.

4. Olivenhain Municipal Water District (MSR13-23; SR13-23)

Abstract: Olivenhain Municipal Water District (MWD) was formed in 1959 to develop an adequate water supply for the landowners and residents of its service area. The District joined the San Diego County Water Authority (SDCWA) in 1960 and imported SDCWA water provides 97% of the district's potable supply.

Services: The Olivenhain MWD is authorized to provide water service, hydroelectric generation, wastewater collection and treatment, recycled water, and park and recreation services within portions of the Cities of Carlsbad, Encinitas, San Diego, San Marcos, and Solana Beach; and the

communities of 4S Ranch, Elfin Forest, Fairbanks Ranch, Leucadia, Olivenhain, Rancho Cielo, Rancho Santa Fe, and Rancho Santa Fe Valley. Wastewater services are restricted to the 4S Ranch and Rancho Cielo areas. The MWD sells reclaimed water for irrigation uses in the San Dieguito Valley and La Costa areas.

Olivenhain MWD owns and operates the David C. McCollom Water Treatment Plant. The District services approximately 27,500 potable and recycled water meters. The District annually provides approximately 18,000 acre feet (AF) of potable water and 2,000 AF of recycled water.

Governance: Elected five-member Board of Directors

District Area: 48.45 sq. miles / 31,009 acres

Population: 67,333 (2010 SANDAG Special District Population Estimates)

Financial: Annual District adopted Budget (FY 2012-13):

Operating Expenses:

Potable water operations	$13,449,000
Recycled water operations	$914,000
Wastewater operations	$2,075,000

Capital budget:

Wastewater projects	$5,843,646
Water projects	$3,480,000
Recycled water projects	$2,396,490

Financial audits frequency: *Annually*

Financing capital replacement method:

Water and wastewater replacement funds

Operating Revenues:

Potable water operations	$38,827,000
Revenue from property taxes	$2,763,000
Recycled water operations	$2,563,000
Wastewater operations	$4,117,000
Total Agency revenue:	**$51,458,000**

Debt Service: Reassessment District 96-1 Limited Obligation Improvement Bonds; 2006A Water Revenue Refunding Bonds; 2009 Water Revenue Bonds; 2012 State Revolving Fund Loan; 2012 California Bank & Trust Tax-Exempt Promissory Note

Total Debt Service Net Income (Loss): ($5,540,000)

Current Planning Documents: 2011 Water/Recycled Water Master Plan and Capital Improvement Program Update, 2010 Urban Water Management Plan.

District Sphere of Influence: LAFCO approved a sphere of influence for the Olivenhain MWD in 1984 that was larger than the district boundary. The larger-than district sphere was affirmed in 2007.

LAFCO approved a wastewater service-specific sphere in 1998 that is larger than the wastewater service area. The existing wastewater service-specific sphere was affirmed in 2007 and covers the 4S Ranch and Rancho Cielo communities.

Special Study Areas: Olivenhain MWD reports that all special study area issues have been resolved. Olivenhain MWD currently serves all potable water demands in the subject area and has a contractual agreement to serve recycled water to the Fairbanks Ranch Country Club. The current special study area designations for the Fairbanks Ranch Country Club (304 acres) and the holding ponds of the former 4S Ranch Sanitation District Wastewater Treatment Facility (50 acres) are recommended for removal.

Status of current sphere: No sphere or jurisdictional changes have occurred since the 2007 affirmation of the larger-than-district sphere and no new information that would warrant a sphere change has been presented. District responses to the *2012 Sphere of Influence and Service Review* indicate that no proposals for a sphere change or jurisdictional change are anticipated.

RECOMMENDATION: It is recommended that the existing larger-than-district sphere for the Olivenhain MWD be affirmed.

It is recommended that the existing wastewater service-specific sphere for the Olivenhain MWD be affirmed.

It is recommended that the existing special study area designations be removed from the Olivenhain MWD sphere.

5. Rancho Santa Fe Community Services District (MSR13-24; SR13-24)

Abstract: Rancho Santa Fe Community Services District (CSD) was formed as the successor agency from the 1981 dissolution of the county-dependent Rancho Santa Fe Sanitation District (SD). The service area of the newly-formed CSD was larger than the dissolved SD because of anticipated septic system failures in surrounding areas and the resulting need for services. With formation of the CSD, County Supervisors dissolved an

Improvement District that had provided county-funded landscape services in the communities of Rancho Santa Fe, Whispering Palms, and portions of Fairbanks Ranch. Landscape maintenance responsibility for the Rancho Santa Fe area was transferred to the CSD and the service area corresponds to the former improvement district within the Rancho Santa Fe Covenant area.

Services: Rancho Santa Fe CSD is authorized to provide wastewater, landscape maintenance, and utility undergrounding services within portions of the unincorporated communities of Rancho Santa Fe, Santa Fe Valley, and South Pointe Farms. The District contracts with the Rancho Santa Fe Association for landscaping services and with Dudek and Associates for management and operational services.

In 2010, the CSD was authorized to provide utility undergrounding services as a latent power. Undergrounding is limited to an area corresponding to the Rancho Santa Fe Covenant area. Undergrounding will be initiated incrementally and funded by property-owner assessments.

Governance: Elected five-member Board of Directors

District Area: 16.17 sq. miles / 10,348 acres

Population: 7,457 (2010 SANDAG Special District Population Estimates)

Financial: Annual District adopted budget (FY 2012-13):

Operating budget (Wastewater)	$1,963,500
Operating budget (Landscaping)	$699,400
Capital budget (Wastewater)	$104,500

Financial audits frequency: *Annually*

Financing capital replacement method:

Sewer service charges

Agency revenue:

Wastewater charges/fees:	$2,348,200
Wastewater property tax allocation:	$48,000
Landscaping property tax allocation:	$695,000
Other revenues:	$1,611,100
Total Agency revenue:	**$3,252,300**

Current Planning Documents: Adopted FY 2012-13 Budget, Capital Improvement Program, Asset Management Plan.

District Sphere of Influence: LAFCO approved a sphere-of-influence for the Rancho Santa Fe CSD in 1983 that was smaller than the District. The sphere was significantly expanded in 1997 to include

the entire Santa Fe Valley Specific Plan Area. The larger-than-district sphere was affirmed in 2007. A service-specific sphere was approved for the utility undergrounding area in 2010.

Special Study Areas:

Bridges Project

The Bridges property consists of approximately 94 acres proposed for development with 30± residences. The CSD has not reported a current need for the area's placement within the sphere; therefore, the special study area designation is recommended to be retained.

Sun Valley

The Sun Valley special study area consists of approximately 284 parcels within an approximate 496-acre unincorporated area that is contiguous to the Cities of San Diego and Solana Beach and the CSD. The area has had a history of septic system failures during wet winter periods. In 2011, a small group of local Sun Valley property owners petitioned LAFCO for approval of annexation to the Rancho Santa Fe CSD (Ref. Nos.: SA/DA11-07, "El Camino Real Annexation") because of failing or failed septic systems. The CSD negotiated a contract with the City of San Diego to provide wastewater service to the seven subject properties following their annexation to the CSD's service area.

The remainder of the Sun Valley special study area should be further reviewed to explore the potential expansion of the CSD sphere to facilitate future contractual service connections to the City of San Diego when environmental conditions are warranted.

Flower Hill (Potential Special Study Area)

Immediately south of the Sun Valley special study area is the approximately 477-acre Flower Hill area. About two-thirds of Flower Hill is within the incorporated boundary of the City of San Diego; the remaining third is located in the unincorporated territory of the County of San Diego. The Flower Hill area contains a variety of land uses including rural residential, single-family residential, multi-family residential, low-rise office/professional, store-front commercial, health care, open space, landscaped open space, golf course, residential recreation, agricultural, and vacant land.

Currently, the City of San Diego provides sewer service to its incorporated Flower Hill area residents, with the remainder of developed unincorporated properties utilizing septic systems for wastewater disposal. Although the City of Solana Beach and the Rancho Santa Fe CSD spheres border portions of the area, topography and other

geographic constraints make the City of San Diego the most logical wastewater service provider.

In response to documented failing septic systems, the Rancho Santa Fe CSD has supported annexation of adjacent Sun Valley properties to receive wastewater service by contractual agreement with the City of San Diego. Additional study of the City's local capacity, and ability/willingness to meet projected local demands should be conducted before placement of the unincorporated Sun Valley and Flower Hill areas within the Rancho Santa Fe CSD's sphere.

Status of current sphere:

Minimal sphere or jurisdictional changes have occurred since the 2007 affirmation of the larger-than-district sphere and no new information that would warrant a sphere change has been presented. District responses to the *2012 Sphere of Influence and Service Review* indicate that no proposals for a sphere change or jurisdictional change are anticipated. The existing special study areas are recommended to be retained. The Flower Hill residential area is a potential service area that should be considered for designation as a special study area.

RECOMMENDATION:

It is recommended that the existing larger-than-district sphere for the Rancho Santa Fe CSD be affirmed.

It is recommended that the existing utility undergrounding service-specific sphere for the Rancho Santa Fe CSD be affirmed.

It is recommended that the existing special study area designations for Sun Valley and the Bridges Project areas be retained, and that the Commission discuss the potential expansion of the Sun Valley special study area to include the unincorporated portion of the adjacent Flower Hill development area.

6. San Dieguito (Irrigation) Water District (MSR13-25; SR13-25)

Abstract: San Dieguito (Irrigation) Water District (WD) was formed in 1922 as an Irrigation District to provide water service in the unincorporated area south of the City of Carlsbad. The District joined the San Diego County Water Authority (CWA) in 1948. The 1986 incorporation of the City of Encinitas included the territory of the San Dieguito WD. The District became a subsidiary district of the City and is governed by the Encinitas City Council acting as the District Board of Directors.

The San Dieguito WD service area covers approximately nine square miles in the western portion of the City of Encinitas, generally west of El Camino Real. The remainder of the City and adjacent unincorporated areas are served by the independent Olivenhain MWD.

Local surface water stored in City of San Diego-owned Lake Hodges is the source for approximately 70% of the San Dieguito WD's water supply; imported water purchased from the San Diego CWA currently provides approximately 30% of the district's water supply. The San Dieguito WD and the Santa Fe Irrigation District (ID) jointly own and operate the R.E. Badger Water Filtration Plant, where water from Lake Hodges and raw water purchased from CWA is treated.

Services: San Dieguito WD is authorized to provide potable water treatment and distribution service within the approximate western-half of the City of Encinitas. In 2000, the San Dieguito WD began distributing reclaimed/recycled wastewater from the San Elijo Water Pollution Control Facility to landscape irrigation customers within approximately half of the District's service area.

Governance: Subsidiary district to City of Encinitas. Encinitas City Council presides as District Board of Directors

District Area: 9.16 sq. miles / 5,854 acres

Population: 35,948 (2010 SANDAG Special District Population Estimates)

Financial: Annual District adopted budget (FY 2011-12 and FY 2012-13):

Operating budget	$13,188,526
Capital budget:	$1,815,000

Financial audits frequency: *Annually*

Financing capital replacement method:

Capital Replacement Reserves

Agency revenue:

Revenue from charges/fees:	$13,454,076
Revenue from property taxes	$720,000
Total Agency revenue	**$15,906,000**

Debt Service: 1999 San Dieguito WD note to Badger Financing Authority; 2007 SDWD Note to Badger Financing Authority; 2004 Water Revenue Refunding Bond.

Bond rating: Standard and Poors "AA+" for 2010

Current Planning Documents: 2010 Urban Water Management Plan, 2010 Water System Master Plan, 2012 SDWD-SFID Joint Facilities Master

Plan, Capital Improvement/Work Project Program and Financial Plan (FY 2011-12 to FY 2016-17).

District Sphere of Influence: LAFCO approved a sphere-of-influence for the San Dieguito WD in 1984 that was smaller than the district boundary. The approved sphere remained the same after the incorporation of the City of Encinitas and was affirmed by LAFCO in 2005 and 2007.

Special Study Areas: None

Status of current sphere: No sphere or jurisdictional changes have occurred since the 2007 affirmation of the smaller-than-district sphere and no new information that would warrant a sphere change has been presented. District responses to the *2012 Sphere of Influence and Service Review* indicate that no proposals for a sphere change or jurisdictional change are anticipated.

RECOMMENDATION: It is recommended that the existing smaller-than-district sphere for the San Dieguito WD be affirmed.

7. Santa Fe Irrigation District (MSR13-26; SR13-26)

Abstract: Santa Fe Irrigation District (ID) was formed in 1923 by the property owners in the area east of Carlsbad and south of the City of Escondido. Santa Fe ID provides potable water service for agricultural, commercial and residential water customers; and recycled water for landscape irrigation of common areas, golf courses, schools, parks, businesses and Caltrans.

Services: Santa Fe ID is authorized to provide potable water service to an approximately 16 square mile area within the City of Solana Beach and unincorporated communities of Rancho Santa Fe and Fairbanks Ranch. The ID relies upon imported water from the San Diego County Water Authority (CWA) to meet approximately 70% of its water demand; the remainder is supplied by local surface water stored in City of San Diego-owned Lake Hodges.

Water from Lake Hodges and raw water purchased from the San Diego CWA is treated at the jointly-owned and operated R.E. Badger Water Filtration Plant, which has a capacity of up to 40 million gallons per day (MGD). The Santa Fe ID also provides recycled water service to a portion of its service area with water purchased from the San Elijo Joint Powers Authority.

Due to topography and other factors, the Santa Fe ID's service area is referenced as the Western and Eastern Service Areas. The Eastern Service Area primary includes the unincorporated communities of Rancho Santa Fe and Fairbanks Ranch.

Governance: Elected five-member Board of Directors

District Area: 16.1 square miles/10,332 acres

Population: 18,737 (2010 SANDAG Special District Population Estimates)

Financial: Annual District adopted budget (FY 2012-13):

Operating budget *(does not include salaries, benefits, and administrative expenses)*	$14,055,408
Capital budget	$6,045,080

Financial audits frequency: *Annually*

Financing capital replacement method:
Combination of pay-as-you-go and capital financing (debt)

Agency revenue:

Revenue derived from charges/fees	$20,739,986
Revenue derived from property taxes	$1,800,000
Other revenues	$3,557,034
Total Agency revenue	**$26,097,020**

Debt Service: The District's total debt obligation for FY13 is $1,350,950. The long-term debt obligation of the District is the R.E. Badger Water Facilities Financing Authority 2007 Water Revenue Refunding Bonds that will have an outstanding balance of $9,260,000 as of June 30, 2012. The District's debt service coverage is projected to be 481%, which well exceeds its debt service rate covenant that requires net revenues greater than 115% of the annual debt obligation.

Current Planning Documents: 2010 Urban Water Management Plan; 2009 Asset Management Master Plan, 2007 Integrated Water Resources Plan, 2005 Recycled Water Master Plan; 2011 Eastern Service Area Recycled Water Facilities Plan; 2012 SFID-SDWD Joint Facilities Master Plan.

District Sphere of Influence: LAFCO approved a sphere-of-influence for the Santa Fe ID in 1984 that was smaller than the district boundary. The approved sphere was affirmed by LAFCO in 2007.

Special Study Areas: None

Status of current sphere: No sphere or jurisdictional changes have occurred since the 2007 affirmation of the smaller-than-district sphere and no new information that would warrant a sphere change has been presented. District responses to the *2012 Sphere of Influence and Service Review* indicate that no proposals for a sphere change or jurisdictional change are anticipated.

RECOMMENDATION: It is recommended that the existing smaller-than-district sphere for the Santa Fe ID be affirmed.

8. Whispering Palms Community Services District (MSR13-27; SR13-27)

Abstract: Whispering Palms Community Services District (CSD) was formed in 1987 from a reorganization that involved: (1) dissolution of the Whispering Palms Sanitation District and County Service Area (CSA) No. 1 (Whispering Palms); and (2) formation of the Whispering Palms CSD as the successor agency.

Services: Whispering Palms CSD is authorized to provide wastewater treatment and roadside landscape, street sign, and lighting maintenance services within approximately 3.5 square miles of the Rancho Santa Fe area, including the unincorporated communities of Whispering Palms, San Diegueno Hills, Santa Fe Sur, Rancho Diegueno, Rancho Santa Fe Farms and Del Mar Country Club.

Whispering Palms CSD operates the Whispering Palms Water Reclamation Facility, which treats an average wastewater flow of 0.290 MGD, with a maximum rated capacity of 0.400 MGD.

Governance: Elected five-member Board of Directors

District Area: 3.35 sq. miles / 2,144.80 acres

Population: 2,629 (2010 SANDAG Special District Population Estimates)

Financial: Annual District adopted budget (FY 2012-13):

Operating budget (sewer)	$471,900
Capital budget (sewer)	$110,000
Operating budget (landscaping)	$105,500
Capital budget (landscaping)	$108,000

Financial audits frequency: *Annually*

Financing capital replacement method:

Sewer service charges

Agency revenue:

Wastewater	
Revenue from sewer charges/fees	$407,500
Revenue from property tax allocation	$39,000
Other sewer revenues	$114,000
Landscaping	
Revenue property tax allocation	$216,000
Other landscaping revenues	$2,000
Total Agency revenue	$768,500

Current Planning Documents: Adopted FY 2012-13 Budget, Five-year Capital Improvement Program, Asset Management Plan

District Sphere of Influence: LAFCO approved a sphere-of-influence for the Whispering Palms CSD in 1987 that is larger than the district boundary. The approved sphere was affirmed by LAFCO in 2007.

Special Study Areas: None

Status of current sphere: No sphere or jurisdictional changes have occurred since the 2007 affirmation of the larger-than-district sphere and no new information that would warrant a sphere change has been presented. District responses to the *2012 Sphere of Influence and Service Review* indicate that no proposals for a sphere change or jurisdictional change are anticipated.

RECOMMENDATION: It is recommended that the existing larger-than-district sphere for the Whispering Palms CSD be affirmed.

MUNICIPAL SERVICE

Water Service

Definition of function/service

Water: Wholesale, Retail, Replenishment, Injection

Water service to the San Dieguito MSR study area is primarily provided by four San Diego County Water Authority (CWA) member agencies via imported water supply sources:

- Carlsbad Municipal Water District (MWD) (City of Carlsbad)
- Olivenhain Municipal Water District
- San Dieguito Water District (WD) (City of Encinitas)
- Santa Fe Irrigation District (ID)

Metropolitan Water District of Southern California (MET)

The San Diego CWA is a member agency of the Metropolitan Water District of Southern California (MET). MET is one of the world's largest water agencies and imports almost 60% of the water used by more than 15 million people in urban Southern California, including San Diego County. The San Diego CWA also obtains water via long-term Colorado River water conservation and transfer agreements with agencies in the Coachella Valley and Imperial County.

