SAN DIEGO LAFCO

Draft

Municipal Service Review and Sphere of Influence Update

for the

Municipal Water Districts within the Bonsall and Pala Hydrologic Sub Area

Rainbow Municipal Water District
San Luis Rey Municipal Water District
Valley Center Municipal Water District

October 2006



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MUNICIPAL SERVICE REVIEW AND SPHERE OF INFLUENCE UPDATE FOR THE MUNICIPAL WATER DISTRICTS WITHIN THE BONSALL AND PALA HYDROLOGIC SUBAREA

SAN DIEGO COUNTY LOCAL AGENCY FORMATION COMMISSION

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ACRONYM LIST

AAD	average annual demand
ADD	average daily demand
ac	acre
AF	acre-feet
ADWF	average dry weather flow
afy	acre-feet per year
asl	above sea level
cfs	cubic feet per second
CIP	capital improvement program
du	dwelling unit
du/ac	dwelling unit per acre
EDU	equivalent dwelling unit
ERAF	Educational Revenue Augmentation Fund
GIS	geographic information system
HGL	hydrologic grade line
lf	linear feet
MDD	maximum daily demand
gpd	gallons per day
gpd/ac	gallons per day per acre
gpm	gallons per minute
LAFCO	Local Agency Formation Commission
LAIF	Local Agency Investment Fund
mg	million gallons
mgd	million gallons per day
MWD	Metropolitan Water District
psi	pounds per square inch
CEQA	California Environmental Quality Act
RMWD	Rainbow Municipal Water District
RWQCB	State of California Regional Water Quality Control Board
SANDAG	San Diego Association of Governments
SOI	Sphere of Influence
SWRCB	State Water Resources Control Board
SDCWA	San Diego County Water Authority
SLRMWD	San Luis Rey Municipal Water District
USGS	United States Geologic Survey
VCMWD	Valley Center Municipal Water District
WWTP	wastewater treatment plant
YMWD	Yuima Municipal Water District

1.0 INTRODUCTION TO THE MUNICIPAL SERVICE REVIEW AND SPHERE OF INFLUENCE UPDATES

Municipal Service Review Requirements

The Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (the Act) requires that comprehensive studies, known as Municipal Service Reviews (MSR), be conducted for all cities and special districts that provide municipal services. The term "municipal services" generally refers to the full range of services that a public agency provides or is authorized to provide. The primary goal of the MSR is to gather and evaluate information in order to make the following nine determinations that are required by the Act. San Diego Local Agency Formation Commission (LAFCO) has developed MSR guidelines; including standards for analysis to explain and clarify the required determinations (San Diego LAFCO's MSR Guidelines are included in Appendix A).

1. Infrastructure needs or deficiencies
2. Growth and population projections for the affected area
3. Financing constraints and opportunities
4. Cost avoidance opportunities
5. Opportunities for rate restructuring
6. Opportunities for shared facilities
7. Government structure options
8. Evaluation of management efficiencies
9. Local accountability and governance

Pursuant to the Act, MSRs are to be conducted before or in conjunction with updating an agency's Sphere Of Influence (SOI). A SOI is defined as a plan for the probable physical boundaries and service area of a local agency, and is determined by LAFCO. Characterized as a planning tool, a SOI provides guidance in reviewing individual proposals, promotes efficient service provision, and prevents duplication of service responsibilities. As a tool for long-range planning, a SOI may be used as one factor in forecasting an agency's future service needs within a geographic area in order to anticipate infrastructure planning and financing.

Responding to the revision in State Law, San Diego LAFCO initiated its MSR program in 2002 after adopting service review guidelines, as included in Appendix A. The guidelines provide the procedures to fulfill the municipal services review program. In addition to identifying goals and objectives, the Commission's guidelines provide direction in determining geographical boundaries, preparing the report, and defining which services and agencies to address.

Sphere of Influence Requirements

In conjunction with the requirement to conduct MSRs, the Act obligates LAFCO to review and update, as necessary, SOIs for each local agency within LAFCO's jurisdiction. As mentioned previously, SOIs are defined as a plan for the probable physical boundaries and service area of a local government agency. A SOI is considered to be a planning tool that is designed to provide guidance in reviewing proposals, promoting the efficient provision of municipal services, and preventing duplication of service responsibility. In determining a SOI, the Commission is required pursuant to Government Code Section 56425 to consider specific factors and make written determinations related to:

1. Present and planned land uses in the area, including agricultural and open space lands
2. Present and probable need for public facilities and services in the area
3. Present capacity of public facilities and adequacy of public services that the agency provides or is authorized to provide
4. Existence of any social and economic communities of interest in the area

Each of these factors are discussed for each agency, and written determinations are included within this document.

Background

Over the last several years, the level of proposed development involving territory near the intersection of Interstate 15 (I-15) and State Route 76 (SR-76) has increased significantly. Pressure to develop this area can be linked to the position promulgated by the San Diego Association of Governments (SANDAG) to encourage development along transportation corridors. In addition, the County of San Diego is currently undertaking an update of its General Plan. Known as GP 2020, the proposed General Plan utilizes land use designations and zoning specifications to support SANDAG's strategy. Associated with the accelerated development pressure in this area are service provision issues, particularly water, sewer, and recycled water. Located in this region are the Rainbow, San Luis Rey, and Valley Center Municipal Water Districts.

Supplying imported water to San Diego County is the responsibility of the San Diego County Water Authority (SDCWA) and the Metropolitan Water District of Southern California (MWD), which import and distribute water to the region via the member agencies. While Rainbow MWD (RMWD) and Valley Center MWD (VCMWD) are members and already are in the business of selling water to customers, the San Luis Rey MWD (SLRMWD) is not. Thus, to be eligible to access imported water for commercial distribution, SLRMWD would have to gain membership to SDCWA and annex to both SDCWA and MWD in addition to obtaining approval by LAFCO to exercise latent powers for water and wastewater service provision.

LAFCO staff concluded that the preparation of an MSR and SOI Update Study that focused on this area would help resolve jurisdictional issues associated with the provision of water, wastewater, and reclaimed water services in that region. It should be noted that both RMWD and VCMWD already supply wastewater service to limited areas within each District's boundary. SLRMWD does not furnish wastewater service and is not legally authorized to do so. Authorization for SLRMWD to exercise its wastewater latent powers would need to be obtained from LAFCO.