The Metropolitan Water District of Southern California (MET) was formed in 1928 to develop, store, and provide wholesale distribution of supplemental water in Southern California for domestic and municipal purposes. MET is a consortium of 26 cities and water agencies, including the San Diego County Water Authority, and covers an area which includes all, or portions, of Ventura, Los Angeles, Orange, Riverside, San Bernardino, and San Diego Counties. MET serves as a water wholesaler, and provides water to its member agencies from the Colorado River via the Colorado River Aqueduct, which it owns and operates, and from northern California via the State Water Project.

San Diego County Water Authority (CWA)

The San Diego County Water Authority (CWA) is one of MET's 26 member agencies. The San Diego CWA was formed in 1944 by the California Legislature to provide a supplemental supply of water as the San Diego region's civilian and military populations expanded to meet wartime activity needs. The CWA annexed to MET in 1946 and is now represented on the MWD Board by four directors. The San Diego CWA purchased approximately 25% of MET's total delivered water in fiscal year 2007, making CWA the largest member agency.

The CWA purchases water from MET and other sources for resale to its 24 member agencies, and supplies between 75 to 95% of the water needs of its service area. The CWA delivers treated and raw water into San Diego County through five large diameter pipelines, located in two principal corridors known as the 1st and 2nd San Diego Aqueducts. The aqueduct pipelines are connected to treated and raw water feeds from MET facilities at Lake Skinner in southern Riverside County.

Regulatory framework

Municipal drinking water is regulated by the United States Environmental Protection Agency (EPA) under the Safe Drinking Water Act, originally passed by the United States Congress in 1974 and amended and reauthorized in 1986 and 1996.

In California, the federal regulations are administered by the California Department of Public Health (CDPH), Drinking Water Branch, which is a Primacy Agency under the SDWA. Regulations administered by the CDPH are contained in Title 17 and Title 22 of the California Code of Regulations. Title 17 regulates backflow preventers. Title 22 regulates all other aspects of drinking water supplies, and is the primary compilation of regulations applying to water systems. Chapter 16 of Title 22 consists of the California Waterworks Standards, which describe minimum requirements for design and operation of drinking water distribution systems.

Urban Water Management Planning Act

The Urban Water Management Planning Act (UWMP Act) (California Water Code Division 6, Part 2.6, Sections 10610 through 10657) requires every urban water supplier that provides water for municipal purposes to more than 3,000 connections or supplying more than 3,000 acre-feet of water annually to adopt and submit a Urban Water Management Plan (UWMP) every five years to the California Department of Water Resources (DWR). The UWMP Act describes the required contents of the Urban Water Management Plan as well as how urban water suppliers should adopt the plan.

The UWMP Act states that the subject urban water suppliers should make every effort to assure the appropriate level of reliability in its water service is sufficient to meet the needs of its various categories of customers during normal, dry, and multiple dry years. The intent of an UWMP is to present important information on water supply, water usage, recycled water and water use efficiency programs in a respective water district's service area over a 25 year timeframe.

The UWMP Act was most recently amended in November 2009 with the adoption of Senate Bill x7-7 (SB x7-7), the Water Conservation Bill of 2009. This bill enacted new requirements for UWMPs prepared by urban retail water suppliers, which were applied beginning with the 2010 UWMPs. The overall goal of this legislation is to reduce per capita urban water use by 20% by the year 2020 (also referred to as "20x2020").

In accordance with SB x7-7, urban retail water suppliers must first determine a baseline daily per capita water use to develop the 2020 water use targets. As explained by DWR Guidelines and the DWR Methodologies, the baseline details the amount of water used within the urban water supplier's distribution service area on a per capita basis, using water use and population estimates from two defined baseline periods.

The two baseline periods used for calculation of the base daily per capita water use are:

- Ten-to-15 year continuous base period – "The urban retail water supplier's estimate of its average gross water use, reported in gallons per capita per day and calculated over

a continuous 10-year period ending no earlier than December 31, 2004, and no later than December 31, 2010.

For an urban retail water supplier that meets at least 10% of its 2008 measured retail water demand through recycled water that is delivered within the service area of an urban retail water supplier or its urban wholesale water supplier, the urban retail water supplier may extend the calculation described in paragraph 1 up to an additional five years to a maximum of a continuous 15-year period ending no earlier than December 31, 2004, and no later than December 31, 2010" (Water Code section 10608.12 (1-2)).

- Five-year continuous base period – "For the purposes of Section 10608.22, the urban retail water supplier's estimate of its average gross water use, reported in gallons per capita per day and calculated over a continuous five-year period ending no earlier than December 1, 2007, and no later than December 31, 2010" (Water Code section 10608.12(3).

Integrated Regional Water Management Plan

In addition to the CWA's 2004 Regional Water Facilities Master Plan, the San Diego CWA, County of San Diego and City of San Diego collaboratively maintain an Integrated Regional Water Management Plan (IRWMP) for the San Diego region. The 2007 San Diego IRWMP includes a description of the region and participants, regional objectives and priorities, water management strategies, implementation, impacts and benefits, data management, financing, stakeholder involvement, relationship to local planning, and State and federal coordination.

- **Carlsbad Municipal Water District**

Carlsbad MWD is authorized to provide potable water services to approximately 85% of the City of Carlsbad. The MWD purchases 100% of its potable water as treated water from the San Diego County Water Authority (CWA). The imported water is purchased by CWA from the Metropolitan Water District of Southern California (MET) and is treated at MET's Skinner Filtration Plant in Riverside County and CWA's Twin Oaks Water Treatment Plant in San Marcos, and is conveyed to Carlsbad MWD through four connections to the CWA aqueducts.

Carlsbad MWD service area totals approximately 20,682 acres, or 32 square miles. The Carlsbad MWD's 2012 Water Master Plan states that the MWD's 2007 total adjusted average day demands was 21,400 acre-feet per year (AF) or 19.1 MGD. Single-family and multi-family residential uses consume approximately 56% of the MWD's water deliveries. Almost 20% of the water provided within Carlsbad MWD service area is for irrigation uses. Commercial uses (including retail, office and industrial land uses) comprise approximately 15% of the MWD's total demand.

<u>Service planning documents</u>

2010 Urban Water Management Plan

This 2010 Urban Water Management Plan (UWMP) addresses the Carlsbad Municipal Water District (CMWD) and includes descriptions of the water supply sources including recycled

water, groundwater, surface water, water conservation activities, and projected water demands. The Plan presents a comparison of projected water supplies to water demands during normal, single-dry, and multiple-dry years.

2012 Water Master Plan Update

The Carlsbad MWD Water Master Plan Update documents the existing water system facilities and demands, and identifies required improvements for build-out of the District's service area, which is anticipated to occur by 2020.

Connections/EDUs

Carlsbad MWD 2010 UWMP reports the district currently supplies a total of 15,076 acre-feet per year of potable water to a total of 27,479 metered water connections. The metered connections are comprised of: single-family residences (23,080), multi-family residences (1,016), commercial/industrial (2,363), institutional/government (73), landscape irrigation (909), and agricultural (38) accounts.

The total water volume delivered to the metered accounts, in acre-feet per year (AF), are as follows: single-family residences (7,965 AF), multi-family residences (1,769 AF), commercial/industrial (2,868 AF), institutional/government (122 AF), landscape irrigation (1,932 AF), and agricultural (420 AF).

Facilities/Distribution

Carlsbad MWD provides potable water service through 450 miles of active water mains ranging in size from 4-inch to 42-inch in diameter, 57 pressure regulating stations, five pump stations, ten storage tanks, and one reservoir. Carlsbad MWD imports CWA water through four separate treated water turnouts. Two of the turnouts, Connections No. 1 and No. 2, are direct connections to the CWA Second Aqueduct. Connection No. 1 supplies only the Carlsbad MWD; Connection No. 2 also supplies the Vallecitos Water District (WD) and the Olivenhain Municipal Water District (MWD). Water supply to the Carlsbad MWD from CWA Connection No. 2 is delivered through a Vallecitos WD transmission main. Connections No. 3 and No. 4 to the aqueduct system are on the CWA owned and operated Tri-Agency Pipeline (TAP), which is also supplied from the Second Aqueduct. The TAP also serves the City of Oceanside and the Vista Irrigation District (ID).

Carlsbad MWD operates and maintains one active pump station and four standby pump stations within the distribution system that are only used during emergencies to supply water to higher zones during a CWA shutdown or other outage. The Carlsbad MWD water supply from the four CWA aqueduct connections can be routed to different parts of the distribution system, which allows system operators to balance reservoir levels and correct for any differences in the amount of water ordered versus the amount that is delivered through the service connections.

The total operational storage for Carlsbad MWD is 245.5 million gallons (MG). Water storage for the Carlsbad MWD is provided by the Maerkle Reservoir and 10 additional reservoirs within the distribution system. Maerkle Reservoir is the primary treated water storage facility

for the Carlsbad MWD, with a capacity of approximately 600 acre-feet (195 MG). The reservoir is used to meet the City of Carlsbad's Growth Management Plan requirement to provide a minimum of ten days of emergency drinking water storage. Under normal operations, water is supplied to Maerkle Reservoir from the CWA TAP No. 3 connection and is then pumped into the adjacent Maerkle Tank. From Maerkle Tank water is supplied by gravity to the distribution system. Carlsbad MWD has the ability to pump water and feed the higher zones from Maerkle Reservoir, via the upgraded Maerkle flow control facility, in the event of a CWA shutdown.

Anticipated Build-Out/Capacity

Carlsbad MWD's 2010 Urban Water Master Plan (UWMP) reports that the MWD had 27,479 metered water accounts with a water demand of 13.45 MGD. The 2010 service area population of the Carlsbad MWD is approximately 84,838 with total water deliveries of 15,076 acre-feet per year. Future service area population projections anticipate a 2020 population of 94,101, and a 2035 population of 101,402.

The 2010 Urban Water Management Plan (UWMP) projects a total of 20,259 AF per year in potable water deliveries in 2020, and 22,122 AF delivered in 2035. The 2012 Water Master Plan projects a total 2020 water demand of 21,600 AF, or 19.3 MGD. The ultimate water demand used for the Carlsbad MWD 2012 Water Master Plan is based on buildout at 2035. The 2012 Water Master Plan projects 2035 water demand for the Carlsbad MWD service area as 23,300 AF or 20.8 MGD. The MWD's total connection capacity to the CWA aqueduct system exceeds its average day demands (ADD) and maximum delivery rates.

2020 Per Capita Water Use Target

Senate Bill x7-7 (SB x7-7), the Water Conservation Bill of 2009, enacted new requirements for UWMPs prepared by urban retail water suppliers, which are to be applied beginning with the 2010 UWMPs. The overall goal of the legislation was to reduce per capita urban water use by 20% by the year 2020 (also referred to as "20x2020").

In accordance with SB x7-7, urban retail water suppliers must first determine a baseline daily per capita water use that details the amount of water used within the urban water supplier's distribution service area on a per capita basis, using water use and population estimates from two defined baseline periods: a 10-year continuous base period, and a five-year continuous base period. An urban retail water supplier that meets at least 10% of its 2008 measured retail water demand through recycled water (that is delivered within the service area of an urban retail water supplier or its urban wholesale water supplier) may extend the calculation up to an additional five years to a maximum of a continuous 15-year period.

10-Year Baseline

Because Carlsbad MWD's recycled water use is greater than 10% of its 2008 retail water delivery, the MWD has used a 15-year baseline to develop its per capita water use targets. This baseline was established based on the period of 1990–2004, which resulted in a base daily per capita water use of 256.6 gallons per capita per day (gpcd).

5-Year Baseline

Carlsbad MWD further calculated water use for a five-year baseline period, and used that value to determine a minimum required reduction in water use by 2020. The five-year baseline was established based on the period of 2003–2007, which includes a base daily per capita water use of 246.9 gpcd. This results in a minimum threshold of 234.5 gpcd (95% of 246.9 gpcd).

2020 Water Use Target

After establishing its baseline water use, the Carlsbad MWD set an urban water use target that demonstrates planned daily per capita water use within the service area, taking into account existing and planned water conservation and recycled water practices. DWR has established four technical methodologies that may be used to support a water supplier in determining its urban water use targets.

Carlsbad MWD has selected Method 4 for establishing the 2020 per capita water use target. *Method 4 is a provisional method that was developed by DWR where the target is based on indoor residential, CII (commercial, industrial, and institutional), outdoor, and water loss components*. Using the Provisional Method 4 Target Calculator provided by DWR, with a CII water use in 1997 of 3,241 AF, gives a 2020 target of ***207.1 gpcd***.

Carlsbad MWD's 2010 UWMP estimates that per capita water use in 2010 (180 gpcd) was already below the 2020 target (207.1 gpcd). The MWD's approach to meeting the 2020 per capita water use target has several elements consisting of increased saturation into the customer base of low flow plumbing devices and fixtures, continued implementation of demand management measures, the water use reductions that occur with the increased costs of water, and the increased use of recycled water.

<u>Planning for Areas Outside of Sphere</u>

Carlsbad MWD water service area covers approximately 85% 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 (MWD). The Vallecitos Water District (WD) provides service to the Meadowlark area along the eastern City limit. The Carlsbad MWD water service area is bounded by the City of Oceanside and Vista Irrigation District (ID) to the north, Vallecitos WD to the east, and Olivenhain MWD and San Dieguito WD to the south.

Carlsbad MWD has stated that the district's current water supply and contractual/physical capacity is adequate to serve the territory both within the district's service area and within the existing coterminous sphere. The Carlsbad MWD sphere is bordered by existing special districts and incorporated cities; therefore, the MWD is not actively planning for service provision outside of its sphere.

Cooperative Agreements/Regional Coordination

Carlsbad MWD participates in the San Diego Integrated Regional Water Management Plan, which is intended to integrate local water resources planning across jurisdictional boundaries.

Carlsbad MWD is also participating with eight local agencies to develop a regional recycled water supply and distribution system referred to as the "North San Diego County Regional Recycled Water Project". This regional recycled water supply project could potentially supply a demand of 16,554 AF. The member agencies are coordinating efforts to obtain funding opportunities for the regional project, which would include Phase III of Carlsbad MWD's recycled water master plan.

- **Olivenhain Municipal Water District**

Olivenhain MWD is authorized to provide water service to the unincorporated areas of Olivenhain Valley, Fairbanks Ranch, Mt. Israel, Elfin Forest, Rancho Santa Fe, 4S Ranch Specific Plan Area, Whispering Palms, and portions of the cities of Carlsbad, Encinitas, San Diego, San Marcos, and Solana Beach.

Olivenhain MWD's service area totals approximately 30,542 acres (over 48 square miles) (2010). All customers in the MWD's service area are metered. Olivenhain MWD imports 100% of its water supply from the San Diego CWA. Olivenhain MWD provides 86% of its water service to residential, industrial or commercial land uses and 14% of its service to agricultural land uses. The average daily consumption for the MWD is 41.1 million gallons per day (MGD).

Service Planning Documents

2010 Urban Water Management Plan

This 2010 Urban Water Management Plan (UWMP) addresses the Olivenhain MWD and includes descriptions of the water supply sources including recycled water, groundwater, surface water, water conservation activities, and projected water demands. The UWMP presents a comparison of projected water supplies to water demands during normal, single-dry, and multiple-dry years.

2010 Comprehensive Potable and Recycled Water Master Plan

Olivenhain MWD completed a 2010 Comprehensive Potable and Recycled Water Master Plan which was adopted by its Board of Directors on March 23, 2011.

Connections/EDUs

For 2010, the Olivenhain MWD reports that it supplies a total of 21,158 acre-feet per year (AF) of potable and recycled water to a total of 21,975 metered water connections. The metered connections are comprised of: single-family residences (19,990), multi-family residences (470), commercial (443), institutional/government (90), landscape irrigation (577), and agricultural (155) accounts.

The total water volume, in acre-feet per year, delivered to the metered accounts are as follows: single-family residences (13,391 AF), multi-family residences (689 AF), commercial/industrial (899 AF), institutional/government (241 AF), landscape irrigation (2,518 AF), and agricultural (922 AF). The MWD also delivers a total of 2,498 af/y of recycled water to 250 metered accounts. *(2010 UWMP)*

For FY 2012-2013, purchased potable water is estimated to be approximately 18,680 acre-feet based on the FY 2011-2012 revised budget and a 5.0% historical average of unaccounted water loss. In Fiscal Year 2012-2013, Olivenhain MWD is projected to buy 12,702 acre-feet of untreated water (68% of total potable water purchases) and 5,977 acre-feet of treated water from CWA.

Facilities/Distribution

The Olivenhain MWD operates approximately 425 miles of pipeline, 17 closed storage reservoirs, four pump stations, the Olivenhain Reservoir (24,789 AF capacity), and the Roger Miller Reservoir. Additional Olivenhain MWD facilities include the David C. McCollom Water Treatment Plant (DCMWTP) and two hydroelectric plants.

The 34 million gallons per day (MGD) membrane DCMWTP came on line April 2002, initially capable of treating 25 MGD. It was expanded by 9 MGD in 2004-05 to its present capacity. The DCMWTP was the largest of its kind in the world upon its completion and incorporates the latest membrane ultrafiltration technology.

The CWA is constructing a pipeline, pump station, and hydrogeneration station from the City of San Diego-owned Lake Hodges to Olivenhain Reservoir in order to capture local runoff during the winter season and generate electricity during peak periods in the summer. To resolve the issue of introducing lesser-quality water from Lake Hodges to Olivenhain Reservoir, Olivenhain MWD is constructing a 17,000-foot, 48-inch diameter raw water pipeline from CWA's Second San Diego Aqueduct to the DCMWTP. The DCMWTP will utilize this pipeline instead of receiving water directly from the Olivenhain Reservoir thereby avoiding water quality issues resulting from the introduction of lower-quality runoff water or water from Lake Hodges to the Olivenhain Reservoir.

Anticipated Build-Out/Capacity

The 2010 service area population of the Olivenhain MWD is approximately 84,838 with total water deliveries of 15,076 acre-feet per year. The MWD reports its treatment capacity as 2.0 MGD or 7,500 EDUs, with an average flow volume of 0.80 MGD or 3,000 EDUs. The MWD reports a peak within the past year of 1.10 MGD or 4,100 EDUs. The district states that it current and planned capacity able to accommodate all projects that have received commitments for wastewater service.

Future service area population projections anticipate a 2020 population of 94,101, and a 2035 population of 101,402. In 2020, the Olivenhain MWD 2010 Urban Water Management Plan (UWMP) projects a total of 26,248 AF per year in water deliveries to 23,335 metered

accounts. The projected 2020 water deliveries include 4,100 AF in recycled water to 300 metered accounts.

2020 Per Capita Water Use Target

Senate Bill x7-7 (SB x7-7), the Water Conservation Bill of 2009, enacted new requirements for UWMPs prepared by urban retail water suppliers, which are to be applied beginning with the 2010 UWMPs. The overall goal of the legislation was to reduce per capita urban water use by 20% by the year 2020 (also referred to as “20x2020”).

In accordance with SB x7-7, urban retail water suppliers must first determine a baseline daily per capita water use that details the amount of water used within the urban water supplier’s distribution service area on a per capita basis, using water use and population estimates from two defined baseline periods: a 10-year continuous base period, and a five-year continuous base period. An urban retail water supplier that meets at least 10% of its 2008 measured retail water demand through recycled water that is delivered within the service area of an urban retail water supplier or its urban wholesale water supplier, the subject urban retail water supplier may extend the calculation up to an additional five years to a maximum of a continuous 15-year period.

10-Year Baseline

This is a 10-year (or 15-year) continuous period used to calculate baseline per capita water use. Because Olivenhain MWD’s recycled water use totaled less than 10% of total deliveries in 2008, the District has used a 10-year baseline instead of a 15-year baseline to develop its per capita water use targets. This baseline was established based on the period of 1999-2008, which resulted in a base daily per capita water use of 354 gallons per capita per day (gpcd).

5-Year Baseline

This is a continuous five-year period used to determine whether the 2020 per capita water use target meets the legislation’s minimum water use reduction requirements of at least a 5% reduction per capita water use. The Olivenhain MWD calculated water use for a five-year baseline period, and used that value to determine a minimum required reduction in water use by 2020. The five-year baseline was established based on the period of 2004–2008, which includes a base daily per capita water use of 354 gpcd. This results in a minimum threshold of 336.3 gpcd (95% of 354 gpcd).

2020 Water Use Target

After establishing its baseline water use, the Olivenhain MWD set an urban water use target that demonstrates planned daily per capita water use within the service area, taking into account existing and planned water conservation and recycled water practices.

DWR has established four technical methodologies that may be used to support a water supplier in determining its urban water use targets. The Olivenhain MWD has selected *Method 1: 80% of Base Daily Per Capita Water Use* as its means to determine a 2020 water

use target. This method is defined within CWC§10608.20(b)(1) and is calculated as 80% of the water supplier's baseline per capita water use.

Using Method 1, the Olivenhain MWD has established a 2020 water use target of 283 gpcd, which is 80% of the base daily per capita water use of 354 gpcd. The District confirmed this target by comparing it against the minimum threshold of 336.3 gpcd (95% of 354 gpcd) determined by the five-year baseline. Because the Method 1 target is more restrictive than the minimum threshold, the ***283 gpcd*** water use target will be used.

Planning for Areas Outside of Sphere

The Olivenhain MWD has stated that the district's current water supply and contractual/physical capacity is adequate to serve the territory both within the district's service area and within the existing larger-than-district sphere. The Olivenhain MWD sphere is bordered by existing special districts and incorporated cities; therefore, the MWD is not actively planning for service provision outside of its sphere.

Cooperative Agreements/Regional Coordination

Olivenhain MWD, Vallecitos Water District, San Dieguito Water District, and Rincon del Diablo Municipal Water District have formed a regional alliance pursuant to CWC §10608.28(a), the DWR Guidebook, and the DWR Methodologies to cooperatively determine and report progress toward achieving their water use targets on a regional basis. All of these members are recipients of water from a common wholesale water supplier (San Diego CWA), and all of the members are located within the South Coast Hydrologic Region as depicted in the California Water Plan.

Olivenhain MWD is a member agency of the North San Diego County Regional Recycled Water Project, which is a cooperative with seven other agencies to study greater interconnection and development of northern San Diego County's recycled water infrastructure.

- **San Dieguito Water District**

San Dieguito Water District (District) was formed in 1922 by a local developer to obtain water for about 1,000 acres of land in the town of Leucadia. Arrangements were later made to purchase water from the Santa Fe Land Company at Lake Hodges to accommodate the towns of Encinitas and Cardiff-by-the-Sea as well as Leucadia. Although the San Dieguito WD was originally established to provide irrigation water to surrounding farms, ranches and fruit groves, the area has developed over time into a suburban residential community. The San Dieguito WD now delivers the majority of its water to residential and commercial customers.

San Dieguito WD joined the San Diego County Water Authority (CWA) in 1948 to acquire the right to purchase and distribute imported water throughout its service area. The San Diego CWA purchases the water from the Metropolitan Water District of Southern California (MET).

As part of the 1986 incorporation of the City of Encinitas, the San Dieguito WD became a subsidiary district of the City. The five City Council members also serve as the Board of Directors of the District. The San Dieguito WD service area includes over 5,000 acres and serves a population of approximately 35,948 (2010).

San Dieguito WD receives local runoff water from Lake Hodges and imported raw water from the CWA. Both sources are treated at the R.E. Badger Filtration Plant which is jointly owned with the Santa Fe Irrigation District (SFID). Treated water from the CWA can also be delivered directly to the district. The district receives recycled water from San Elijo Joint Powers Authority (SEJPA).

Service Planning Documents

2010 Urban Water Management Plan

This 2010 Urban Water Management Plan (UWMP) addresses the San Dieguito WD and includes descriptions of the water supply sources including recycled water, groundwater, surface water, water conservation activities, and projected water demands. The UWMP presents a comparison of projected water supplies to water demands during normal, single-dry, and multiple-dry years.

2010 Water Master Plan

The San Dieguito WD Water Master Plan documents the existing water system facilities and demands, and identifies required capital improvements.

2012 San Dieguito WD-Santa Fe ID Joint Facilities Plan

The Joint Facilities Plan Update documents the existing R.E. Badger Filtration Plant facilities and demands, and identifies required capital improvements.

Connections/EDUs

The San Dieguito WD currently supplies a total of 5,436 acre-feet per year (AF) of potable water to a total of 11,407 metered water connections (2010). The metered connections are comprised of: single-family residences (8,692), multi-family residences (1,742), commercial (527), institutional/government (111), landscape irrigation (228), and agricultural (107) accounts.

The total water volume, in acre-feet per year (AF) delivered to the metered accounts are as follows: single-family residences (3,157 AF), multi-family residences (1,178 AF), commercial (491 AF), institutional/government (109 AF), landscape irrigation (306 AF), and agricultural (195 AF). *(2010 UWMP)*

Facilities/Distribution

The San Dieguito WD obtains surface water from Lake Hodges and imports treated and untreated water from the San Diego CWA. Lake Hodges is owned and operated by the City of San Diego. Through the 1966 agreement with the City of San Diego (San Diego), the district and the Santa Fe Irrigation District (ID) were able to purchase an average of 7,500 AF

of raw water per year from San Diego at much less than the cost of imported water. In 1998, the agreement changed the amount of local water that could be purchased. The amount available was reduced to 5,700 AF of raw water after the completion of the Lake Hodges to Olivenhain Pipeline, because Lake Hodges became part of the San Diego CWA Emergency Storage Project. A new agreement has been negotiated to allow the District 33% of Lake Hodges yield, or approximately 2,432 AF.

The San Dieguito WD also receives untreated water for the San Diego CWA's second aqueduct. The CWA purchases water from MET. The imported MET water comes from two sources—the Colorado River and Northern California via the State Water Project. The San Dieguito WD jointly owns, with the Santa Fe ID, the 40 million gallon per day (MGD) R.E. Badger Filtration Plant, the 1,100 acre-foot raw water San Dieguito Reservoir, and a covered treated water reservoir with a capacity of 13 million gallons (MG).

The San Dieguito WD has one-third ownership in a 3.0 MG treated water storage reservoir (Olivenhain MWD owns the remaining two-thirds). The WD is the sole owner of two underground treated water reservoirs located within its service area that have respective capacities of 7.5 MG and 2.5 MG gallons.

Anticipated Build-Out/Capacity

The San Dieguito WD 2010 Urban Water Management Plan (UWMP) describes the service area population for San Dieguito WD as approximately 35,948 in 2010. The UWMP states that the district's 2010 total water deliveries were 5,436 AF per year to a total of 11,407 metered accounts. In 2020, the UWMP anticipates a service area population of 41,870, and projects a total of 7,005 AF per year in water deliveries to 11,498 metered accounts.

The San Dieguito WD reports its projected demand within the next five years as 6,500 AF. The district states that, although the current water supply is adequate to meet future and current demands, the WD will continue to explore opportunities for expansion of the recycled water system and water conservation programs.

2020 Per Capita Water Use Target

Senate Bill x7-7 (SB x7-7), the Water Conservation Bill of 2009, enacted new requirements for UWMPs prepared by urban retail water suppliers, which are to be applied beginning with the 2010 UWMPs. The overall goal of the legislation was to reduce per capita urban water use by 20% by the year 2020 (also referred to as "20x2020").

In accordance with SB x7-7, urban retail water suppliers must first determine a baseline daily per capita water use that details the amount of water used within the urban water supplier's distribution service area on a per capita basis, using water use and population estimates from two defined baseline periods: a 10-year continuous base period, and a five-year continuous base period. An urban retail water supplier that meets at least 10% of its 2008 measured retail water demand through recycled water that is delivered within the service area of an urban retail water supplier or its urban wholesale water supplier, the subject urban retail

water supplier may extend the calculation up to an additional five years to a maximum of a continuous 15-year period.

10-Year Baseline

Because San Dieguito WD's recycled water use totaled less than 10% of total deliveries in 2008, the District has used a 10-year baseline to develop its per capita water use targets. This baseline was established based on the period of 1995–2004, which resulted in a base daily per capita water use of 199 gallons per capita per day (gpcd).

5-Year Baseline

The San Dieguito WD further calculated water use for a five-year baseline period, and used that value to determine a minimum required reduction in water use by 2020. The five-year baseline was established based on the period of 2003–2007, which includes a base daily per capita water use of 181 gpcd. This results in a minimum threshold of 172 gpcd (95% of 181 gpcd).

2020 Water Use Target

After establishing its baseline water use, the San Dieguito WD set an urban water use target that demonstrates planned daily per capita water use within the service area, taking into account existing and planned water conservation and recycled water practices.

DWR has established four technical methodologies that may be used to support a water supplier in determining its urban water use targets. The San Dieguito WD has selected *Method 1: 80% of Base Daily Per Capita Water Use* as its means to determine a 2020 water use target. This method is defined within CWC§10608.20(b)(1) and is calculated as 80% of the water supplier's baseline per capita water use.

Using Method 1, the San Dieguito WD has established a 2020 water use target of 160 gpcd, which is 80% of the base daily per capita water use of 199 gpcd. The District confirmed this target by comparing it against the minimum threshold of 172 gpcd (95% of 181 gpcd) determined by the 5-year baseline. Because the Method 1 target is less restrictive than the minimum threshold, the **160 gpcd** water use target will be used.

San Dieguito WD estimates that projected demands will be in compliance with their SB x7-7 targets. The 2010 UWMP states that, given projected potable water demands and SANDAG population forecasts, per capita water use is expected to remain below the target 160 gpcd.

<u>Planning for Areas Outside of Sphere</u>

The San Dieguito WD has stated that the district's current water supply and contractual/physical capacity is adequate to serve the territory both within the district's service area and within the existing smaller-than-district sphere. The San Dieguito WD is approximately 86% built-out; therefore projected growth is expected to be low. The San Dieguito WD's existing smaller-than-district sphere is bordered on the north by the Carlsbad Municipal Water District, on the east by the Olivenhain Municipal Water District and on the

south by the Santa Fe Irrigation District; therefore, the WD is not actively planning for service provision outside of its sphere.

Cooperative Agreements/Regional Coordination

The San Dieguito WD has an interconnection to Olivenhain Municipal Water District's water distribution systems that can be utilized in an emergency. The San Dieguito WD does not regularly transfer water to other agencies.

The San Diego CWA Board of Directors has approved a Seawater Desalination Action Plan that is focusing on developing a 50-MGD seawater desalination plant facility at the Encina Power Station in the City of Carlsbad. The San Dieguito WD does not plan to directly utilize the desalinated water supply.

San Dieguito WD, along with Vallecitos Water District, Olivenhain Municipal Water District, and Rincon del Diablo Municipal Water District have formed a regional alliance pursuant to CWC 5 10608.28(a), the DWR Guidebook, and the DWR Methodologies to cooperatively determine and report progress toward achieving their water use targets on a regional basis. All of these members are recipients of water from a common wholesale water supplier (CWA), and all of the members are located within the South Coast Hydrologic Region as depicted in the California Water Plan.

- **Santa Fe Irrigation District**

Santa Fe Irrigation District (ID) was formed January 26, 1923 under the California Irrigation District Act to deliver water to the City of Solana Beach and unincorporated San Diego County communities of Rancho Santa Fe and Fairbanks Ranch.

Santa Fe ID's 16-square mile service area is supplied by three water sources: imported raw and treated water, local surface water, and recycled water. The ID is authorized to provide potable water service for agricultural, commercial and residential water customers; and recycled water for landscape irrigation of common areas, golf courses, schools, parks, businesses and Caltrans. Santa Fe ID relies upon imported water from the San Diego County Water Authority (CWA) to meet approximately 70% of its water demand.

The Santa Fe ID and the San Dieguito Water District (WD) jointly own the 40 million gallons per day (MGD) R.E. Badger Water Filtration Plant (WFP). The Badger WFP treats local surface water and imported raw water to serve Santa Fe ID and San Dieguito WD potable water supply needs.

The Rancho Santa Fe and Fairbanks Ranch Community Service Districts (CSDs) provide wastewater treatment services to customers within the District's service area. The Rancho Santa Fe CSD comprises 6,490 acres (64%) of the District's service area and Fairbanks Ranch CSD comprises 920 acres (9%). At some time in the future, the CSDs may provide a source of recycled water to the District's service area.

The Santa Fe ID purchases recycled water from the San Elijo Joint Powers Authority (SEJPA) at wholesale rates, for retail sale to District nonpotable customers. SEJPA also provides wastewater treatment service to customers within the District's service area.

Service Planning Documents

2010 Urban Water Management Plan

This 2010 *Urban Water Management Plan* (UWMP) addresses the Santa Fe ID and includes descriptions of the water supply sources including recycled water, groundwater, surface water, water conservation activities, and projected water demands. The UWMP presents a comparison of projected water supplies to water demands during normal, single-dry, and multiple-dry years.

The purpose of the 2010 UWMP is to demonstrate the adequacy and reliability of Santa Fe ID's water supply over the next 25 years in conjunction with regional UWMPs being developed by the San Diego County Water Authority (CWA) and Metropolitan Water District of Southern California (MWD). The UWMP also ensures that details on the reliability of Santa Fe ID's imported water supplies are provided to the San Diego region. California state law requires updates of the UWMP every five years.

2007 Integrated Water Resources Plan

The *Integrated Water Resources Plan* (IWRP) is intended to define supply options to meet future demands cost-effectively while providing benefits consistent with the Santa Fe ID's mission. The IWRP analyzed different supply options that could be utilized as future water supply sources. The analysis looked at the feasibility and cost-effectiveness of each supply source option to meet future projected water demands.

2010 Water Rate Study Report

The 2010 *Water Rate Study Report* is a comprehensive water rate study that includes a three-year operating and capital financing plan. The 2010 report documents the results of the water rate study and includes findings and recommendations to meet the District's pricing objectives.

2009 Asset Management Master Plan

The 2009 *Asset Management Master Plan* identifies a ten-year, $60-million capital improvement program (CIP) for infrastructure replacement and rehabilitation to achieve water delivery performance requirements for both the distribution system and the R.E. Badger Water Filtration Plant.

2012 San Dieguito WD / Santa Fe ID Joint Facilities Plan Update

The *Joint Facilities Plan Update* documents the infrastructure and assets jointly owned by the Santa Fe Irrigation District and the San Dieguito Water District. The plan analyzes the

existing R.E. Badger Filtration Plant facilities and demands, and identifies required capital improvements.

2011 Eastern Service Area Recycled Water Facilities Plan

In 2011, the Santa Fe ID adopted the *Eastern Service Area Recycled Water Facilities Plan* that updated the 2005 *Recycled Water Master Plan* to better define the improvements needed to use recycled water to offset potable water used by customers in the eastern portion of the District's service area.

Connections/EDUs

The 2010 *Urban Water Management Plan* (UWMP) for the Santa Fe ID reports that the district currently supplies a total of 11,208 acre-feet per year (AF) of potable water to a total of 6,484 metered water connections. The metered connections are comprised of: single-family residences (5,454), multi-family residences (464), commercial/industrial (358), institutional/government (34), landscape irrigation (137), and agricultural (21) accounts.

The total water volume delivered to the metered accounts, in acre-feet per year (AF), are as follows: single-family residences (9,076 AF), multi-family residences (713 AF), commercial/industrial (545 AF), institutional/government (90 AF), landscape irrigation (667 AF), and agricultural (89 AF).

For FY 2013, Santa Fe ID's total water purchases are budgeted at 10,925 AF, which includes 6,286 AF of wholesale water purchased from CWA, 4,190 AF of local water, and 450 AF of recycled water. There is a distribution water loss assumption of 2%. The Santa Fe ID also purchases a small portion of treated water from CWA; about 300 AF is budgeted for FY 2013 to accommodate a brief plant shutdown for routine annual maintenance.

Facilities/Distribution

The Santa Fe ID owns and maintains approximately 160 miles of pipeline and the Larrick water storage reservoir with a capacity of 6.0 million gallons (MG). The Santa Fe ID and the San Dieguito Water District (WD) jointly own approximately eight miles of pipelines and transmission mains, two pumping stations, a 1.4 megawatt hydroelectric power plant, a 13.0 MG filtered water reservoir, the 40 MGD R.E. Badger Water Filtration Plant, and the 0.26 MG San Dieguito Reservoir. The Santa Fe ID is the operator and administrator for the joint water facilities.