Currently, neither RMWD nor SLRMWD provides recycled water service. Two of VCMWD's wastewater treatment facilities utilize reclaimed water. Moreover, the District is committed to expanding the use of recycled water and has adopted a Mandatory Reclaimed Water Use Ordinance, which requires that new developments install facilities if the reclaimed water usage is feasible.

Although a portion of the service areas of the Fallbrook Public Utility District, the Vista Irrigation District, and the Yuima MWD are located in the geographical boundary defined for the Bonsall and Pala Hydrologic Subareas MSR, those agencies were not identified as having a direct relationship to the area experiencing increased development pressure and have not been included in this MSR/SOI Update Study.

In late 2005, LAFCO staff authorized SLRMWD to prepare an MSR/SOI Update Study proposal. In 2006, the District finalized a contractual arrangement with a consultant to prepare the reports. To complete the MSR/SOI Update Study, a Request for Information (RFI) survey was developed and distributed to the three MWDs. In addition, based on an inquiry from Yuima MWD, an RFI was completed and submitted by that agency for review. However, the conclusion was reached that an evaluation of Yuima MWD should be included in a separate study.

San Diego LAFCO's Role and Responsibility and MSR Methodology

Pursuant to the Act and San Diego LAFCO's service review guidelines, San Diego LAFCO is the agency ultimately responsible for the MSR and also the agency directing preparation of the MSR. This includes the following:

- LAFCO has determined the geographic boundary and agencies that are included within this MSR.
- LAFCO has determined the schedule, procedure, and content for the MSR.
- LAFCO has prepared, in coordination with participating agencies, the Request for Information (RFI) for the MSR.
- LAFCO has established an MSR Working Group Committee to meet regularly throughout the MSR process and provide technical and policy suggestions to LAFCO staff.
- LAFCO is responsible for public review of the MSR and adoption of the MSR by the LAFCO Commission.

This MSR project began with a Working Group Meeting to discuss the scope, process, milestones, and process for the project. Data from each of the agencies was collected through agency completion of detailed RFIs. The RFI information was clarified and supplemented through written and verbal discussions with each of the Districts, as well as with LAFCO staff. After the data for each agency was compiled and analyzed, the agencies had the opportunity to review, comment, and clarify the data for their own agency. In addition, a series of public Working Group Meetings with District and LAFCO staff were held to discuss the project's procedures, milestones, timelines, and service and boundary-related issues to be evaluated within the MSR.

Municipal Service Review Area and Agencies Included

This MSR includes the municipal water districts (MWD) that are located within the Bonsall and Pala Hydrologic Subareas. The subareas are located in northern San Diego County and bisected by Interstate 15 (I-15). Specifically, the subareas are bounded by Riverside County to the north and unincorporated County areas to the east. The Camp Pendleton Marine Corps Base and the Cities of Oceanside and Vista are located to the west, and the City of Escondido is located to the south.

Specifically, this MSR and the Bonsall and Pala Hydrologic Subareas include the Rainbow MWD, Valley Center MWD, and the San Luis Rey MWD. The location of the Hydrologic Subarea and Districts are shown in Figure 1.1. In addition, an aerial of each District and its existing SOI is provided in Figure 1.2. Each of the agencies included within this MSR is discussed in detail, including both existing and planned services. Both MSR and SOI determinations are included for each of the agencies.

Reserves

In the context of this MSR, the term "reserves" refers to unrestricted funds that could be made available for whatever purposes are deemed necessary by an agency's board of directors. On May 4, 2000, a Public Finance Special Report issued by Fitch IBCA (an International Rating Agency) recounted that, "Maintaining an operating reserve or 'rainy day fund' is perhaps the most effective practice that can enhance an issuer's credit rating" (page 2). However, according to the Government Finance Officers Association, a significant level of reserve funds should not of itself be interpreted as evidence of overall economic health. For example, a local agency could increase a reserve fund by obtaining a long-term debt. Although rating agencies that evaluate an entity's creditworthiness are likely to favor high reserve levels, other groups, consisting of taxpayers, citizens, or union members, may view high levels of reserves as an indication that taxpayers' money is being horded.

While the California Constitution and the statutes that empower local governments contain provisions for fiscal management, no standards for managing reserves have been adopted. Government Code Section 53600 et seq. defines the objectives for safeguarding principal, meeting liquidity needs, and achieving a return on investments, but offers no direction regarding accumulating or using reserve funds. While annually collecting local agency financial reports with information about reserves, the County Auditor does not assess the economic well being of individual agencies based on reported reserve fund levels. "Moreover, it appears there are no universally accepted standards upon which decision-makers may rely in determining what level of reserves to maintain" (San Diego LAFCO Southern San Diego County Water and Sewer Municipal Service Review, Page 31). Even though no standards for reserve funds have been approved by the State, there is a widely accepted belief that decisions concerning these funds should be shaped by policy.

Organization of the Document

The document is organized in a manner that provides a complete picture of each agency. Therefore, a complete discussion and evaluation of each agency is provided in a section dedicated to the agency. The evaluations include the required determinations for both the MSR and SOI Update. The following list provides the section number for each municipal water district.

- Section 2.0: Rainbow MWD
- Section 3.0: San Luis Rey MWD
- Section 4.0: Valley Center MWD

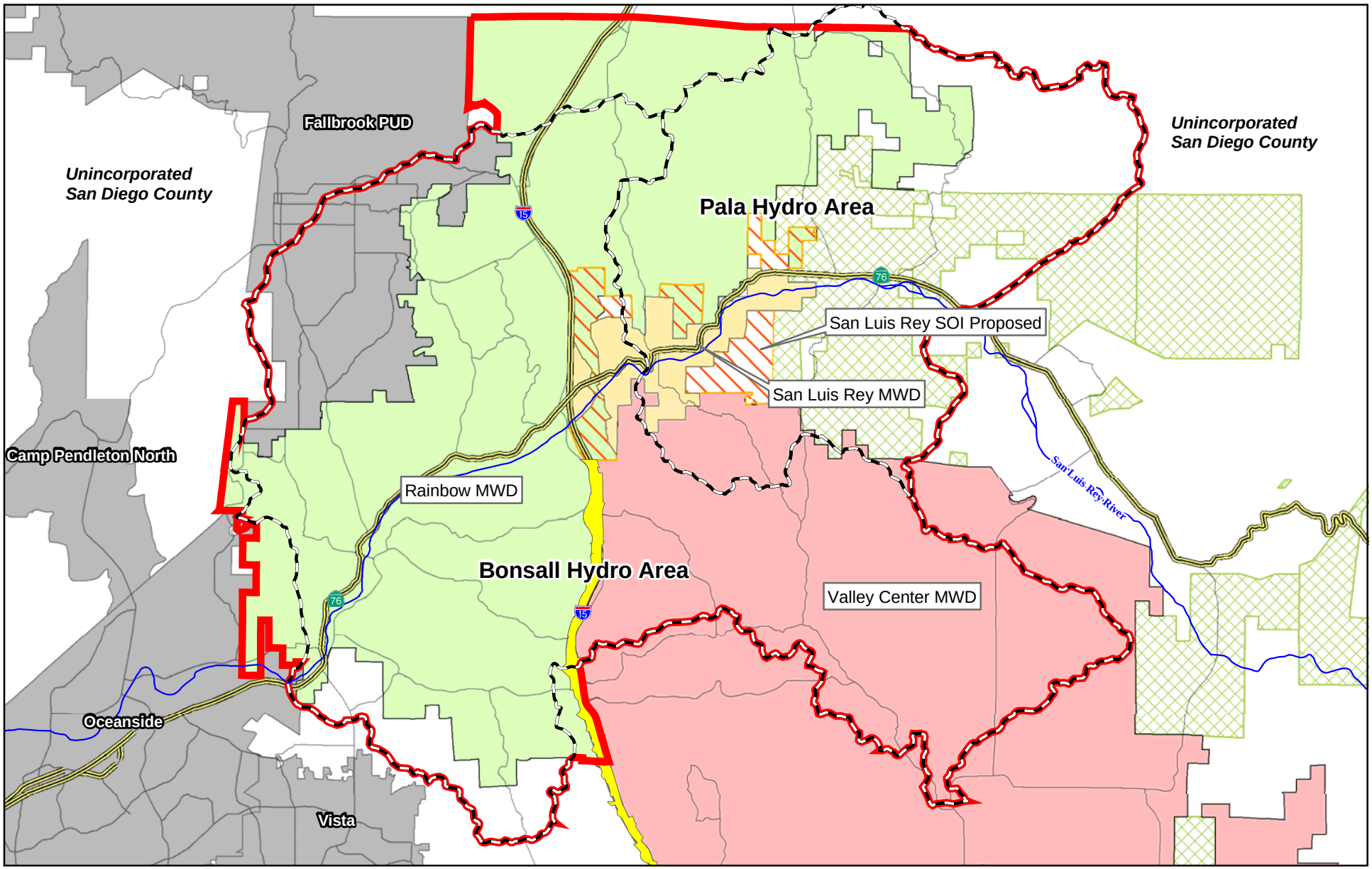


FIGURE 1.1

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SOURCE: SANGIS (2004)