The Santa Fe ID obtains its potable water supply from two sources: local surface water from Lake Hodges and imported raw and treated water purchased from the Water Authority. Lake Hodges was built in 1918 with the construction of Hodges Dam on San Dieguito Creek. The City of San Diego purchased the dam and reservoir in 1925. The District jointly retains water rights to the surface water in Lake Hodges through an agreement with the City of San Diego. When full, the reservoir has 1,234 surface acres and a water storage capacity of approximately 30,250 acre-feet (AF).

Over the last ten years, the Santa Fe ID has obtained approximately 26% of its water from Lake Hodges. In the near future, the Water Authority is scheduled to begin using Lake

Hodges to store water in conjunction with its Emergency Storage Project (ESP), and the lake will be connected to the Water Authority's aqueduct system. The use of capacity in Lake Hodges for ESP storage is not anticipated to impact the District's ability to collect and store the District's portion of local surface water supply.

Anticipated Build-Out/Capacity

The Santa Fe ID's service area is characterized by low and very-low density urban development, including a large number of 3-acre and larger estate homes. Approximately 87% of the district's water demand is for residential uses. Of the residential acres currently developed, approximately two-thirds are low-density single-family parcels. Many of these low-density residential properties have extensive irrigated landscapes, and the district estimates that 70% of its service area water use is attributable to landscaping.

Santa Fe ID's 2010 Urban Water Management Plan (UWMP) describes the 2010 service area population as approximately 19,386. The UWMP states that the district's 2010 total water deliveries were 11,208 acre-feet per year to a total of 6,484 metered accounts.

In 2020, the UWMP anticipates a service area population of 20,084 and projects a total of 10,638 acre-feet per year in water deliveries to 6,573 metered accounts. Santa Fe ID states that it has current supply and planned capacity able to serve all territory within the service area and sphere.

2020 Per Capita Water Use Target

Senate Bill x7-7 (SB x7-7), the Water Conservation Bill of 2009, enacted new requirements for UWMPs prepared by urban retail water suppliers, which are to be applied beginning with the 2010 UWMPs. The overall goal of the legislation was to reduce per capita urban water use by 20% by the year 2020 (also referred to as "20x2020").

In accordance with SB x7-7, urban retail water suppliers must first determine a baseline daily per capita water use that details the amount of water used within the urban water supplier's distribution service area on a per capita basis, using water use and population estimates from two defined baseline periods: a 10-year continuous base period, and a 5-year continuous base period.

An urban retail water supplier that meets at least 10% of its 2008 measured retail water demand through recycled water that is delivered within the service area of an urban retail water supplier or its urban wholesale water supplier, the subject urban retail water supplier may extend the calculation up to an additional five years to a maximum of a continuous 15-year period.

10-Year Baseline

Because Santa Fe ID's recycled water use totaled less than 4% of total deliveries in 2008, the District has used a 10-year baseline to develop its per capita water use targets. This baseline was established based on the period of 2000–2009, which resulted in a base daily per capita water use of 631 gallons per capita per day (gpcd).

5-Year Baseline

Santa Fe ID further calculated water use for a five-year baseline period, and used that value to determine a minimum required reduction in water use by 2020. The five-year baseline was established based on the period of 2005–2009, which includes a base daily per capita water use of 641 gpcd. This results in a minimum threshold of 609 gpcd (95% of 641 gpcd).

2020 Water Use Target

After establishing its baseline water use, the Santa Fe ID set an urban water use target that demonstrates planned daily per capita water use within the service area, taking into account existing and planned water conservation and recycled water practices.

DWR has established four technical methodologies that may be used to support a water supplier in determining its urban water use targets. Santa Fe ID has selected *Method 1: 80% of Base Daily Per Capita Water Use* as its means to determine a 2020 water use target. This method is defined within CWC§10608.20(b)(1) and is calculated as 80% of the water supplier's baseline per capita water use.

Using Method 1, Santa Fe ID has established a 2020 water use target of **505 gpcd**, which is 80% of the base daily per capita water use of 631 gpcd. The District confirmed this target by comparing it against the minimum threshold of 609 gpcd (95% of 641 gpcd) determined by the five-year baseline. Because the Method 1 target is more restrictive than the minimum threshold, the 505 gpcd water use target will be used.

The Santa Fe ID's 2010 UWMP demand projections are lower than the SB x7-7 targets established in accordance with the DWR Methodologies. The District's *Water Use Reduction Plan*, which describes how these water use targets will be achieved, is included within the 2010 UWMP update.

<u>Planning for Areas Outside of Sphere</u>

The Santa Fe ID has stated that the district's current water supply and contractual/physical capacity is adequate to serve the territory both within the district's service area and within the existing smaller-than-district sphere. The Santa Fe ID service area is relatively built-out; therefore projected growth is expected to be low. The Santa Fe ID's existing smaller-than-district sphere is bordered by the Olivenhain Municipal Water District on the north, east, and south, with the Pacific Ocean to the west; therefore, the ID is not actively planning for service provision outside of its sphere.

<u>Cooperative Agreements/Regional Coordination</u>

The Santa Fe ID and the San Dieguito Water District (WD) share rights to the local water supply from Lake Hodges and jointly own the 40 million gallons per day (MGD) R.E. Badger Water Filtration Plant (WFP). The Badger WFP treats local surface water and imported raw water to serve Santa Fe ID and San Dieguito WD potable water supply needs. Santa Fe ID serves as the administrator/operator of the joint water system facilities, managing local water supplies and operating the filtration plant.

Santa Fe ID continues to plan and work collaboratively with San Dieguito WD and other agencies to optimize the operation of the jointly-owned water system, maximize the usage of local water resources and integrate operations where practical and cost-effective.

Santa Fe ID has multiple emergency interconnection agreements in place with the Cities of San Diego and Del Mar, Olivenhain MWD, and San Dieguito WD. These agreements enable normally closed connections between the various neighboring systems to be opened during emergency conditions.

Santa Fe ID is a member agency of the North San Diego County Regional Recycled Water Project, which is a cooperative of ten local agencies to study greater interconnection and development of northern San Diego County's recycled water infrastructure. This regional recycled water supply project could potentially supply a demand of 16,554 AF. The member agencies are coordinating efforts to obtain funding opportunities for the regional project.

Santa Fe ID participates in the San Diego Integrated Regional Water Management Plan, which is intended to integrate local water resources planning across jurisdictional boundaries.

CONCLUSION

After review of the North County Coastal water agencies, the staff conclusion is that water services are being adequately provided to the Sphere and MSR study area. In the face of reduced revenues, increased costs, and diminishing supplies, the subject water agencies have responded regionally and locally with positive actions to new regulatory requirements. The special district water service providers have adopted and updated master service plans and capital improvement programs to meet present and future service demands and use targets, and to identify infrastructure needs and replacements. The districts have adopted operational and capital budgets, asset management plans, and rate studies to ensure present and future financial accountability and sustainability.

The water agencies have collaborated on the development of alternate water supply options, such as recycled/reclaimed water and desalination, which will reduce the region's dependence on imported water sources. The water agencies have successfully implemented emergency planning measures in response to state-wide drought conditions and the resulting constraints on planned water deliveries. The special districts have also participated in regional infrastructure planning efforts that will provide greater efficiencies in long-range facility and operational planning by local water service providers.

Accordingly, it is recommended that the existing spheres for the subject agencies be affirmed. Additional issues that the Commission should discuss include supporting inter-agency collaboration on increased administrative and operational efficiencies; exploring operational consolidation opportunities such as forming joint powers authorities and other governmental structure options; encouraging local agency coordination on regional and sub-regional infrastructure planning; and, exploring greater efficiencies through shared facilities and infrastructure opportunities.

Wastewater Service

Definition of function/service

Sewer: Collection, Transportation, Treatment, Reclamation, Disposal

Sewer (wastewater) service to the San Dieguito MSR study area is primarily provided by six special districts:

- Carlsbad Municipal Water District (MWD)
- Fairbanks Ranch Community Services District (CSD)
- Leucadia Wastewater District (WWD)
- Olivenhain MWD
- Rancho Santa Fe CSD
- Whispering Palms CSD

Wastewater agencies are generally responsible for providing collection, transmission, and disposal of sewage (wastewater). Wastewater is water containing wastes from residential, commercial, and industrial processes. Municipal wastewater contains sewage, gray water (e.g., water from sinks and showers), and sometimes industrial wastewater. Wastewater requires treatment to remove pollutants prior to discharge.

Regulatory framework

Existing Federal, State and local regulations are intended to ensure that safe and adequate wastewater facilities are available for the public. These regulations include: the Federal Water Pollution Control Act (Clean Water Act), which regulates discharges of pollutants into waters of the United States; and the Porter-Cologne Water Quality Control Act (California Water Code, Division 7, Water Quality, Section 13000 et.seq), which controls polluted discharges into State of California waters.

California State Water Resources Control Board

The State Water Resources Control Board (the State Water Board) was created by the California Legislature in 1967. The mission of the Water Board is to ensure the highest reasonable quality for waters of the State, while allocating those waters to achieve the optimum balance of beneficial uses. The joint authority of water allocation and water quality protection enables the Water Board to provide comprehensive protection for California's waters. The California Environmental Protection Agency (Cal/EPA) was created in 1991 by Governor's Executive Order and the State Water Board was placed under its purview.

On May 2, 2006, the State Water Board adopted a set of regulations, known as Waste Discharge Requirements (WDRs) (Order No. 2006-0003-DWQ) designed to ensure proper design, and safe operation and maintenance of the sanitary sewer systems throughout California. All federal and state agencies, municipalities, counties, districts, and other public entities that own or operate sanitary sewer systems greater than one mile in length that collect and/or convey untreated or partially treated wastewater to a publicly owned treatment facility in the State of California were required to comply with the terms of this order.

The intent of the WDRs is to regulate all collections systems in the State in an effort to reduce or eliminate the number of Sanitary Sewer Overflows (SSOs) which pollute the environment. The Statewide WDRs governing sanitary sewers requires each collection system agency to prepare and adopt a Sewer System Management Plan (SSMP) that must identify the appropriate responsible representative, identify the organization and lines of authority, and provide a chain of communication for reporting SSOs from receipt of a complaint and include the person responsible for reporting SSOs.

Regional Water Quality Control Boards

There are nine Regional Water Quality Control Boards (Regional Boards) that exercise State Water Board rulemaking and regulatory activities within their respective basin region. The mission of the Regional Boards is to develop and enforce water quality objectives and implementation plans that will best protect the beneficial uses of the State's waters, recognizing local differences in climate, topography, geology and hydrology. Regional Boards develop "basin plans" for their hydrologic areas, govern requirements/issue waste discharge permits, take enforcement action against violators, and monitor water quality. The San Diego Regional Water Quality Control Board is designated as Region 9, which includes San Diego County and portions of Imperial and Riverside Counties.

Regional wastewater treatment and outflow facilities

Encina Water Pollution Control Facility

The Encina Water Pollution Control Facility (EWPCF), which was originally constructed in the mid-1960s, is a regional wastewater treatment facility owned jointly by six public agencies as a Joint Powers Authority known as the Encina Wastewater Authority (EWA): Vallecitos WD, the cities of Carlsbad (Carlsbad MWD), Vista and Encinitas (San Dieguito WD), the Buena Sanitation District and the Leucadia Wastewater District. Wastewater is collected from the six agencies and arrives at the EWPCF through gravity and forced main piping manifolds.

The EWPCF provides wastewater treatment services to approximately 300,000 North San Diego County residents. The facility's treatment capacity is 40.5 MGD liquid and 43.3 MGD solids; current daily flows are estimated at 23.3 MGD. The EWPCF averages >96% removal of solids utilizing preliminary, primary and activated sludge secondary treatment processes.

The EWPCF serves primarily as a secondary treatment and disposal facility. Treated effluent from the EWPCF is discharged to the Pacific Ocean through the Encina Ocean Outfall or delivered to the 4.0 MGD Carlsbad Water Recycling Facility (CWRF) or LWWD's Gafner WRP for further treatment to produce recycled water for irrigation.

The Encina Ocean Outfall extends along the ocean floor to a point 1.5 miles off shore, at a depth of over 150 feet. The outfall pipeline consists of two individual sections, including the original 48-inch, 6,600-foot outfall constructed in 1965 and the 72-inch, 2,300-foot extension constructed in 1973. The outfall extension project also added an 800-foot diffuser system to the end of the outfall. The current capacity of the Encina Ocean Outfall is estimated to be approximately 75 MGD.

San Elijo Water Reclamation Facility

The San Elijo Joint Powers Authority (SEJPA) provides wastewater treatment/disposal and recycled water services to a service area of approximately 19 square miles, with a population of estimated at 32,000. The SEJPA owns and operates San Elijo Water Reclamation Facility (SEWRF) in Cardiff-by-the-Sea, which treats up to 5 MGD of wastewater and is able to produce 2.5 MGD of recycled water. The SEJPA also operates and maintains nine wastewater lift stations.

The SEWRF service area includes the City of Solana Beach, portions of the Cities of Del Mar and Encinitas, and the unincorporated community of Rancho Santa Fe. The SEWRF handles mostly domestic waste and is permitted to discharge up to 5.25 MGD of secondary treated wastewater through the San Elijo Ocean Outfall. The ocean Outfall is co-owned with the City of Escondido, and is comprised of 30-inch and 48-inch diameter reinforced concrete pipe that extends 1.5 miles into the Pacific Ocean.

The SEWRF is permitted to discharge up to 2.48 million gallons per day (MGD) of tertiary treated wastewater to recycled water users. In 2011, the SEJPA recycled more than 345 MG which was used to irrigate local landscape, golf courses, school athletic fields, parks and the Del Mar Fairgrounds. The SEJPA also owns and operates 19 miles of recycled water distribution pipelines, and two recycled water reservoirs.

- **Carlsbad Municipal Water District**

Carlsbad MWD is authorized to provide sewer (wastewater) collection services for approximately 78% of the geographic area of the City of Carlsbad. Collected wastewater is delivered to the Encina Wastewater Authority, where it is treated by the Encina Water Pollution Control Facility (EWPCF) and either released into the ocean or treated further and used as recycled water. The EWPCF is jointly owned by the cities of Carlsbad, Encinitas, and Vista, the Leucadia Wastewater District, the Vallecitos Water District, and the Buena Vista Sanitation District. Wastewater services to the remainder of the City of Carlsbad are provided by either the Leucadia Wastewater District or Vallecitos Water District.

Service planning documents

2012 Master Plan Update

The Carlsbad MWD 2012 Sewer Master Plan Update provides a system evaluation and capacity assessment of the wastewater collection system’s projected future facility needs based upon the city build-out growth projections by 2035. The Master Plan recommended a list of Capital Improvement Program sewer improvements and replacements to provide for continued reliable wastewater service through build-out conditions.

Wastewater Flow/Treatment Capacity

The daily wastewater flow for Carlsbad MWD was estimated at approximately 7.9 MGD in 2009. The Carlsbad MWD's established planning value for wastewater flow is 220 gallon per

day (gpd) per EDU. Based on a 220 gpd value, the MWD's estimated daily wastewater flow of 7.9 MGD is equivalent to 35,909 EDU.

A non-residential land use wastewater flow factor of 800 gpd per 10,000 square feet of building area is applied to commercial and industrial development projections in the City of Carlsbad's Growth Database.

Facilities/Disposal

The Carlsbad MWD provides wastewater collection service to 30.5 square miles, through six interceptor pipelines, approximately 270 miles of collection and conveyance pipelines, and 16 lift stations. All wastewater flows are conveyed to the Encina Water Pollution Control Facility (EWPCF) for treatment and then disposal through the ocean outfall, or delivery to the adjacent Carlsbad Water Recycling Facility (CWRF) for reuse.

Anticipated Build-Out/Capacity

The daily wastewater flow for Carlsbad MWD was estimated at approximately 7.9 MGD in 2009. Compared to the City Carlsbad's capacity ownership of 10.26 MGD for treatment and solids handling in the EWPCF, Carlsbad is currently using approximately 77% of its treatment capacity ownership. Wastewater flow generated within the City of Carlsbad is projected to increase by approximately 27 percent over existing flows, to a projected ultimate flow of approximately 10.0 MGD by the year 2035.

The Encina Ocean Outfall has a maximum instantaneous capacity of 104.9 MGD; Carlsbad MWD's peak flow capacity rights in the outfall are 25.51 MGD, which is based on a peaking factor of 2.76 times the Average Dry Weather Flow (ADWF). Carlsbad MWD also diverts up to 4.0 MGD of flow during summer months to produce recycled water, which reduces effluent flow to the outfall.

Planning for Areas Outside of Sphere

The Carlsbad MWD has stated that the district's current wastewater treatment contractual/physical capacity is adequate to serve the territory both within the district's service area and within the existing coterminous sphere. The Carlsbad MWD sphere is bordered by existing special districts and incorporated cities; therefore, the MWD is not actively planning for service provision outside of its sphere.

Carlsbad MWD's 2012 Sewer Service Plan references three areas within the MWD's service area that are also with the service area of the Leucadia WWD. The districts have agreed that the subject areas would be best served by the Carlsbad MWD. A reorganization of the territory (involving LAFCO approval of detachment from the Leucadia WWD and annexation to the Carlsbad MWD) would be supported by the districts when the individual properties are approved for development and request wastewater services.

Cooperative Agreements/Regional Coordination

Carlsbad MWD is a member of the Encina Wastewater Authority with five other wastewater agencies.

Carlsbad MWD has numerous service agreements and interconnections with surrounding wastewater agencies.

Carlsbad MWD is a member agency of the North San Diego County Regional Recycled Water Project, a cooperative of ten local agencies to study greater interconnection and development of northern San Diego County's recycled water infrastructure.

- **Fairbanks Ranch Community Services District**

Fairbanks Ranch Community Services District (CSD) is authorized to provide wastewater service to the unincorporated Fairbanks Ranch Specific Plan Area, a 1,237 acre residential and commercial development to the southeast of the San Dieguito Town Center area. The Fairbanks Ranch CSD was formed in 1987 as the result of a reorganization involving the dissolution of the Fairbanks Ranch Sanitation District. As a successor agency, the Fairbanks Ranch CSD encompasses the boundaries of the dissolved district.

The Fairbanks Ranch CSD is regulated under the provisions of Section 61000 of the California Government Code and is governed by a locally elected, five member board of directors. At the time of its formation, the District was granted the ability to provide wastewater service, public street lighting maintenance, roadside landscape maintenance, and water reclamation.

Service planning documents

Adopted FY 2012-13 Budget, Five-year Capital Improvement Program, Asset Management Plan.