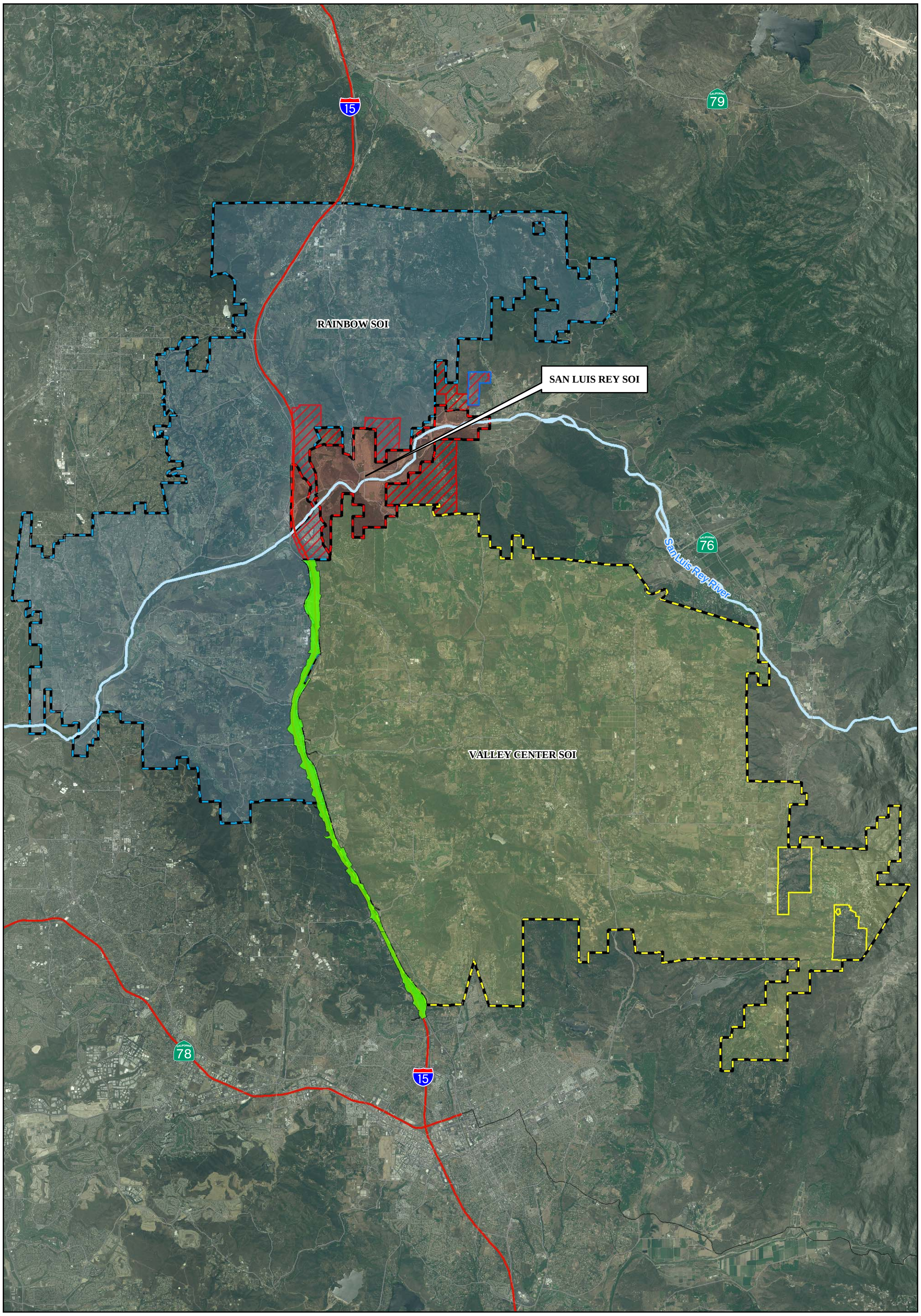
LEGEND

- MSR/SOI Update Study Boundary
- Bonsall and Pala Subareas
- San Luis Rey MWD SOI
- San Luis Rey Proposed MWD SOI
- Rainbow MWD
- Valley Center MWD
- Special Study Area
- Pala Indian Reservation

San Diego LAFCO MSR and SOI Update

Bonsall and Pala Hydrologic SubAreas

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LEGEND

- Special Study Area
- Existing San Luis Rey MWD Sphere of Influence
- San Luis Rey MWD/ SDCWA and MWD Boundary
- Proposed San Luis Rey MWD Sphere of Influence
- Rainbow MWD Sphere of Influence
- Rainbow MWD/ SDCWA and MWD Boundary
- Valley Center MWD Sphere of Influence
- Valley Center MWD/ SDCWA and MWD Boundary

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0 5,500 11,000

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FIGURE 1.2

San Diego LAFCO MSR and SOI Update

Aerial/Boundary Map

SOURCE: USGS 7.5' QUAD - BONSALL ('68), PALA ('88); CALIF.

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2.0 RAINBOW MUNICIPAL WATER DISTRICT

2.1 INTRODUCTION AND GOVERNANCE

The Rainbow Municipal Water District (RMWD or District) was established in 1953 through a conglomeration of several mutual water companies under the Municipal Water District Act of 1911 (Section 7100 et. seq. of the California Water Code). RMWD became a member of the San Diego County Water Authority (SDCWA) and the Metropolitan Water District of Southern California (MWD) in the same year to acquire the right to purchase and distribute imported water. The District's 51,200-acre service area is located in northern San Diego County. It is approximately 40 miles north of the City of San Diego and 17 miles east of the Pacific Ocean. The northern boundary of the District is coterminous with the San Diego/Riverside County border. The District includes the unincorporated communities of Rainbow and Bonsall, as well as portions of Pala and Fallbrook.

The District provides water and wastewater collection and conveyance services to properties within its boundary. The District supplies water to most of the developed properties within its service area, while only a portion of its service area is provided with sewer service. A large majority of the District's existing service area uses septic tanks to dispose of wastewater.

A five-member Board of Directors, elected by geographic division, governs the District. Board members are elected to serve four-year terms. Elections are conducted each even-numbered year. Table 2.A1 of the RMWD Supplemental Data Appendix provides a 10-year history of membership of the Board of Directors. As shown, RMWD has an unstable history of governance. Within each of the District's divisions, directors have resigned, retired, or been recalled prior to the end of their term within the last 10 years. Due to this, several directors have been appointed and several recall elections have occurred.

Directors receive $150 per diem for attendance at one regular Board meeting and are authorized reimbursement for mileage, lodging, and meal expenses as appropriate per the policies of the Board. At a regular board meeting held on July 15, 2004, the directors voted to eliminate all District-financed payments for Director Benefits. Thereafter, any Directors electing to have benefits through the District must reimburse the agency for the elected benefits on a monthly basis. The District staff keeps a record of these reimbursements, and if any Director lapses in reimbursing the District, the accounts payable staff will notify the human resources department to cancel the benefits immediately.

It is the policy of RMWD to encourage Board development and excellence of performance by reimbursing expenses incurred for tuition, travel, lodging, and meals resulting from training, educational courses, participation in professional organizations, and attendance at local, State, and national conferences associated with the interests of the District. Attendance at such conferences is not considered a day of service for the purpose of Board member compensation. Attendance must be approved by the entire Board.

As of 2002, the governing body at RMWD met the first Wednesday of each calendar month in the Board Room located at the District office. On January 13, 2006, the Board of Directors voted to

change the meeting date to the third Friday of each calendar month at 9:00 a.m. in the District's Board Room. Periodically off-site meetings are held in the evening; however, they are still held within the boundary of the District. All meetings have adequate meeting space. A summary of the number of meetings for the past three fiscal years is provided in Table 2.A2 of the RMWD Supplemental Data Appendix.

Matters to be considered by the Board are described in the agenda for each meeting. RMWD follows the notification procedures set forth by the Brown Act. All regular Board meeting agendas are posted no less than 72 hours in advance and Special Board meetings no less than 24 hours prior to the scheduled meeting time. Agendas are displayed in several locations within the District, in display cases at the front entry gate and outside the main office entrance, and within the District's operations department and administration area. Agendas are also faxed or e-mailed to individuals who have requested this noticing for the current calendar year. Special events are typically noticed in the District's monthly newsletter, which is mailed to all customers with their monthly service bill. Some of the District's special events are also published in the local newspapers.

The Board governs the District through an appointed general manager. The Board's involvement in administrative, management, and personnel matters includes, but is not limited to, active participation in annual budgetary processes that authorize activities from capital projects to staffing levels, serving on special project or benefits committees with personnel, and authorizing labor contracts. The District does not have a specific policy that regulates communication between elected official and employees, other than the Water Code and Brown Act. Elected officials are generally not involved in administrative, management, and personnel matters. The elected officials do, however, participate in policy and financial matters.

2.2 DISTRICT PERSONNEL AND CONTRACT SERVICES

There are currently 49 employees working for the District. Table 2.A provides detail regarding the distribution and function of the employees.

Table 2.A: RMWD Employees by Category (2006)

Category	Number of Employees
Executive (General Manager)	1
Management	4
Professional	1
Operational	35
Clerical	8
Total	**49**

Source: RMWD, RFI, April 2006.

Based upon the number of employees, the District appears to have high turnover and is challenged in maintaining consistent employment, having 7 retirements, 30 resignations, and 9 terminations over the past five years. Table 2.B provides detail regarding these staffing changes.

Table 2.B: RMWD Five Year History of Retirements, Resignations, and Terminations

	Retirement	Resignation	Termination
2001			
Executive			
Managerial		2	
Professional			
Operational	1	3	2
Clerical	1	1	
2002			
Executive		1	
Managerial			
Professional			
Operational	1	2	1
Clerical		2	
2003			
Executive			
Managerial	1		
Professional		2	1
Operational		1	2
Clerical		2	
2004			
Executive			
Managerial			
Professional			
Operational		6	1
Clerical		2	
2005			
Executive			1
Managerial			
Professional			
Operational	1	5	1
Clerical	1		
Through April 2006			
Executive			
Managerial			
Professional			1
Operational		1	
Clerical			
Total	**7**	**30**	**9**

Source: RMWD RFI, April 2006.

The District has also undergone several recent reorganizations, which began when the General Manager resigned in March 2002. A new General Manager was hired in June 2002 and conducted meetings with the District operations staff to obtain information pertaining to the needs of the District. From those meetings, the General Manager began the internal reorganizational changes. The District's organizational charts from the budgets between 2000 and 2006 are provided in the RMWD Supplemental Data Appendix. The following provides detail of the changes.

Job titles or positions that have been created include:

- Created a valve maintenance crew consisting of 3 utility worker positions and 1 foreman position to be responsible for the maintenance of all the valves in the District.
- Created a wastewater crew consisting of 3 utility worker positions and 1 supervisor position to separate the duties of water line breaks from wastewater line cleaning and maintaining lift stations.
- Created a meter services crew to handle all customer service calls, meter reads, and meter installations. It was also determined that there was a need for an additional employee on this crew. The meter crew consists of 4 utility workers and 1 supervisor.
- Created an assistant operations and maintenance manager position to assist the operations and maintenance manager with all the sections and additional staff.
- Created a mechanic assistant position to assist the mechanic on fleet maintenance along with pump station and lift station motors.
- Created a program manager position to oversee the work of the District's contracted engineering firm and the Capital Improvement Program (CIP).
- Created the safety/security officer position to take over the safety and risk management responsibilities of the administration manager position.
- Created a warehouse assistant position to assist the purchasing/warehouse specialist.
- Created administration specialist position to assist the administration manager with administrative code and water code projects.
- Created a human resources administrator position from the administrative services personnel position along with personnel responsibilities from the administration manager.
- Created a finance manager position from the finance supervisor position along with the finance responsibilities from the administration manager.
- Board of Directors approved to fill contracted engineer position with a District engineer.

Job titles or positions that have been eliminated include:

- Program manager: employee resigned, outsourced duties.
- Safety/security officer: employee retired, responsibilities delegated to operations and maintenance manager.
- Mechanic assistant: mechanic retired, assistant promoted to mechanic.
- Warehouse assistant: contract temporary position.

- Administrative service II personnel: reclassified to human resources administrator.
- Finance supervisor: reclassified to finance manager.
- Administration specialist: employee resigned.
- Utility worker I (janitorial/landscaping): employee promoted to meter services. Janitorial and landscaping responsibilities outsourced.
- Administration manager: employee laid off.

It should also be noted that the General Manager that was hired in June 2002 was terminated in September 2005. After termination, he chose to retire from public service. The general manager hired in October 2005 on a contractual basis currently has a contract through February 2007. The District has had 11 general managers over the previous 12 years. In addition, the District's Board President resigned in August 2006.

RMWD utilizes outside labor and technical assistance to provide specific administrative and operational functions. Through this structure, the District has access to diverse professional resources without incurring the cost of full-time employees. The RMWD regularly utilizes the following outside services:

- **General Legal Counsel.** The District contracts its legal services to the firm of Foley & Lardner, LLC. Foley & Lardner was selected in 2000 as the District's legal counsel by the Board of Directors through a full interview process. A Request for Proposal (RFP) was issued and various law firms were interviewed in a public meeting of the Board. The Board conducted another RFP and interview process in 2005 and selected Foley & Lardner to continue providing services. The District only pays for legal services on an as-needed basis, thereby eliminating the expense of full-time employees. The current contract is year-to-year and allows the firm to bill at an all-inclusive rate of $260 per hour. A summary of the District's legal costs for the past 5 years is provided in Table 2.C.

  Table 2.C: RMWD 5-Year History of Legal Expenses and Settlements

Fiscal Year Ending	Legal Expense
June 2002	$87,475
June 2003	$250,863
June 2004	$251,666
June 2005	$165,833
As of March 2006	$171,105

Source: RMWD RFI Response, April 2006; RMWD June 2006.

- **Engineering Services.** The District has been contracting with Dudek & Associates, Inc. (Dudek) since 1998 to provide as-needed engineering functions. Dudek was selected at that time based on its expertise in designing and operating small sewage treatment plants. This was intended to be a short-term contract but the District did not hire a District Engineer until January 2006. Currently, the District has its own staff engineer who manages the as-needed engineering contract. The billing rate varies according to the level of expertise of the engineer. Under the as-needed contract, the District negotiates an hourly billing rate for professional services and then any task

that is required can be acted upon quickly without sending an RFP. The District has stated that it has discussed sending out an RFP many times for additional as-needed engineering providers during the past eight years but neither the Board nor the General Manager have authorized the task. The as-needed engineering contract expires on June 30, 2006, and the District Engineer has been directed to seek additional engineering providers. RMWD paid Dudek $1,749,155 during the fiscal year 2004-05 for engineering services for capital projects, inspection services, and general engineering services.

- **General Management Services.** Dudek also is contracted to provide general administrative services for the District under a fixed price contract. This contract contains a 60-day termination clause. RMWD pays Dudek $20,700 per month for general administrative services.
- **Tank Maintenance Commitments.** On December 10, 2003 the District entered into a 10-year contract with Utility Service Co., Inc., to maintain 12 water tanks at an annual cost of $715,000. Efforts to find another company that provided the same service were unsuccessful so the District signed a contract with Utility Service Co., Inc.. The contract can be cancelled annually if the intent to cancel is received within 90 days prior to the anniversary date.