Wastewater Flow/Treatment Capacity

Fairbanks Ranch CSD reports its average wastewater flow volume at 0.160 MGD or 650 EDU, and treatment capacity of 0.275 MGD or 785 EDU. Since the population has remained constant over the past 20 years, the CSD has adequate capacity to provide service to the current property owners and residents.

Facilities/Disposal

The Fairbanks Ranch CSD maintains 15 miles of pipelines, two lift stations and conveys wastewater locally to the Fairbanks Ranch Water Pollution Control Facility (WPCF).

The Fairbanks Ranch CSD operates the Fairbanks Ranch WPCF, which provides modified secondary treatment for an average wastewater flow of 160,000 gallons per day (gpd) (0.160 MGD or 650 EDU). The WPCF has a maximum rated capacity of 275,000 gpd (0.275 MGD or 785 EDU. Wastewater effluent is treated and primarily disposed through four percolation ponds on a lot adjacent to the San Dieguito River. Four additional interim/emergency percolation ponds are located adjacent to the WPCF.

Anticipated Build-Out/Capacity

Fairbanks Ranch CSD reports that it is essentially built-out with little land available for

development within its service area. The CSD has capacity to serve approximately 130 additional EDU.

While the Fairbanks Ranch CSD does not currently treat wastewater to Title 22 standards, the CSD could potentially add tertiary treatment facilities in the future, pending results of an ongoing feasibility analysis. Due to high TDS levels, demineralization facilities would also be required.

Planning for Areas Outside of Sphere

The Fairbanks Ranch CSD has stated that the district's current wastewater flow and contractual/physical treatment capacity is adequate to serve the territory both within the district's service area and within the existing coterminous sphere. The Fairbanks Ranch CSD sphere is bordered by existing special districts; therefore, the Fairbanks Ranch CSD is not actively planning for service provision outside of its sphere.

Cooperative Agreements/Regional Coordination

Fairbanks Ranch CSD is not a member agency of the North San Diego County Regional Recycled Water Project due to its isolated location in relation to the other member agencies' infrastructure and the economic infeasibility of interconnection to regional tertiary treatment facilities.

- **Leucadia Wastewater District**

Established in 1959, Leucadia Wastewater District (WWD) is authorized to provide wastewater collection, treatment, disposal and service to a population of approximately 60,000 across a service area of approximately 16-square miles that includes La Costa, Leucadia and the Village Park area of Encinitas. The WWD is a member of the Encina Wastewater Authority (EWA) and joint owner of the EWA's Encina Water Pollution Control Facility (EWPCF) along with the cities of Carlsbad, Encinitas, and Vista, the Vallecitos Water District, and the Buena Vista Sanitation District. Leucadia WWD also provides wastewater collection services to a portion of the City of Carlsbad.

Service planning documents

2008 Asset Management Plan and 2009 Sewer System Management Plan.

Wastewater Flow/Treatment Capacity

Leucadia WWD reports its wastewater treatment capacity at 7.11 MGD or 215 EDU, and an average wastewater flow volume of 4.01 MGD or 144 EDU. Collected wastewater is delivered to the Encina Wastewater Authority, where it is treated by the Encina Water Pollution Control Facility (EWPCF) and either released into the ocean or treated further and used as recycled water.

Flows generated within the Leucadia WWD are monitored on a continual basis by both the District and the Encina Wastewater Authority (EWA). The EWPCF presently has a capacity of

approximately 41 MGD; the Leucadia WWD owns capacity of 7.11 MGD. With an ultimate flow projection of 6.46 MGD, the WWD has approximately 0.55 MGD of emergency reserve capacity.

Facilities/Disposal

The District owns approximately 20% of the treatment capacity at EWPCF and presently transports an average of 4.5 MGD of wastewater to the Encina facility. Leucadia WWD maintains an approximately 190-mile gravity collection system.

Leucadia WWD also owns and operates the Gafner Water Reclamation Facility (WRF), which has tertiary treatment capacity of 1.0 MGD. The WRF receives and treats secondary effluent delivered from the EWPCF. Recycled water produced at the Gafner Facility is sold, on a wholesale basis, to irrigate the La Costa Resort & Spa Golf Course via a sales agreement with Carlsbad MWD.

Anticipated Build-Out/Capacity

The Leucadia WWD service area is at approximately 92% build out with an anticipated 100 to 200 EDUs connecting to the system annually over the next 20 years. EDU build out is assumed at 30,045 EDUs. The WWD has transitioned its capital improvement program from growth-based projects to replacement-based projects.

Planning for Areas Outside of Sphere

The Leucadia MWD has stated that the district's current wastewater flow and contractual/physical treatment capacity is adequate to serve the territory both within the district's service area and within the existing larger-than-district sphere. The Leucadia MWD sphere is bordered by existing special districts and incorporated cities; therefore, the Leucadia WWD is not actively planning for service provision outside of its sphere.

Cooperative Agreements/Regional Coordination

Leucadia WWD is a member agency of the North San Diego County Regional Recycled Water Project, which is a cooperative of ten local agencies to study greater interconnection and development of northern San Diego County's recycled water infrastructure. This regional recycled water supply project could potentially supply a demand of 16,554 AF. The member agencies are coordinating efforts to obtain funding opportunities for the regional project.

- **Olivenhain Municipal Water District**

Olivenhain MWD is authorized to provide wastewater collection and treatment services in the 4S Ranch and Rancho Cielo communities. The 4S Ranch and Rancho Cielo areas include approximately 5,300 acres and will ultimately contain approximately 7,200 equivalent dwelling units (EDU). The District presently provides sewer collection and treatment services for approximately 6,943 EDU.

The 4S Ranch Water Reclamation Facility (WRF) was expanded to meet projected demand at built-out and was completed in 2003. The new and expanded wastewater plant is able to

provide sewer treatment capacity for approximately 7,000 single family residences in addition to commercial and irrigation usage. The WRF is able to treat all wastewater effluent received and produce high quality recycled water for non-potable irrigation use.

Service planning documents

2012-2013 Operating and Capital Budget and 2011 Potable and Recycled Water Master Plan and Capital Improvement Program.

Wastewater Flow/Treatment Capacity

The MWD reports its current treatment capacity at 2.0 MGD or 7,500 EDU. The district reports an average flow volume of 0.80 MGD or 3,000 EDU with a peak flow of 1.1 MGD or 4,100 EDU.

Facilities/Distribution

Olivenhain MWD has a total of 375 miles of pipeline, 50,000 feet of which are dedicated to recycled water transportation. Wastewater from the WMD is conveyed to the District's 4S Wastewater Treatment Plant. The 4S WRF currently operates at 1.0 million gallons per day (MGD) of its ultimate capacity of 2.0 MGD. The expanded and upgraded 4S WRF is capable of providing California Title 22 tertiary treated recycled water which can be used for unrestricted irrigation purposes.

Anticipated Build-Out/Capacity

Based upon the 2010 Master Plan, Olivenhain MWD estimates that it is currently at 85% of its ultimate build-out of approximately 33,442 equivalent dwelling units.

The MWD states that 0.10 MGD or 465 EDU of capacity has been reserved or committed for planned or proposed development.

Planning for Areas Outside of Sphere

The Olivenhain MWD estimates a service demand of less than 0.10 MGD or 100-110 EDU for areas outside of the existing sphere, and less than 0.10 MGD or 110-30 EDU for areas within of the existing sphere The MWD has stated that the district's current wastewater flow and contractual/physical treatment capacity is adequate to serve the territory both within the district's service area and within the existing larger-than-district sphere. The Olivenhain MWD sphere is bordered by existing special districts and incorporated cities; therefore, the MWD is not actively planning for service provision outside of its sphere.

Cooperative Agreements/Regional Coordination

Olivenhain MWD is a member agency of the North San Diego County Regional Recycled Water Project, which is a cooperative of ten local agencies to study greater interconnection and development of northern San Diego County's recycled water infrastructure. This regional recycled water supply project could potentially supply a demand of 16,554 AF. The member agencies are coordinating efforts to obtain funding opportunities for the regional project.

- **Rancho Santa Fe Community Services District**

The Rancho Santa Fe Community Services District (RSFCSD) was formed in 1982 as the result of a reorganization involving the dissolution of the Rancho Santa Fe Sanitation District and the Rancho Santa Fe (Landscape) Maintenance District. As successor agency, the new CSD encompasses the boundaries and assumed the functions of the dissolved districts. The CSD is regulated under the provisions of Section 61000 of the California Government Code.

The RSFCSD is authorized to provide wastewater collection, treatment, and disposal services to an estimated population of 7,457 over a service area of approximately 10,348 acres within the unincorporated community of Rancho Santa Fe.

Service planning documents

Adopted FY 2012-13 Budget, 5-year Capital Improvement Program, Asset Management Plan

Wastewater Flow/Treatment Capacity

Rancho Santa Fe CSD reports its wastewater treatment capacity as: 0.25 MGD at the San Elijo WPCF; 0.45 MGD at the Rancho Santa Fe WRF; and 0.49 MGD at the Santa Fe Valley WRF. The CSD reports average flow volume as 0.13 MGD at the San Elijo WPCF; 0.28 MGD at the Rancho Santa Fe WRF; and 0.15 MGD at the Santa Fe Valley WRF.

Facilities/Distribution

Rancho Santa Fe CSD operates 43.78 miles of pipeline, 12 pump stations and conveys wastewater to the San Elijo Wastewater Pollution Control Facility. Rancho Santa Fe CSD operates two wastewater treatment plants: the Rancho Santa Fe Water Reclamation Facility (WRF), and the Santa Fe Valley WRF. The Rancho Santa Fe WRF has an average flow of 0.35 MGD and a rated capacity of 0.45 MGD. The Rancho Santa Fe WRF generally provides treatment services for Rancho Santa Fe and other surrounding communities in the unincorporated areas of the county.

In 1997, the CSD annexed an area of approximately 3000 acres, known as the Santa Fe Valley Specific Plan Area, into the District. In order to serve this area a 0.485 MGD treatment facility was constructed. The Santa Fe Valley Water WRF produces tertiary treated recycled water, which is sold to the Olivenhain MWD for irrigation of local golf courses. The Santa Fe Valley Water WRF has an average flow of 0.05 MGD.

Anticipated Build-Out/Capacity

Rancho Santa Fe CSD reports that it is essentially built-out with little land available for development within its service area. The CSD has capacity to serve approximately 1,702 additional EDU.

Special Study Areas

Bridges Project

The Bridges property consists of approximately 94 acres proposed for development with 30± residences. The CSD has not requested any changes to include the area within the sphere; therefore, the special study area designation is recommended to be retained.

Sun Valley

The Sun Valley special study area consists of approximately 284 parcels within an approximate 496-acre unincorporated area that is contiguous to the Cities of San Diego and Solana Beach and the CSD. The area has had a history of septic system failures during wet winter periods. In 2011, a small group of local Sun Valley property owners petitioned LAFCO for approval of annexation to the Rancho Santa Fe CSD because of failing or failed septic systems (LAFCO Ref. Nos.: SA/DA11-07, "El Camino Real Annexation"). The CSD negotiated a contract with the City of San Diego to provide wastewater service to the seven subject properties following their annexation to the CSD's service area.

The remainder of the Sun Valley special study area should be further reviewed to explore the potential expansion of the CSD sphere to facilitate future contractual service connections to the City of San Diego when environmental conditions are warranted.

Flower Hill (Potential Special Study Area)

Immediately south of the Sun Valley special study area is the approximately 477-acre Flower Hill area. About two-thirds of Flower Hill is within the incorporated boundary of the City of San Diego; the remaining third is located in the unincorporated territory of the County of San Diego. The Flower Hill area contains a variety of land uses including rural residential, single-family residential, multi-family residential, low-rise office/professional, store-front commercial, health care, open space, landscaped open space, golf course, residential recreation, agricultural, and vacant land.

Currently, the City of San Diego provides sewer service to its incorporated Flower Hill area residents, with the remainder of developed unincorporated properties utilizing septic systems for wastewater disposal. Although the City of Solana Beach and the Rancho Santa Fe CSD spheres border portions of the area, topography and other geographic constraints make the City of San Diego the most logical wastewater service provider.

In response to documented failing septic systems, the Rancho Santa Fe CSD has supported annexation of adjacent Sun Valley properties to receive wastewater service by contractual agreement with the City of San Diego. Additional study of the City's local capacity, and ability/willingness to meet projected local demands should be conducted before placement of the unincorporated Sun Valley and Flower Hill areas within the Rancho Santa Fe CSD's sphere.

Planning for Areas Outside of Sphere

The Rancho Santa Fe CSD has stated that the district's current wastewater flow and contractual/physical treatment capacity is adequate to serve the territory both within the

district's service area and within the existing larger-than-district sphere. The Rancho Santa Fe CSD sphere is bordered by existing special districts and incorporated cities; therefore, the Rancho Santa Fe CSD is not actively planning for service provision outside of its sphere.

Cooperative Agreements/Regional Coordination

Rancho Santa Fe CSD has a sales agreement with Olivenhain MWD to purchase the full recycled water output of the CSD's Santa Fe Valley Water Reclamation Facility for delivery to Olivenhain MWD recycled water customers.

- **Whispering Palms Community Services District**

The Whispering Palms Community Services District (CSD) is authorized to provide wastewater collection and treatment services to the Whispering Palms community, as well as to surrounding areas to the west such as Del Mar Country Club Estates, San Diegueno Hills, Rancho Santa Fe Lakes, the Farms, and Rancho Valencia. The CSD also provides landscape maintenance services for several areas within the Whispering Palms community, as well as the roadside landscaping along Via De La Valle, Cancha De Golf, and Via Valle Verde.

The Whispering Palms CSD was formed in 1987 as the result of a reorganization involving the dissolution of the Whispering Palms Sanitation District and the County Service Area No. 1 (which provided roadside landscape services to the Whispering Palms community). As successor agency, the CSD encompasses the boundaries and assumed the functions of the dissolved districts, along with additional territory annexed in subsequent years.

The Whispering Palms CSD is regulated under the provisions of Section 61000 of the California Government Code. The powers exercised by the CSD are the provision of sewer service, landscaping of public areas, street lighting and street sign maintenance. The CSD is governed by a locally elected five member Board of Directors, all of whom are residents within the District.

Service Planning Documents

Adopted FY 2012-13 Budget, Five-year Capital Improvement Program and Asset Management Plan.

Wastewater Flow/Treatment Capacity

The Whispering Palms CSD reports its wastewater treatment capacity as 0.40 MGD or 1818 EDU, with an average flow volume of 0.26 MGD or 1452 EDU.

The District's service boundary encompasses 2,615 acres, and serves more than 1,440 homes and businesses. These services are funded by a combination of sewer fees and the District's share of local property tax revenue.

Facilities/Distribution

The Whispering Palms CSD operates the Whispering Palms Water Reclamation Facility (WRF). The Whispering Palms WRF treats an average wastewater flow of 0.29 MGD, with a maximum rated capacity of 0.40 MGD.

The CSD has a service area of 2,140 acres. Whispering Palms CSD operates 17.1 miles of pipeline, two pump stations and conveys wastewater locally to the Whispering Palms WRF.

Anticipated Build-Out/Capacity

Whispering Palms CSD reports that it is essentially built-out with little land available for development within its service area. The CSD has capacity to serve approximately 366 additional EDU.

Planning for Areas Outside of Sphere

The Whispering Palms CSD has stated that the district's current wastewater flow and contractual/physical treatment capacity is adequate to serve the territory both within the district's service area and within the existing larger-than-district sphere. The Whispering Palms CSD sphere is bordered by existing special districts; therefore, the CSD is not actively planning for service provision outside of its sphere.

Cooperative Agreements/Regional Coordination

Whispering Palms CSD is not a member agency of the North San Diego County Regional Recycled Water Project due to its isolated location in relation to the other member agencies' infrastructure and the economic infeasibility of interconnection to regional tertiary treatment facilities.

CONCLUSION

After review of the wastewater agencies, the staff conclusion is that sewer services are being adequately provided to the Sphere and MSR study area. The special district sewer service providers have adopted and updated master service plans and capital improvement programs to meet present and future service demands and to identify infrastructure needs and replacements. The special districts have adopted operational and capital budgets, asset management plans, and rate studies to ensure financial accountability and sustainability. The special districts are members of joint powers authorities that bring economies of scale to provide the major facility needs for populated urban areas.

The local wastewater agencies have coordinated on regional and subregional infrastructure planning that will significantly increase the tertiary treatment capacities necessary to produce high-quality recycled water to meet projected local and regional demands. New sources of recycled water can help to conserve potable water supplies for needed uses and reduce the region's demand for expensive imported water.

Accordingly, it is recommended that the existing spheres for the subject wastewater agencies be affirmed. As the service areas of the districts become closer to build-out conditions, inter-agency collaboration should focus on exploring greater efficiencies through shared facilities and infrastructure opportunities. For example, potential consolidations between smaller

adjacent wastewater agencies such as the Rancho Santa Fe, Fairbanks Ranch, and Whispering Palms Community Services Districts may provide opportunities for enhanced local wastewater treatment improvements and facility interconnections with regional distribution systems. Additional issues that the Commission should discuss include supporting inter-agency collaboration on increased administrative and operational efficiencies; exploring operational consolidation opportunities such as formation of joint powers authorities and other governmental structure options; and encouraging local agency coordination on regional and sub-regional infrastructure planning.

Recycled/Reclaimed Water Service

Definition of function/service

"Recycled water" means water which, as a result of treatment of waste, is suitable for a direct beneficial use or a controlled use that would not otherwise occur and is therefore considered a valuable resource. (California Water Code Section 13050 (n))

Recycled/reclaimed water is treated municipal wastewater that is subject to State of California water quality standards and regulatory agency oversight and approval. The recycled water delivered within the San Dieguito Sphere and MSR study area has received an advanced level of treatment, known as tertiary treatment, which meets California Code of Regulations, Title 22 criteria.

Primary treatment of wastewater settles the solids from the effluent; the secondary treatment stage involves biological systems that consume organic waste. In the third or tertiary stage, wastewater is filtered and is then disinfected by chlorination before leaving the treatment plant. Tertiary filtration is typically accomplished through fine sand or charcoal filtration, but microfiltration and reverse osmosis filtration may also be used.

The finished recycled product is high quality water that is usable for designated non-potable, beneficial uses such as landscape irrigation for parks, campgrounds, golf courses, freeway medians, community greenbelts, school athletic fields; irrigation for agricultural food crops and nursery stock; recreational and aesthetic enjoyment associated with the replenishment of lakes, ponds and ornamental fountains; dust control at construction sites; makeup water for cooling tower use; and other industrial and commercial purposes.