The District has had 23 claims made against its insurance carrier (ACWA Joint Powers Insurance Authority) within the last 10 years. The costs resulting from the claims between 1995 and July of 2005 totaled $1,235,749.73. A summary of these claims is included in Table 2.A3 of the RMWD Supplemental Data Appendix.

2.3 FISCAL INFORMATION

Budget, Financial Policies, and Reserves

RMWD adopts an annual budget and conducts independent audits every year. The annual budget process begins when budget requests are developed by the District's department heads and approved by the General Manager. The proposed budget is then presented to the Board of Directors for review and ultimate approval prior to each fiscal year. The General Manager has the authority to approve expenditures up to $35,000 without Board approval. Two signatures are required on all vendor checks. Checks exceeding $50,000 require the additional signature of a Board member.

The District's current bond rating is A/Stable, which indicates "good quality." RMWD has debt resulting from 1993 Certificates of Participation for $1,460,000, which will be fully retired in 2008. The District's revenue is obtained from service rates, connection fees, investment income, and a share of the 1 percent property tax. In addition, the District can charge fees for annexation of territory. The District's Financial Statements for the Fiscal Year 2004-05 state that operating expenditures exceeded operating revenues. However, the District's nonoperating revenues exceeded nonoperating expenses. The District has stated that the operating expense includes a non-cash depreciation expense of $2.2 million. The nonoperating revenues largely consisted of connection and capacity fees paid from new developments. Without these fees the District would have had a net loss for the fiscal years ending June 2004 and 2005. Table 2.D below provides a summary of Fiscal Years 2004 and 2005 revenues and expenditures.

Table 2.D: Summary of RMWD Revenues and Expenditures for Fiscal Years Ending 2004 and 2005

Revenues	Year Ending June 2004	Year Ending June 2005
Total Operating Revenue	$23,487,402	$22,282,900
Total Operating Expenses	$23,716,084	$22,624,900
Operating Income (loss)	(228,682)	(342,000)
Nonoperating Revenue net of Expense	$1,861,785	$4,708,204
Net Income (Loss)	$1,633,103	$4,366,204

Source: Rainbow Municipal Water District, Financial Statement, 2005.

There are several factors that affected the District's 2004-05 Fiscal Year revenues, which are detailed below:

- Water sales decreased by $2,142,342 from the prior year. The District sold 25,465 acre-feet of water, which was a 20 percent decrease in comparison to the prior year. This decrease was mainly due to the higher rainfall for that year.
- Sewer service charges increased $585,401 due to the sales of equivalent dwelling units (EDUs) to developers.
- The State's Educational Revenue Augmentation Fund (ERAF) Tax Shift reduced the District's portion of the 1 percent property tax by $213,971.
- Investment income decreased due to short-term losses taken when trading for higher-earning investments.

The District's 2005-06 budget includes a cash transfer of $5,055,303 to reserves in the nonoperating expense line. If including this transfer to reserves the District's budget shows an overall loss. However, not including this transfer the budget shows overall income of $5,027,724, as shown in Table 2.E.

Table 2.E: RMWD Fiscal Year 2005-06 Budget Summary

Budgeted Expenditures	
Operating Expense	$21,129,564
Nonoperating Expense	$5,111,803
Capital Improvements	$4,244,781
Debt Service	$538,462
Total Expenditure Budget	**$31,024,610**
Budgeted Revenues	
Operating Revenues	$25,671,788
Nonoperating Revenues	$542,000
Transfers from Reserves	$4,244,781
Debt Service	$538,462
Total Revenue Budget	**$30,997,031**
Net Budgeted Income (Loss)	**($27,579)**
Budgeted Income Not Including Transfers to Reserves	**$5,027,724**

Source: RMWD Fiscal Year 2005-06 Budget.

The District utilizes a straight line depreciation for all capital assets of the District. The values are recorded as historical purchase cost. Useful lives of 5 to 50 years are assigned to each individual asset. Infrastructure replacement is prioritized as part of the budget process, and infrastructure reserves are used to fund the replacements. The District does not have specific policies that regulate reserve funds. However, each year, as part of the budget process, the Board approves a certain amount of funds to reserve for infrastructure replacement and expansion. The Board also designates each year that any excess of revenues over expense will be transferred into a reserve for infrastructure replacement and improvement. The District states that the current fee structure allows approximately $5 million per year in water funds and $1 million per year in sewer funds to be available for infrastructure upgrades the following year. There are currently no designated operating reserves; however, the Board has the ability to redirect infrastructure reserves to be used for operating emergencies. Table 2.F below shows the current infrastructure reserves for the District as of February 2006.

Table 2.F: RMWD Infrastructure Reserves as of February 2006

Reserve	Amount
Water Infrastructure Expansion Reserves	$3,247,722
Water Infrastructure Replacement Reserves	$8,666,683
Sewer Infrastructure Expansion Reserves	$11,681,928
Sewer Infrastructure Replacement Reserves	$982,630
Retained Earnings/Fund Balance	**$48,542,863**

Source: RMWD RFI, April 2006.

Capital Improvement Planning and Financing

The District adopted the current CIP in March 2002. The projects within the CIP were based upon the District's Water and Wastewater Master Plans, in addition to needs that were identified by staff observations. Every year the projects are reviewed during the budgeting process, and potential changes to the schedule are approved. The current budget placed all CIP projects on hold until the Master Plan revisions, which are underway, are completed. The Draft Water and Wastewater Master Plans include updated CIPs.

The District utilizes the reserve funds that are detailed in Table 2.F to fund the CIP. Additionally, the District has a "pay-as-you-go" method for funding infrastructure. RMWD is limited in borrowing money through loans or bonds due to local Ordinance 95-1, which was enacted in 1995 by the District's Board. This ordinance requires a two-thirds vote to incur additional public debt whenever the District is already carrying cumulative debt in excess of $1 million for capital improvements. In addition, the District requires that new facilities that are needed to serve new development must be funded by the developer, and the new facilities are to be dedicated to the District upon completion.