Regulatory framework

"The Legislature finds and declares that a substantial portion of the future water requirements of this state may be economically met by beneficial use of recycled water. The Legislature further finds and declares that the utilization of recycled water by local communities for domestic, agricultural, industrial, recreational, and fish and wildlife purposes will contribute to the peace, health, safety and welfare of the people of the state." (California Water Code, Section 13511)

The California Department of Public Health (DPH) and the California Regional Water Quality Control Board has primary responsibility for regulating the application and use of recycled water in the state. Planning and implementing water recycling projects involves close interaction with the regulatory agencies prior to project approval.

DPH establishes the statewide effluent bacteriological and treatment reliability standards for recycled water uses in Title 22, Division 4, Chapter 3, California Code of Regulations (CCR). Under Title 22, standards are established for each general type of use based on the potential for human contact with recycled water. The highest degree of standards for recycled water is for unrestricted body contact.

The Regional Water Quality Control Board is charged with establishing and enforcing requirements for the application and use of recycled water within the state. Permits are required from the Regional Board for all water recycling operations. 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.

The San Diego County Department of Environmental Health (DEH) serves as the local regulatory body for the use of recycled water through a delegation agreement with DPH. This delegation of regulatory authority provides DEH with an independent and autonomous role and authority to impose additional requirements and take enforcement actions with respect to local water reclamation ordinances. The regulatory 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.

DEH works closely with the recycled water producers, purveyors and different municipalities where recycled water projects are proposed, as well as the State Department of Public Health (DPH) Division of Drinking Water and Environmental Management's (DDWEM) Drinking Water Program and Drinking Water Field Operations Branch, and the San Diego Regional Water Quality Control Board. Permission to use recycled water is based on the ability to adequately treat municipal wastewater to the point that the recycled water (effluent) meets or exceeds the requirements of Title 22.

DEH 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. DEH 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.

Local/Regional Water Reclamation/Recycling Facilities

Carlsbad Water Recycling Facility

EWPCF staff operates the Carlsbad Water Recycling Facility (CWRF), which is located adjacent to the EWPCF and is owned by the Carlsbad MWD. Secondary effluent from the EWPCF is diverted from the ocean outfall and delivered to the CWRF for further tertiary

treatment. The CWRF, which began operation in 2005, can reclaim up to 4.0 MGD of treated wastewater, which is supplied to the Carlsbad MWD.

Gafner Water Reclamation Facility

The GWRF is owned and operated by the Leucadia Wastewater District. The plant takes treated effluent from the EWPCF and can produce 1.0 MGD of recycled water, which is used for irrigating the La Costa Golf Course via a sales agreement with Carlsbad MWD.

San Elijo Water Reclamation Facility

The San Elijo Joint Powers Authority owns and operates San Elijo Water Reclamation Facility (SEWRF) in Cardiff-by-the-Sea, which treats up to 5 MGD of wastewater and is able to produce 2.5 MGD of recycled water.

Santa Fe Valley Water Reclamation Facility

Rancho Santa Fe CSD owns and operates Santa Fe Valley Water WRF. The Santa Fe Valley Water WRF produces tertiary treated recycled water, which is sold to the Olivenhain MWD for irrigation of local golf courses. The Santa Fe Valley Water WRF has an average flow of 0.05 MGD and a treatment capacity of 0.485 MGD.

Regional Coordination

North San Diego County Regional Recycled Water Project

The North San Diego County Regional Recycled Water Project is a cooperative of ten local agencies that provide water and/or wastewater services to study greater interconnection and development of northern San Diego County's recycled water infrastructure. The member agencies include both cities and special districts: the Carlsbad MWD (City of Carlsbad), Leucadia WWD, Olivenhain MWD, Rincon Del Diablo MWD, San Elijo JPA, Santa Fe ID, Vallecitos WD, Vista ID, and the cities of Escondido and Oceanside.

The North San Diego County Regional Recycled Water Project is a comprehensive, cross-jurisdictional partnership matching areas with high recycled water demand to facilities that can produce enough recycled water to meet that demand. Maximizing the use of regional recycled water resources reduces the region's dependence on increasingly limited and expensive imported water supplies, and assists the agencies to achieve the state-mandated potable water reduction of 20% per capita per day by the year 2020.

In 2010, the California Department of Water Resources (DWR) awarded a grant of $1.5 million to the North San Diego County Regional Recycled Water Project to develop a Regional Recycled Water Facilities Plan, which was completed in 2011. The next step will be to develop a Programmatic Environmental Impact Report for the project.

In early 2013, The San Diego CWA will formally submit an application to the DWR for $10,300,000 in Proposition 84 grant funds allocated to the San Diego region through the Integrated Regional Water Management (IRWM) program. The recycled water project was one of eight approved in January 2013 for inclusion in the San Diego region's application, and pending approval by DWR, the project agencies anticipate to be granted an additional

$3,452,000 for construction of recycled water facilities in North County from the region's total grant award.

Pending the receipt of grant funding, construction elements of the project are planned to begin in mid-2013. Upon completion of all long-term project elements, the North San Diego County Regional Recycled Water Project will add nearly 30.0 MGD of recycled water to North County's water supply, potentially offsetting the potable water demand of approximately 75,000 households.

- **Carlsbad Municipal Water District**

Carlsbad Municipal Water District (MWD) delivers nearly 1.23 billion gallons of recycled water to local irrigation customers per year. In 2010, 3,517 AF (3.1 MGD) of recycled water was delivered, which represents approximately 16% of the total water use in CMWD's service area. The MWD reports that recycled water use has increased approximately 60% over the last ten years. Recycled water is supplied to the Carlsbad MWD from three different agency sources and is distributed through a separate recycled water distribution system to developed areas within the MWD's service area.

Service planning documents

2012 Recycled Water Master Plan.

Connections/EUDs

Carlsbad MWD currently delivers over 4,000 AF of recycled water per year for irrigation of golf courses, parks, median strips, shopping areas, freeway landscaping, and common area landscaping in residential and commercial developments. The distribution system currently supplies more than 500 recycled-use sites such as the La Costa Resort and Spa, Park Hyatt Aviara Resort, Legoland California, Grand Pacific Palisades Hotel, Karl Strauss Brewery and the Carlsbad Flower Fields. Recycled water is also supplied to many of the City of Carlsbad parks, median strips, and common areas of homeowner associations.

Facilities/Distribution

Carlsbad MWD owns the Carlsbad Water Recycling Facility (WRF), which is located adjacent to the EWPCF and is operated by Encina JPA staff, but is owned by the Carlsbad Municipal Water District. Up to 4.0 MGD of secondary effluent from the EWPCF is diverted from the Encina ocean outfall and delivered to the WRF for further tertiary treatment. The WRF treats an average of 2.0 MGD of recycled water. The treated water is then supplied to the Carlsbad MWD.

The Carlsbad MWD has about 78 miles of recycled distribution pipeline, which supplies approximately 500 recycled-use sites. Carlsbad MWD's primary recycled water distribution system consists of five pressure zones, three storage tanks, three booster pumping stations, two supply sources with pump stations, and three pressure regulating stations.

Carlsbad MWD also receives recycled water from the Meadowlark WRF, owned and operated by the Vallecitos WD, and the Gafner WRP, owned and operated by the Leucadia

WWD. Carlsbad MWD supplies recycled water to the south course of the La Costa Resort and Spa from the Leucadia WWD's Gafner WRP through a separate distribution system.

Anticipated Build-Out/Capacity

Nearly 20% of the potable water provided within Carlsbad MWD is for irrigation uses. Development of an expanded recycled water system within the Carlsbad MWD service area would provide incentives for irrigation users to switch from potable water to recycled water, potentially lowering the MWD's total potable water demands.

The MWD reports that recycled water deliveries are projected to be 6,500 AFY (5.8 MGD) by the year 2020, which is an increase of approximately 85% over existing recycled water demands. Recycled water use is expected tol increase as the distribution system is expanded into future development areas and from conversion of existing potable water customers to the recycled water system.

Planning for Areas Outside of Sphere

Through an agreement dated September 24, 2008 with Vallecitos WD, Carlsbad MWD provides recycled water service to Vallecitos WD customers located within the City of Carlsbad. In 2010, Carlsbad MWD reports that it sold 75-acre feet of recycled water through nine meters within Vallecitos WD's service area.

Cooperative Agreements/Regional Coordination

Carlsbad MWD is a member agency of the North San Diego County Regional Recycled Water Project, which is a cooperative of ten local agencies to study greater interconnection and development of northern San Diego County's recycled water infrastructure. This regional recycled water supply project could potentially supply a demand of 16,554 AF. The member agencies are coordinating efforts to obtain funding opportunities for the regional project.

- **Leucadia Wastewater District**

The Leucadia Wastewater District (WWD) sends treated secondary effluent from the EWPCF to their Gafner Water Reclamation Facility (WRF). This water reclamation facility presently produces 86 million gallons of recycled water per year (0.25 MGD), and has the design capacity to produce up to 350 million gallons per year (approx. 1.0 MGD). Presently, this recycled water is sold to the Carlsbad MWD, who sells it to the La Costa Resort & Spa Golf Course for irrigation purposes.

Service planning documents

2008 Asset Management Plan and 2009 Sewer System Management Plan.

Facilities/Distribution

In 1993, the District upgraded the Gafner Water Reclamation Facility (WRF) to meet new regulatory standards for recycled water. The new upgrades included a 1.0 MGD filtration

plant that provided a third tertiary stage of treatment to the WRF's original primary and secondary facilities. The District opted to decommission the original primary and secondary facilities in 1997, and began piping treated secondary effluent from the Encina plant to the new Gafner filtration facility.

Anticipated Build-Out/Capacity

Leucadia WWD can produce up to 350 million gallons of recycled water per year at the Gafner WRF. The WWD has plans to expand their wastewater recycling program, with a goal of 1.0 billion gallons per year.

Planning for Areas Outside of Sphere

Recycled water produced at the Gafner Facility is sold, on a wholesale basis, to irrigate the La Costa Resort & Spa Golf Course via a sales agreement with Carlsbad MWD.

Cooperative Agreements/Regional Coordination

Leucadia WWD is a member agency of the North San Diego County Regional Recycled Water Project, which is a cooperative of ten local agencies to study greater interconnection and development of northern San Diego County's recycled water infrastructure. This regional recycled water supply project could potentially supply a demand of 16,554 AF. The member agencies are coordinating efforts to obtain funding opportunities for the regional project.

- **Olivenhain Municipal Water District**

Olivenhain MWD serves two areas in its recycled water system: the Northwest quadrant and Southeast quadrant. Since 2003, Olivenhain Municipal Water District (MWD) has produced approximately 1.0 MGD of recycled water at the 4S Ranch Water Reclamation Facility (WRF).

Recycled water produced at the WRF is used throughout Olivenhain MWD's Southeast Quadrant for major irrigation users such as golf courses, large landscape areas, parks, and school grounds. Demand for recycled water in the Southeast Quadrant is supplemented by recycled water purchased from the City of San Diego and Rancho Santa Fe Community Services District. Olivenhain MWD also serves recycled water customers in its Northeast Quadrant with recycled water purchased from Vallecitos Water District.

Service planning documents

2012-2013 Operating and Capital Budget, 2011 Potable and Recycled Water Master Plan and Capital Improvement Program.

Connections/EDUs

Olivenhain MWD reports that it delivers an approximate total of 3,000 AF per year of recycled water to 250 metered accounts. The MWD purchases a total of 1,040 AF of recycled water

from the City of San Diego (410 AF), Rancho Santa Fe CSD (150 AF), and Vallecitos WD (480 AF). The remaining recycled water supply is provided by the MWD's 4S WRF.

Facilities/Distribution

Olivenhain MWD's 4S WRF currently operates at 1.0 million gallons per day (MGD) of its ultimate capacity of 2.0 MGD. The expanded and upgraded 4S WRF is capable of providing California Title 22 tertiary treated recycled water which can be used for unrestricted irrigation purposes.

Olivenhain MWD's recycled water system includes a 1.0 MG recycled water reservoir, several pump stations, a 250,000 gallon recycled water blending tank, and over 47 miles of recycled water lines.

Anticipated Build-Out/Capacity

The Olivenhain MWD's long-term goal is to be able to provide approximately 3 million gallons per day of recycled water to its irrigation customers. The MWD reports that costs associated with the expansion of recycled water production and distribution systems can be cost-prohibitive and that the district pursues outside funding sources through grants and other alternative funding mechanisms.

Planning for Areas Outside of Sphere

Olivenhain MWD is joint owner (with San Dieguito Water District) of Wanket Reservoir, located near the border of the two agencies. The reservoir is not currently integral to the potable system and negotiations are underway for the MWD to purchase the reservoir outright and convert it to a recycled water storage tank. The conversion would offer Olivenhain MWD the ability to procure and serve up to an additional 400 AFY of recycled water within its service area. The additional supply could be provided by San Elijo Joint Powers Authority, Leucadia WWD, or Carlsbad MWD.

Cooperative Agreements/Regional Coordination

Olivenhain MWD reports that it is limited in its ability to produce enough recycled water to meet existing/potential demands within its service area. Demand for recycled water is supplemented by recycled water purchased from the City of San Diego, Rancho Santa Fe Community Services District and from Vallecitos Water District.

Olivenhain MWD has an agreement with Rancho Santa Fe CSD to purchase the full recycled water output of the Santa Fe Valley Water Reclamation Facility for delivery to Olivenhain MWD recycled water customers. Other small wastewater treatment facilities currently exist within OMWD's water service area but outside of its wastewater service area. The MWD states that efficiencies could be achieved if these facilities were upgraded to provide tertiary treatment capacity, allowing wastewater flows to be reclaimed and used to supplement potable water deliveries within the MWD's service area.

Olivenhain MWD is a member agency of the North San Diego County Regional Recycled Water Project, which is a cooperative of ten local agencies to study greater interconnection and development of northern San Diego County's recycled water infrastructure. This regional recycled water supply project could potentially supply a demand of 16,554 AF. The member agencies are coordinating efforts to obtain funding opportunities for the regional project.

- **San Dieguito Water District**

The San Dieguito WD purchases recycled water from San Elijo Joint Powers Authority (SEJPA) after treatment at the San Elijo Water Pollution Control Plant, for delivery to the WD's customers. The San Dieguito WD reports recycled water use at 448 AF in 2010. The WD projects 625 AF of recycled water use in 2020.

Cooperative Agreements/Regional Coordination

The San Dieguito WD purchases recycled water from the San Elijo Joint Powers Authority, which is a member agency of the North San Diego County Regional Recycled Water Project.

- **Santa Fe Irrigation District**

Santa Fe ID currently delivers approximately 500 acre feet (AF) of recycled water to its customers in the western portion of its service area. Santa Fe ID reports that recycled water deliveries are approximately 5% of the ID's water supply volume.

Santa Fe ID states that expanding its recycled water program is a sustainable option to offset current potable water demands and provide customers with a reliable source of irrigation water that is not affected by potential water use restrictions.

Santa Fe ID completed a comprehensive *Recycled Water Master Plan* in 2005 that identified over 1,300 AF of potential recycled water demand in the District's eastern service area. The ID reports that, with the district's service area close to built out conditions, the potential recycled water demands in the eastern service area could potentially offset current potable demands. The Santa Fe ID has adopted a *Eastern Service Area Recycled Water Facilities Plan* to better define recycled water demands in the eastern service area and the most viable recycled water supply and delivery facilities to serve these demands.

Service planning documents

Recycled Water Master Plan

In 2005, the District developed a Recycled Water Master Plan which described current recycled water uses and infrastructure, projected recycled demands, and identified system infrastructure expansion alternatives.

Eastern Service Area Recycled Water Facilities Plan

In 2011, the Santa Fe ID adopted the *Eastern Service Area Recycled Water Facilities Plan* that updated the 2005 *Recycled Water Master Plan* to better define the improvements needed to use recycled water to offset potable water used by customers in the eastern portion of the District's service area.

Connections/EDUs

Approximate 480 AFY of recycled water is currently being used in the western portion of the District's service area. The District purchases recycled water from San Elijo Joint Powers Authority (SEJPA) for use by the District's customers. Recycled water use is currently limited to the western portion of the District's service area due to proximity of the San Elijo Joint Water Reclamation Facility. Over the past four years, the District has expanded recycled water use in the western service area by approximately 10%.

SEJPA currently supplies recycled water to 14 of the Santa Fe ID's customers from meters within the City of Solana Beach and unincorporated portions of the County of San Diego. Santa Fe ID's recycled water customers include San Dieguito Park, Lomas Santa Fe Golf Course and Country Club, California Department of Transportation, the City of Solana Beach, and several homeowner associations.

Facilities/Distribution

Santa Fe ID recycled water demands, which currently total approximately 500 AF, are supplied from SEJPA. The SEJPA owns and operates the San Elijo WRF and distribution system that serves customers in Solana Beach, plus additional customers in other water districts.

Anticipated Build-Out/Capacity

The San Elijo Joint Water Reclamation Facility currently supplies approximately 500 AF per year of recycled water to the Santa Fe ID's customers in Solana Beach. Santa Fe ID anticipates that SEJPA could construct improvement projects that could provide an additional 400 AF of additional recycled water supply.

Planning for Areas Within/Outside of Sphere

Santa Fe ID reports that its Recycled Water System Expansion project will provide a pipeline that extends the existing recycled water distribution system in the western portion of the ID's service area to deliver recycled water to the lower portion of the San Dieguito Park and other nearby users. The park historically uses approximately 50 acre-feet of potable water per year (equivalent to approximately 100 single family homes). The new pipeline could potentially serve an additional 50 to 75 acre-feet of recycled water to other potable water users in the vicinity of the pipeline.

The Santa Fe ID is currently considering three potential recycled water supply options to serve eastern service area planned recycled water demands. The options include the SEJPA that currently produces enough tertiary effluent to serve the ID's projected demands; the City of San Diego has a potential recycled water distribution system connection point adjacent to

the ID's eastern service area boundary that could serve the Districts projected demands; and the Rancho Santa Fe, Fairbanks Ranch, and Whispering Palms CSDs, which would require implementation of tertiary and demineralization facilities to accommodate a portion of the ID's projected demands.

Cooperative Agreements/Regional Coordination

Santa Fe ID is a member agency of the North San Diego County Regional Recycled Water Project, which is a cooperative of ten local agencies to study greater interconnection and development of northern San Diego County's recycled water infrastructure. This regional recycled water supply project could potentially supply a demand of 16,554 AF. The member agencies are coordinating efforts to obtain funding opportunities for the regional project.

- **Rancho Santa Fe, Whispering Palms, and Fairbanks Ranch Community Services Districts**

The Rancho Santa Fe CSD, Whispering Palms CSD, and Fairbanks Ranch CSD each provide wastewater treatment to unincorporated communities within the Rancho Santa Fe area. The CSDs own and operate separate wastewater treatment plants that provide secondary level treatment.

Facilities/Distribution

Rancho Santa Fe CSD owns and operates the Rancho Santa Fe Water Reclamation Facility (WRF). The design capacity of the WRF is 0.45 MGD. All of the wastewater collected by the WRF is treated to secondary treatment levels and disposed of onsite in percolation beds. Effluent from the WRF has high TDS concentrations; therefore tertiary treatment and demineralization facilities would be required to use effluent from the Rancho Santa Fe WRF for recycled water uses.

Rancho Santa Fe CSD also owns and operates the Santa Fe Valley Water WRF. The Santa Fe Valley Water WRF produces tertiary treated recycled water, which is sold to the Olivenhain MWD for irrigation of local golf courses. The Santa Fe Valley Water WRF has an average flow of 0.05 MGD and a treatment capacity of 0.485 MGD.

Olivenhain MWD has an agreement with Rancho Santa Fe CSD to purchase the full tertiary recycled water output of the CSD's Santa Fe Valley Water Reclamation Facility (WRF) for delivery to Olivenhain MWD recycled water customers. The Olivenhain MWD is projected to purchase a total 150 AF of recycled water per year from the Rancho Santa Fe CSD's WRF.

The Whispering Palms CSD operates the Whispering Palms Water Reclamation Facility (WRF). The Whispering Palms WRF provides secondary treatment for an average wastewater flow of 0.29 MGD, with a maximum rated capacity of 0.40 MGD.

Planning for Areas Within/Outside of Sphere

The CSD's and Santa Fe ID have studied the potential for conveyance of secondary effluent from Whispering Palms and Fairbanks Ranch Wastewater Treatment Plants to Rancho Santa

Fe Wastewater Treatment Plant, and construction of tertiary treatment facilities at Rancho Santa Fe Treatment Plant to treat the CSD flows to acceptable levels for recycled water use.

Demineralization or blending with potable water would be required to address high TDS of the CSD effluent. The Rancho Santa Fe Wastewater Treatment Facility is located just outside of the southeastern boundary of the Santa Fe ID service area. Pumping would be required to convey the recycled water supply to the Santa Fe ID's Eastern Service Area storage facilities.

CONCLUSION

Recycled/reclaimed water service represents a significant opportunity for the subject agencies to reduce dependency on regional imported water supplies by replacing potable water irrigation uses with non-potable sources. The agencies have created regional planning efforts such as the North San Diego County Regional Recycled Water Project that will significantly increase the tertiary treatment capacities necessary to produce high-quality recycled water. The project intends to connect areas with high recycled water demands to facilities that can produce enough recycled water to meet the present and projected demands.

These regional planning efforts should continue to explore expansion of its agency membership so that smaller wastewater agencies such as Community Service Districts can be integrated into the regional recycled water treatment and distribution systems.

Other Provided Services

In addition to the subject water and wastewater services, the North County Costal Sphere and MSR agencies are authorized to provide additional services:

- Fairbanks Ranch Community Services District (CSD): street light maintenance and roadside landscape maintenance services.
- Olivenhain Municipal Water District (MWD): hydroelectric generation, and park and recreation services.
- Rancho Santa Fe Community Services District (CSD): landscape maintenance, and utility undergrounding services.
- Whispering Palms Community Services District (CSD): roadside, street sign, and lighting maintenance services.

No changes to these authorized services have been requested by the respective agencies; therefore, no changes are recommended as part of the subject sphere and service review.

CONCLUSION AND RECOMMENDATIONS

The San Dieguito Sphere and MSR conclusions and recommendations confirm that the subject agencies are adequately providing water and wastewater services to the study area. The report recommends that your Commission:

- Affirm the current *larger-than dist*rict spheres of influence for the Leucadia Wastewater District (WWD), Olivenhain MWD, Rancho Santa Fe CSD, and the Whispering Palms CSD;
- Affirm the current *smaller-than district* spheres for the San Dieguito Water District (WD), and the Santa Fe Irrigation District (ID);
- Affirm the *coterminous* spheres for the Carlsbad Municipal Water District (MWD), and the Fairbanks Ranch Community Services District (CSD);
- Affirm the existing *service-specific* spheres for the Olivenhain MWD (Wastewater), and the Rancho Santa Fe CSD (Utility Undergrounding); and,
- Remove the existing special study area designations from the Olivenhain MWD sphere, retain the special study area designations for the sphere of the Rancho Santa Fe CSD (Sun Valley, Bridges Project); and,
- Discuss the potential expansion of the Rancho Santa Fe CSD (Sun Valley) special study area to include the unincorporated portion of the adjacent Flower Hill development area. (Attached map)

Approval of staff recommendations for the spheres of the eight special districts reviewed in the foregoing report is part of a comprehensive sphere review program that will sequentially review and affirm, minimally adjust, or update all spheres in San Diego County. Affirmation of the existing spheres for the Carlsbad MWD; Fairbanks Ranch CSD; Leucadia WWD; Olivenhain MWD; Rancho Santa Fe CSD; San Dieguito WD; Santa Fe ID; and the Whispering Palms CSD will bring these local agencies into compliance with State Law [Government Code § 56425(g)] and San Diego LAFCO Policy L-102, which require review of all spheres at five-year intervals. Municipal Service Review and Sphere of Influence Determinations will be developed for the subject San Dieguito MSR agencies following the Commission's determination of this report.

Staff is also recommending that your Commission discuss the potential need to update LAFCO's Rules regarding special district functions and services. The LAFCO Rules were originally adopted in the 1970s when special districts were first seated on the Commission. As the provision of water and sewer functions and services have evolved over time, there is a need to better define related terms that the special districts use for describing those functions and services. An example is the terms "wastewater" and "recycled water" services, which are currently used by the special districts and regulatory bodies in reference to "sewer" and "reclaimed water" services. Another example is the need to clarify the production and supply of reclaimed/recycled water between special districts. It is therefore,

RECOMMENDED: That your Commission

(1) Find in accordance with the Executive Officer's determination that pursuant to Section 15061(b)(3) of the State CEQA Guidelines, sphere affirmations are not subject to the environmental impact evaluation process because it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment and the activity is not subject to CEQA.

(2) Find in accordance with the Executive Officer's determination that pursuant to Section 15306 of the State CEQA Guidelines, the service review is not subject to the environmental impact evaluation process because the service review consists of basic data collection, research, management, and resource evaluation activities that will not result in a serious or major disturbance to an environmental resource. The project is strictly for information gathering purposes and is a part of a study leading to an action that has not yet been approved, adopted or funded.

(3) For the reasons set forth in the *2012 Five-Year Sphere of Influence and Service Review,* adopt the written statements on file specifying the functions and classes of services and affirm *coterminous* spheres for the Carlsbad Municipal Water District (MWD) and the Fairbanks Ranch Community Services District (CSD); affirm *smaller-than district* spheres for the San Dieguito Water District (WD) and the Santa Fe Irrigation District (ID); affirm *larger-than district* spheres for the Leucadia Wastewater District (WWD), Olivenhain Municipal Water District (MWD), Rancho Santa Fe Community Services District (CSD), and the Whispering Palms Community Services District (CSD); remove the existing special study area designations from the Olivenhain MWD sphere; retain the special study area designations for the sphere of the Rancho Santa Fe CSD (Sun Valley, Bridges Project), and discuss the potential expansion of the Sun Valley special study area to include the unincorporated portion of the adjacent Flower Hill development area.

(4) Discuss the potential need for updating LAFCO's Rules regarding special district functions and services.

(5) Direct the Executive Officer to prepare written Statements of Determinations and associated resolutions, consistent with the recommendations in the May 6, 2013 LAFCO staff report.

Respectfully Submitted,

MICHAEL D. OTT
Executive Officer

ROBERT BARRY, AICP
Local Governmental Analyst III

MDO:RB:trl

Attachments

Subject agencies Sphere maps

North County Coastal (San Dieguito) Water and Wastewater Agencies

MSR/SR 13-20 to 13-27

8

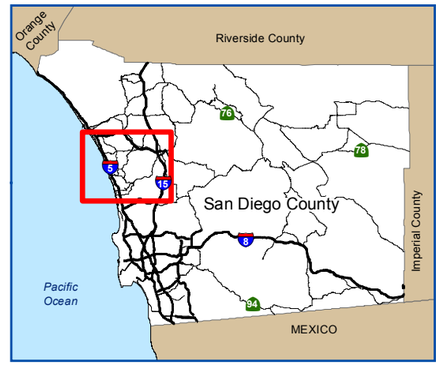
CITY OF OCEANSIDE
CITY OF VISTA
CITY OF SAN MARCOS
CITY OF ESCONDIDO
CITY OF CARLSBAD
CITY OF ENCINITAS
CITY OF SOLANA BEACH
CITY OF DEL MAR
CITY OF SAN DIEGO
CITY OF POWAY

BUENA VISTA LAGOON
AQUA HEDIONDA LAGOON
BATIQUITOS LAGOON
SAN ELIJO LAGOON
LAKE HODGES
Pacific Ocean

Carlsbad MWD
Leucadia Wasterwater District
Olivenhain MWD
San Dieguito WD
Rancho Santa Fe CSD
Santa Fe ID
Fairbanks Ranch CSD
Whispering Palms CSD

LEGEND

- Carlsbad MWD
- Fairbanks Ranch CSD
- Leucadia Wastewater District
- Olivenhain MWD
- Rancho Santa Fe CSD
- San Dieguito WD
- Santa Fe ID
- Whispering Palms CSD



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File: G:/GIS/PROJECTS/Vicinity Maps/agendamaps2013.mxd
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Carlsbad MWD

MSR/SR 13-20

LEGEND

- Carlsbad MWD
- Sphere of Influence (SOI)

SOI Adopted: 9 / 9 / 85
SOI Affirmed: 11 / 7 / 05
SOI Affirmed: 8 / 6 / 07

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CITY OF OCEANSIDE
CITY OF VISTA
CITY OF CARLSBAD
CITY OF SAN MARCOS
CITY OF SAN MARCOS
CITY OF ENCINITAS
Sphere of Influence
Carlsbad MWD
BUENA VISTA LAGOON
AQUA HEDIONDA LAGOON
BATIQUITOS LAGOON
Pacific Ocean
MARRON RD
COLLEGE BL
EMERALD DR
LAKE BL
CANNON RD
MAR VISTA DR
S MELROSE DR
W SAN MARCOS BL
EL FUERTE ST
POINSETTIA LN
MELROSE DR
RANCHO SANTA FE RD
LEVANTE ST
LA COSTA AV
AVENIDA ENCINAS
PALOMAR AIRPORT RD
CARLSBAD BL
CARLSBAD VILLAGE DR
TAMARACK AV
BASSWOOD AV
EL CAMINO REAL
VISTA WY
S COAST HY
78
5

N W E S
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Fairbanks Ranch CSD

MSR/SR 13-21

LEGEND

- Fairbanks Ranch CSD
- Sphere of Influence (SOI)

SOI Adopted: 9 / 14 / 87
SOI Affirmed: 8 / 6 / 07

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File: G:/GIS/PROJECTS/Maps11x17/Sangis/Districts/CSD_Fairbanks.mxd
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Fairbanks Ranch CSD
Sphere of Influence
UNINCORPORATED SAN DIEGO COUNTY
CITY OF SAN DIEGO
MONTIEN
ILUMINADO
PRIVATE RD
LA GRACIA
EL ZORRO VISTA
LAS COLINAS
ARTESIAN RD
ZUMAQUE
AVNDA DE POMPEII
RIO VISTA RD
EL SICOMORO
CALZADA DEL BOSQUE
VIA DE SANTA FE
VIA DE LA VALLE
THE RIVER RD
EL APAJO
CALLE CAMPOSECO
CIRCA DEL NORTE
AVNDA PICACHO
CALLE MAYOR
AVNDA ALTERAS
SAN DIEGUITO RD
VIA CANADA DEL OSITO
VIA DOS VALLES
VIA LAGO AZUL
CAM DE MONTECILLO
VIA CUESTA VERDE
CAM SIERRA DEL SUR
CIRCA ORIENTE
CALLE SERENA
VIA CAZADERO
CIRCA DEL SUR
PRIVATE DY
RANCHO DIEGUENO RD
LA TENISTA
PASEO VALENCIA
SPYGLASS LN
ST ANDREWS RD
PLEIN AIR
ENCENITO
VIA AZUL
VIA BERGAMO
CAM DE LA LUNA
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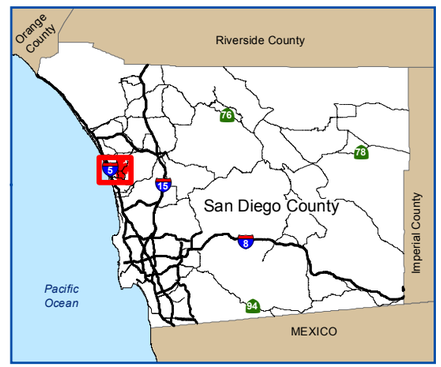
Leucadia Wastewater District

MSR/SR 13-22

LEGEND

- Leucadia WWD
- Sphere of Influence (SOI)

SOI Adopted: 9 / 10 / 84
SOI Affirmed: 8 / 6 / 07



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File: G:/GIS/PROJECTS/Maps11x17/Sangis/Districts/WWD_Leucadia.mxd
Printed April 2013.

CITY OF CARLSBAD
CITY OF SAN MARCOS
CITY OF ENCINITAS
UNINCORPORATED SAN DIEGO COUNTY
Sphere of Influence
Leucadia WWD
Pacific Ocean
BATIQUITOS LAGOON
CARLSBAD BL
AVNDA ENCINAS
EL CAM REAL
S RANCHO SANTA FE RD
SAN ELIJO RD
LA COSTA AV
LEVANTE ST
CALLE BARCELONA
OLIVENHAIN RD
N COAST HIGHWAY 101
LEUCADIA BL
S COAST HIGHWAY 101
N EL CAM REAL
S EL CAM REAL
N RANCHO SANTA FE RD
ENCINITAS BL
SANTA FE DR
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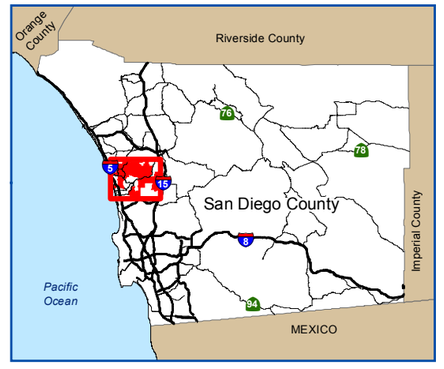
Olivenhain MWD

MSR/SR 13-23

LEGEND

- Olivenhain MWD
- Sphere of Influence (SOI)
- Sewer Service Area
- Sewer Service Area SOI
- Special Study Area

Water SOI Adopted: 6 / 4 / 84
Sewer SOI Adopted: 2 / 2 / 98
SOIs Updated: 5 / 2 / 05
SOIs Affirmed: 8 / 6 / 07



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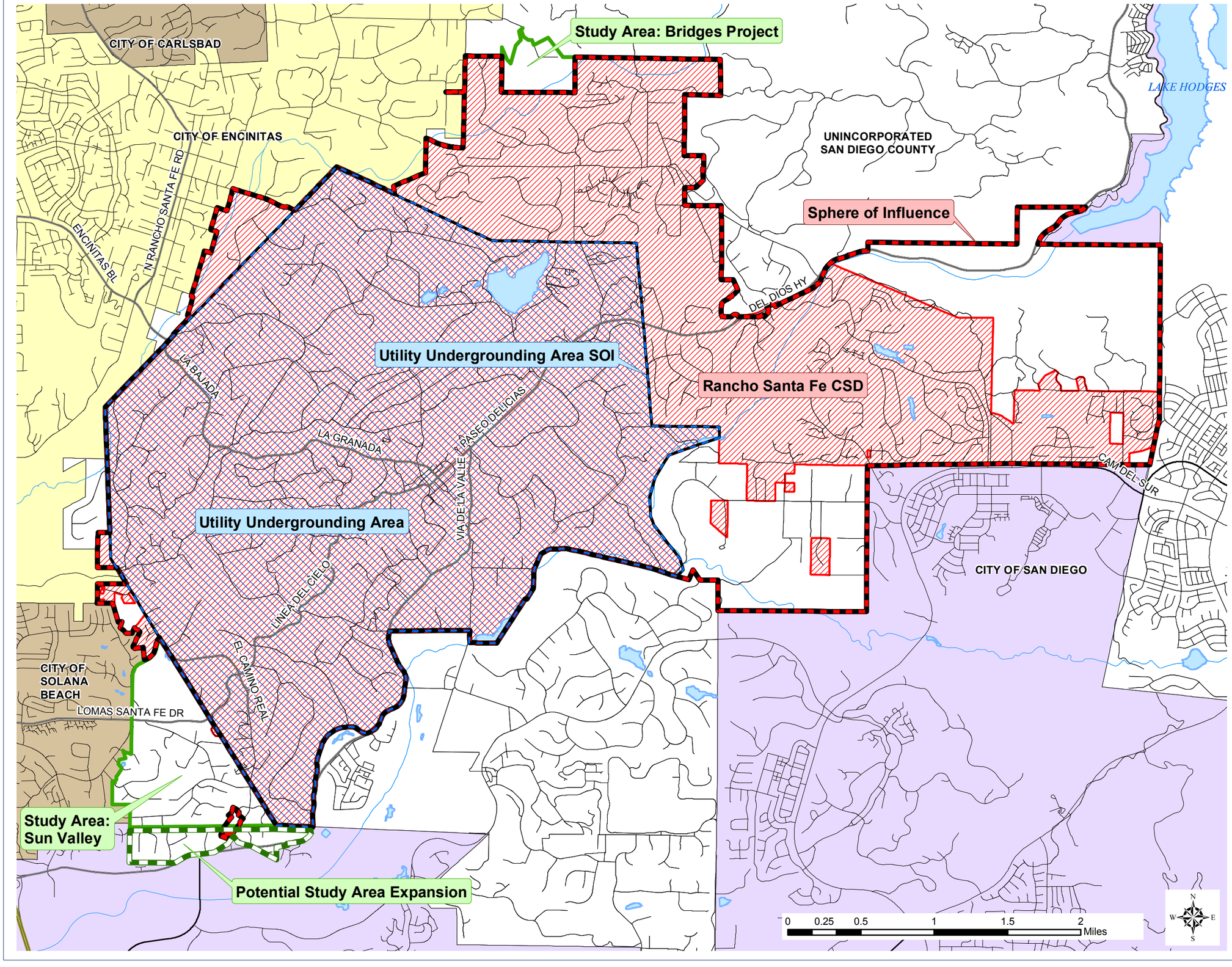
CITY OF CARLSBAD
CITY OF SAN MARCOS
CITY OF ESCONDIDO
BATIQUITOS LAGOON
EL CAMINO REAL
RANCHO SANTA FE RD
OLIVENHAIN RD
Sewer SOI
Olivenhain MWD
DEL DIOS HWY
LAKE HODGES
Sewer Service Area
ENCINITAS BL
CITY OF ENCINITAS
N RANCHO SANTA FE RD
UNINCORPORATED SAN DIEGO COUNTY
Sphere of Influence
S COAST HIGHWAY 101
LA BAJADA
GRANADA
PASEO DELICIAS
LINEA DEL CIELO
SAN ELIJO LAGOON
EL CAMINO REAL
LOMAS SANTA FE DR
CITY OF SOLANA BEACH
Pacific Ocean
CITY OF SAN DIEGO
VIA DE LA VALLE
CAMINO DEL MAR
CITY OF DEL MAR
Study Area
N W E S
0 0.5 1 2 3 Miles