Investment Policy

Any District funds that are held for future use are invested. Interest earnings on cash held by the general fund for other funds are allocated to the respective funds annually. The District has adopted a policy to regulate the investment of these held funds. The policy directs the District's investment selections toward the goals of safety, liquidity, and yield. Per the Government Code, the policy states that the standard to be used by investment officials shall be that of the "prudent person rule" and the policy also requires that the Treasurer submit a monthly investment report and a quarterly investment report to the Board of Directors.

Purchasing Policies

The District has adopted purchasing policies to regulate the expenditures of the District. Through these policies the District has created a centralized purchasing department in order to procure goods and services. The following provides detail in regard to this policy:

- The department manager has the authority to approve purchases under $500.
- The General Manager has the authority to approve expenditures up to $35,000 without Board approval.
- Two signatures are required on all vendor checks.
- Checks exceeding $50,000 require the additional signature of a Board member.

Cost Avoidance

In an effort to increase efficiency and avoid costs, the District has reestablished the meter replacement program. This is a 10-year program that will ultimately replace all of the old meters with remote read meters. The meter replacement program is expected to save money for the District both in reduced costs and by providing more accurate meter reads.

2.4 RATES AND FEES FOR SERVICES

Water Service Rates and Fees

The District reviews its rates annually as part of the budget process. The District's rates are comprised of the rate for water, the monthly service charge for meters, and pump zone charges. In addition, the District levies a special assessment, which is collected on property tax bills. The tax is levied in two amounts; Improvement District 1, which includes the entire District, is assessed $10.54 per acre. Improvement District 6, which is the northeast quadrant of the District, is assessed an additional $4.91 per acre. Open space parcels are assessed $3.99 per acre. The funds generated from the tax are used for debt retirement and to offset the increasing cost of imported water.

In May 2004 the District adopted water rate increases. In addition, in November 2005 the District adopted additional increases that are to become effective at intervals through January 2007. The Board also increased the pump zone charges listed below at the June 2006 Board meeting. Tables 2.G, 2.H, and 2.I provide details of the District's adopted water rates.

Table 2.G: RMWD Water Rates Per Acre-Foot

Customer Classification	Water Rate January 2006	Water Rate July 2006	Water Rate January 2007
Domestic	$740.52	$753.59	$766.66
Commercial Ag/Domestic (Noncertified)	$740.52	$753.59	$766.66
Commercial Ag (Noncertified)	$740.52	$753.59	$766.66
Construction Water	$740.52	$753.59	$766.66
Ag/Domestic (MWD Certified)	$740.52 up to 0.0608 AF $596.77 above 0.0608 AF	$753.59 up to 0.0608 AF $609.84 above 0.0608 AF	$766.66 up to 0.0608 AF $622.91 above 0.0608 AF
Agricultural (MWD Certified)	$740.52	$609.84	$622.91

Source: RMWD Ordinance No. 05-08. AF = acre-foot

Table 2.H: Monthly Service Charge for Standard Water Meters

Meter Size	Monthly Charge
5/8-inch	$19.06
¾-inch	$23.83
1-inch	$30.98
1 ½-inch	$47.66
2-inch	$83.41
3-inch	$142.98
4-inch	$238.30
6-inch	$405.11

Source: RMWD Ordinance No. 04-04.

Table 2.I: RMWD Pump Zone Charges

Zone Number	Charges Per Acre-Foot
1	$165.53
2	$162.04
3	$95.83
4	$33.54
5	$187.31
6	$64.90
7	$379.41

Source: RMWD June 2006.

Pump Charge. The District's Pump Charge for water service varies depending on the elevation of the reservoir that serves the customer's meters. RMWD's service area consists of many rolling hills, steep canyons, and valleys. Service area elevations vary from over 2,200 feet above mean sea level (msl) at the northern portion of the District to under 150 feet above msl in the southwestern portion of the District. The lowest elevations are along the San Luis Rey River, which traverses the southern portion of the District. This varying topography creates the need for the water supply to be pumped to different altitudes. There are seven pump zones in all. Table 2.I lists the pump charges for each zone.

The District's rates for water services are affected by changes in water supply costs that are not under control of the District. In January 2006, the District incurred increased water supply costs because (1) the MWD water delivery charge increased 2.3 percent from $443 to $453 per acre foot; (2) the SDCWA's Customer Service Charge increased 5.8 percent; and (3) the Emergency Storage Charge increased 24.7 percent. In addition, SDCWA includes a melded rate supply cost for additional water supplies that are received from the Imperial Irrigation District. The rate, which started in 2005 was $18 per acre foot and increased to $32 in 2006. As indicated, several of these costs are fixed components of the MWD and SDCWA rate structure. Detail regarding SDCWA's rates are included in Table 2.A4 of the RMWD Supplemental Data Appendix.

As noted in Table 2.G, a discounted water rate [MWD Interim Agricultural Water Program (IAWP)] is provided for water used for the growing or raising, in conformity with recognized practices of husbandry, for the purposes of commerce, trade, or industry, or agricultural, horticultural, or floricultural products, and produced (1) for human consumption or for the market, or (2) for the feeding of fowl or livestock produced for human consumption or for the market, or (3) for the feeding of fowl or livestock for the purpose of obtaining their products for human consumption or for the market, such products to be grown or raised on a parcel of land having an area of not less than one acre utilized exclusively therefore. By accepting this discount, the agricultural customer agrees that mandatory reductions in water may occur in the future. In the event of a mandatory reduction in water usage, the certified agricultural customer will be required to reduce water usage up to 30 percent before any other class of customer is required to reduce usage. The discount is offered by MWD and SDCWA and is passed through to the District's qualified agricultural customers. In addition, the incremental melded rate cost added to the water supply charge by the SDCWA is not charged to agricultural customers. These savings are passed on to the District's certified agricultural customers.

As an opportunity to rate restructuring, the District has reviewed a tiered rate structure whereby the charge per unit would change based on consumption. The intent of this formula was to encourage conservation and provide a rate break for low usage. Upon review, the District determined that this method was impractical and difficult to administer. Therefore, the District is not currently anticipating any changes to the water rate structure.

Wastewater Service Rates

In December 2003, the District adopted wastewater service rates that provide for rate increases each year. Table 2.J provides the District's adopted wastewater rates from 2003-04 through 2006-07.