Rancho Santa Fe CSD

MSR/SR 13-24

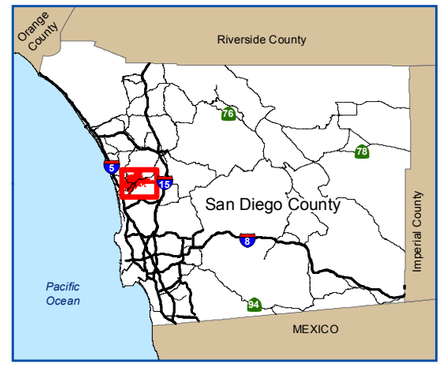


LEGEND

- Rancho Santa Fe CSD
- Sphere of Influence (SOI)
- Utility Undergrounding Area
- Utility Undergrounding Area SOI
- Special Study Area
- Potential Study Area Expansion

SOI Adopted: 11 / 7 / 83
SOI Updated: 5 / 2 / 05
SOI Affirmed: 8 / 6 / 07

Utility Undergrounding SOI
Adopted: 4 / 5 / 10



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San Dieguito Water District

MSR/SR 13-25

LEGEND

- San Dieguito WD
- Sphere of Influence (SOI)

SOI Adopted: 6 / 4 / 84
SOI Affirmed: 11 / 7 / 05
SOI Affirmed: 8 / 6 / 07

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San Dieguito WD

Sphere of Influence

CITY OF CARLSBAD

CITY OF ENCINITAS

CITY OF SOLANA BEACH

CITY OF SAN MARCOS

UNINCORPORATED SAN DIEGO COUNTY

CITY OF SAN DIEGO

BATIQUITOS LAGOON

SAN ELIJO LAGOON

Pacific Ocean

LA COSTA AV

LEUCADIA BL

ENCINITAS BL

SANTA FE DR

BIRMINGHAM DR

MANCHESTER AV

LOMAS SANTA FE DR

SAN ELIJO RD

OLIVENHAIN RD

CALLE BARCELONA

LA BAJADA

LA GRANADA

LINEA DEL CIELO

VIA DE LA VALLE

PASEO DELICIAS

DEL DIOS HY

EL CAMINO REAL

N EL CAM REAL

S EL CAM REAL

N RANCHO SANTA FE RD

S RANCHO SANTA FE RD

N COAST HIGHWAY 101

S COAST HIGHWAY 101

N HIGHWAY 101

I-5

0 0.5 1 2 3 4 Miles

N W E S

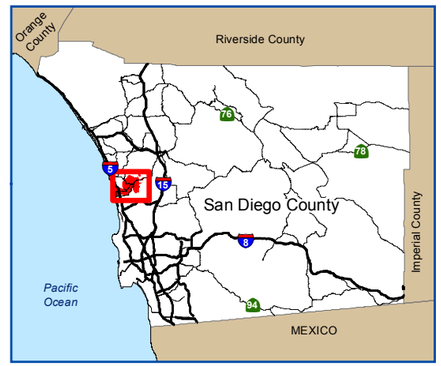
Santa Fe Irrigation District

MSR/SR 13-26

LEGEND

- Santa Fe ID
- Sphere of Influence (SOI)

SOI Adopted: 6 / 4 / 84
SOI Affirmed: 8 / 6 / 07



SAN DIEGO LAFCO

SanGIS
We Have San Diego Covered!

This map has been prepared for descriptive purposes only and is considered accurate according to the GIS and LAFCO data.

File: G:/GIS/PROJECTS/Maps11x17/Districts/ID_Santa_Fe.mxd
Printed April 2013.

Santa Fe ID

Sphere of Influence

Santa Fe ID SOI

CITY OF ENCINITAS

CITY OF SOLANA BEACH

CITY OF DEL MAR

UNINCORPORATED SAN DIEGO COUNTY

CITY OF SAN DIEGO

N EL CAMINO REAL

ENCINITAS BL

N RANCHO SANTA FE RD

SANTA FE DR

BIRMINGHAM DR

S EL CAMINO REAL

MANCHESTER AV

SAN ELIJO LAGOON

N HIGHWAY 101

S HIGHWAY 101

CAM DEL MAR

LOMAS SANTA FE DR

LA BAJADA

LA GRANADA

PASEO DELICIAS

LINEA DEL CIELO

EL CAMINO REAL

VIA DE LA VALLE

DEL DIOS HY

CARMEL VALLEY RD

Pacific Ocean

0 0.5 1 1.5 2 Miles

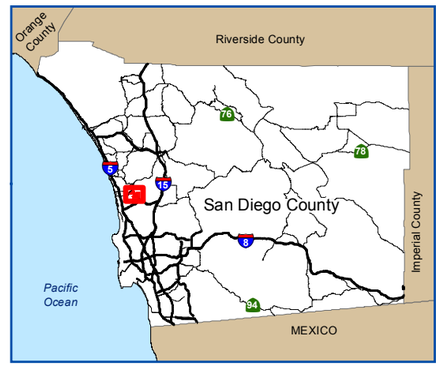
Whispering Palms CSD

MSR/SR 13-27

LEGEND

- Whispering Palms CSD
- Sphere of Influence (SOI)

SOI Adopted: 11 / 5 / 84
SOI Affirmed: 8 / 6 / 07



SAN DIEGO LAFCO

SanGIS
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This map has been prepared for descriptive purposes only and is considered accurate according to the GIS and LAFCO data.

File: G:/GIS/PROJECTS/Maps11x17/Sangis/District /CSD_Whispering.mxd
Printed April 2013.

UNINCORPORATED SAN DIEGO COUNTY

CITY OF SAN DIEGO

Whispering Palms CSD

Sphere of Influence

0 0.25 0.5 1 1.5 2 Miles

6

May 1, 2013

Mr. Michael Ott, Executive Director
San Diego Local Agency Formation Commission
VIA EMAIL TRANSMISSION ONLY

SUBJECT: Five Year Sphere of Influence and Service Review: North County Coastal (San Dieguito) Water and Wastewater Agencies

Dear Mr. Ott,

Thank you for the opportunity to review the subject report. This letter transmits the joint comments of the Santa Fe Irrigation District (SFID) and San Dieguito Water District (SDWD) regarding the report. As you are aware, our two Districts have enjoyed a long standing partnership providing water service to our respective communities that dates back to the 1920's and the early development of water service in the region. This partnership is memorialized in a Joint Exercise of Powers Agreement (Agreement) between the two agencies that governs local surface water supply ownership, as well as the ownership and operation of joint water transmission, storage and treatment facilities.

As a result of our review of the report, we propose minor clarifications to the report. The attached redline sections excerpted from the report show the revisions we propose.

Once again, thank you for the opportunity to review the report, provide comments and participate in this process. If you need additional information, please contact either of us.

Regards,

Michael J. Bardin
General Manager
Santa Fe Irrigation District

/kj

Attachment

Glenn Pruim
General Manager
San Dieguito Water District

Santa Fe Irrigation District
5920 Linea Del Cielo
Rancho Santa Fe, CA 92067
(858) 756-2424

San Dieguito Water District
505 Vulcan Avenue
Encinitas, CA 92024
(760) 633-2763

Attachment

Proposed Revisions

Five Year Sphere of Influence and Service Review:
North County Coastal (San Dieguito) Water and Wastewater Agencies Report

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PAGE 17

District Sphere of Influence:	LAFCO approved a sphere-of-influence for the San Dieguito WD in 1984 that was smaller than the district boundary. The approved sphere remained the same after the incorporation of the City of Encinitas and was affirmed by LAFCO in 2005 and 2007.
Special Study Areas:	None
Status of current sphere:	No sphere or jurisdictional changes have occurred since the 2007 affirmation of the smaller-than-district sphere and no new information that would warrant a sphere change has been presented. District responses to the *2012 Sphere of Influence and Service Review* indicate that no proposals for a sphere change or jurisdictional change are anticipated.
RECOMMENDATION:	It is recommended that the existing smaller-than-district sphere for the San Dieguito WD be affirmed. ~~The Santa Fe ID has informally discussed the merits of consolidating with the San Dieguito WD, but no actions have been taken regarding this possible jurisdictional change.~~

PAGE 39

~~Santa Fe ID and San Dieguito WD have discussed potential options to consolidate operations as part of their joint facilities planning efforts. Additional study and discussion between the agencies is anticipated because of their long-term operational relationship and joint ownership of facilities and infrastructure.~~ Santa Fe ID continues to plan and work collaboratively with San Dieguito WD and other agencies to optimize the operation of the jointly owned water system, maximize the usage of local water resources and integrate operations where practical and cost effective.

Santa Fe ID is a member agency of the North San Diego County Regional Recycled Water Project, which is a cooperative of ten local agencies to study greater interconnection and development of northern San Diego County's recycled water infrastructure. This regional recycled water supply project could potentially supply a demand of 16,554 AF. The member agencies are coordinating efforts to obtain funding opportunities for the regional project.

Santa Fe ID participates in the San Diego Integrated Regional Water Management Plan, which is intended to integrate local water resources planning across jurisdictional boundaries.

Santa Fe Irrigation District

May 17, 2013

Mr. Michael Ott, Executive Director
San Diego Local Agency Formation Commission
VIA EMAIL TRANSMISSION ONLY

6

SUBJECT: Five Year Sphere of Influence and Service Review: North County Coastal (San Dieguito) Water and Wastewater Agencies – ***Additional Comments***

Dear Mr. Ott,

We previously submitted comments to you, in a joint letter from Santa Fe Irrigation District and San Dieguito Water District, regarding the subject report on May 1, 2013. Thank you for the additional time allowed to more thoroughly review and comment on this report.

As a result of our additional review of the report, we propose minor clarifications to the report, as noted below:

Corrections:

- **Page 17, Abstract:** This states that SFID was formed by property owners in the area east of Carlsbad and south of Escondido. We do not have any records of property owners in that location forming the SFID. SFID was formed in 1923 by property owners under the California Irrigation District Act. Those property owners were located in the Rancho Santa Fe Community located east of the current City of Solana Beach and south of the current City of San Marcos.

- **Page 17, Services:** In addition to potable water service, SFID is authorized to provide recycled water service and hydroelectric power generation.

- **Page 18**, Annual District adopted budget (FY 2012-2013): The SFID's operating budget is $22,236,249.

- There are inconsistencies with the number of member agencies in the North San Diego County Regional Recycled Water Expansion Project. The correct number is ten. The following are page numbers where the numbers vary:

    - **Pg 27** – "Carlsbad MWD is also participating **with eight** local agencies to develop a regional recycled"

- **Pg 30** – "Olivenhain MWD is a member agency of the North San Diego County Regional Recycled Water Project, which is a cooperative with **seven** other agencies"

- **Page 60,** under the title, "Planning for Areas Within/Outside of Sphere" the information can be updated. The SFID completed a recycled water pipeline extension project and the County's San Dieguito Park has been converted to 100% recycled water irrigation.

- **Page 60,** under Connection/EDU's, use 500 AFY for recycled water deliveries (this is consistent with page 59 and more accurate).

- **Page 62, Other Provided Services:** Include hydroelectric generation for SFID.

Additions:

- **Page 18**, under Financial: Note that SFID has a "AAA" credit rating from Standard and Poor's.

Once again, thank you for the extended opportunity to review the report, provide comments, and participate in this process. If you need additional information, please contact me.

Regards,

Michael J. Bardin
General Manager

/kj

OLIVENHAIN
Municipal Water District

May 16, 2013

6

Michael Ott
San Diego LAFCO
9335 Hazard Way, Suite 200
San Diego, CA 92123

RE: Five-Year Sphere of Influence (SOI) and Service Review

Dear Mike:

As discussed at the May 6, 2013 LAFCO meeting, below please find Olivenhain Municipal Water District's (OMWD's) comments with respect to the above-mentioned review. We appreciate the extension of time granted by LAFCO for us to review and comment on the report.

First of all, we wish to thank you for producing a truly excellent report. In general, OMWD is in agreement with the recommendations and suggestions posed therein; at the same time, it is such an important document that we strongly feel it can be a tool for even greater partnerships and opportunities for collaboration if given the full attention it merits. It is in that spirit that we requested additional time to comment, coordinate with other agencies, and provide the input and recommendations that are summarized below. These are separated into categories for ease of reference.

General Comments
The following bullet points summarize OMWD's general takeaways from the SOI report.

1. The report is a great summary of water, wastewater, and recycled water agencies in the San Dieguito study area.

2. According to this report, San Dieguito Water District (SDWD) and Santa Fe Irrigation District (SFID) are apparently the only agencies that are discussing the merits of consolidating with each other. All agencies could participate in those discussions with the goal of helping to pinpoint best management practices and exploring yet more consolidation opportunities amongst other agencies.

3. The report concludes that LAFCO should discuss supporting operations consolidation opportunities and potential for shared facilities and infrastructure, but makes no specific recommendations as to the "what" and "how" of what should be discussed. Barring any recommendations, further discussion would not occur for another 5 years when the next update is prepared.

4. According to the report, the CSDs and SFID are studying the possibility of conveying their secondary wastewater up to the Rancho Santa Fe CSD plant and treating it to tertiary and demineralizing it for sale to SFID. OMWD has talked to the CSDs in the past at the staff level about them selling us recycled water. SFID has recently indicated that it is not actively in discussions to buy recycled water from the CSDs at this time. Most of the CSDs overlap within OMWD's water service area. **OMWD strongly feels that this issue should be studied further amongst the CSDs, SFID and OMWD. LAFCO could facilitate these discussions for supply of service, shared services and even potential consolidations.** The CSDs are disposing of treated wastewater that is a vital and much needed resource to water agencies. By way of example, the report states that Whispering Palms is isolated with respect to other agency infrastructure in terms of recycled water but it is right next to some of OMWD's biggest users, including the Morgan Run Golf Course. If Whispering Palms added tertiary capacity, OMWD could easily incorporate that water into our system. LAFCO may be the perfect entity to bring all of these agencies (SFID, OMWD, CSDs) to the table to resolve these issues to the betterment of all the agencies and the region.

5. OMWD is comfortable with all of the sphere commitments and the removal of special study areas recommended in the report. OMWD resolved its two areas via out of service agreements and these are non-issues for us now.

6. There is a suggestion at the end of the report (Page 63) that the commission "clarify the production and supply of reclaimed/recycled water between special districts." OMWD is extremely concerned with the potential impacts of this clarification and **strongly suggests that this issue be sent to the LAFCO Special Districts Advisory Committee for review and vetting** with a recommendation to LAFCO from the Advisory Committee.

Questions/Concerns

1. Although the report indicates that OMWD is well suited to take recycled water from the CSDs if it were available (see p. 58), the report further says on p. 61 that SFID could take this water if there was demineralization. Why is demineralization needed in one instance but not the other? Also, why would wastewater at the CSDs be of such a different nature than what we see everywhere else?

Technical Comments

1. This review shows OMWD getting 97% of our water from SDCWA on p.10 but 100% on p.27. The correct amount is 100% of its potable water supply. Approximately 14% of OMWD's total water supply is recycled.

2. The list of recycled water areas (see p. 11) omits all of 4S Ranch, Crosby Estates, and Santa Fe Valley where OMWD serves recycled water.

3. The quantities of water shown on p. 11, second paragraph, are inaccurate and don't match those given on p. 27.

4. The reference to the Unit AA pipeline on p. 28 should now state that the project is complete.

5. There are more numerical inconsistencies between acre feet and metered connections data at the bottom of p. 28 and data on p. 27.

6. There are numerical inconsistencies between the third and fourth paragraphs on p. 47. The fourth paragraph is more accurate regarding the average flow volume.

7. The list of water reclamation plants on p. 54 omits the 4S Ranch Water Reclamation Facility and Meadowlark WRF, both of whom are major contributors to recycled water in this area. Vallecitos Water District, who operates the Meadowlark WRF, is omitted from this report, but they are a player in a number of ways. They provide wastewater treatment and recycled water services within Carlsbad and OMWD's sphere of influence; they are also a part of a JPA for the Encina Wastewater Authority.

8. The San Elijo Joint Powers Authority (SEJPA) is not included in the list of recycled water providers on pages 5 and 6. They should be added as they produce and distribute recycled water, which OMWD, SFID and SDWD all procure and deliver to the cities of Encinitas, Solana Beach, Del Mar, and San Diego.

9. OMWD does not operate the Olivenhain Reservoir as indicated on p. 28; it is operated by the San Diego County Water Authority.

Thank you again for the opportunity to participate in this highly important initiative and provide comment. Please do not hesitate to ask if you have any questions concerning this summary. OMWD is committed to assisting in this process.

Regards,

Kimberly A. Thorner

Kimberly A. Thorner, Esq.
General Manager

cc: OMWD Board of Directors