Table 2.J: RMWD Wastewater Service Rates

Fiscal Year	RMWD Portion	Treatment Plant Costs Pass-Through Costs	Total
2003-04	$31.51	$17.96	$49.47
2004-05	$36.24	$17.96	$54.20
2005-06	$41.67	$17.96	$59.63
2006-07	$47.92	$17.96	$65.88

Source: RMWD Ordinance No. 03-04; RMWD June 2006.

2.5 COOPERATIVE AGREEMENTS

Through the RMWD's membership in the SDCWA, the District supports and participates in the SDCWA's public information, public education, and water conservation programs, which would be much less cost effective if the programs were established and supported solely by the District. This membership also provides for shared financing, construction, operation, and maintenance of the SDCWA Aqueduct System, which supplies its 23 member agencies.

2.6 CUSTOMER SERVICE

An indicator of whether service provision is adequate involves the number of customer complaints and the methods that are used in resolving customer complaints. The District provides Customer Comment cards to facilitate communication and feedback with customers. The District has records of customer complaints for the last nine months (May 2005 – February 2006). These records do not indicate what the customer issue was or how the issue was resolved. There are no formal records of complaints prior to May 2005. Table 2.K below details the total number of customer comments within this 9-month period and if the customers were satisfied with the resolution of their complaint.

Table 2.K: RMWD Customer Comments May 2005–February 2006

Customer Satisfaction	Number	Percentage
Very Satisfied	28	31.8%
Satisfied	46	52.3%
Unsatisfied	14	15.9%
Total Comments	**88**	**100%**

Source: RMWD RFI Response, April 2006.

2.7 POPULATION AND GROWTH

The District estimates that the current population within the District is 17,750. The District is currently largely agricultural and smaller areas of low-density residential. There are pockets of more dense development generally consisting of commercial areas along State Route 76 (SR-76) and residential developments adjacent to the main tributary roads such as Gird Road, Gopher Canyon Road, Tecolate Drive, and West Lilac Road. In addition, Lake Rancho Viejo is a newly developing suburban-type residential development. It is currently approximately two-thirds developed.

Significant growth in RMWD's residential land uses is projected in the future. Within the District's service area, land use is transitioning from mainly agricultural to more rural residential development. The District's Draft 2006 Water Master Plan estimates ultimate land uses within the District based on known planned development projects and the Draft 2020 San Diego County land use data (which is not adopted by the County). The Draft Master Plan estimates that the amount of developable land remaining in the District is 18 percent of the total land area, or approximately 9,300 acres. Approximately 6,100 acres or 66 percent of the developable land is classified with a rural residential land use, which is defined by lot sizes between 1 and 20 acres. It is noted in the Master Plan and also in the County's proposed 2020 General Plan land uses that most of the existing agricultural areas are projected to convert to residential land uses. The known planned developments within RMWD total 2,717 residential units.

The San Diego Association of Governments (SANDAG) has prepared growth projections for unincorporated Community Plan Areas within the County. RMWD encompasses large areas within the following Community Plan Areas: Bonsall, Fallbrook, Rainbow, and Pala-Pauma. SANDAG has projected that population growth within these areas will average 2.65 percent annually, and housing growth will average 2.58 percent annually through 2030. Table 2.L below provides the SANDAG projections for these Community Plan Areas.

Table 2.L: SANDAG Growth Projections within RMWD

	2000	2010	2020	2030	2000 to 2030 % Change	Annual Growth Rate
Pala-Pauma Community Plan Area						
Population	6,176	7,084	8,362	13,450	118%	3.9%
Housing Units	2,071	2,293	2,671	4,333	109%	3.6%
Rainbow Community Plan Area						
Population	1,836	2,127	2,751	3,608	97%	3.2%
Housing Units	707	805	1,038	1,372	94%	3.1%
Fallbrook Community Plan Area						
Population	39,599	44,789	52,720	58,624	48%	1.6%
Housing Units	14,046	15,705	19,489	21,773	55%	1.8%
Bonsall Community Plan Area						
Population	8,880	10,009	11,627	13,914	57%	1.9%
Housing Units	3,367	3,726	4,329	5,231	55%	1.8%

Source: SANDAG Final 2030 Cities/County Forecast, December 2003.

2.8 WATER SERVICE

Water Supply

The District provides water service to approximately 7,300 metered accounts. In the 2004-05 Fiscal Year the District delivered approximately 25,465 acre-feet of water (RMWD Financial Statement, 2005). Of this, approximately 17.5 acre-feet was sold to agricultural users and approximately 7.5 acre-feet was sold to domestic users. The District's water supply is from imported sources provided by MWD and SDCWA. Water is supplied to the District through eight connections (turnouts) located along the MWD and SDCWA aqueduct systems. The supply provided through these connections is detailed in Table 2.M. These aqueduct systems traverse the District in a generally north-to-south alignment. Water in the aqueducts is treated to potable standards at the Lake Skinner filtration plant. In the past, the District maintained raw water connections to these aqueducts that could provide unfiltered (raw) water for agricultural use. Due to increased regulatory requirements and the complexity of operating separated systems, the unfiltered water supply has been discontinued. However, the District does have the ability to restore the unfiltered water supply in case of need or emergency.

Table 2.M: RMWD Active Aqueduct Connections

Turnout	Agency	Connection Capacity (cfs)			Connection Elevation	Supply Zone
		Max Rating	Max Supplied	Min Allowed		
Filtered Water Connections on SDCWA Aqueduct No. 1						
RB 1	MWD	22	20	2.5	1,131	North (Rice Reservoir)
RB 10	MWD	22	8	2.5	1,027	North (Rice Canyon Tank)
Filtered Water Connections on SDCWA Aqueduct No. 2						
RB 3	SDCWA	22	20	2.5	897	Gopher Canyon (Turner Tank)
RB 6	SDCWA	22	20	2.5	876	Gopher Canyon (to Morro thru valve)
RB 7	SDCWA	40	36	4	909	Canonita (to Beck & Morro thru valve)
RB 8	MWD	25	23	3	720	Canonita (to Beck thru valve)
RB 9	MWD	20	9	2	835	North (Rice Canyon Tank)
RB 11	SDCWA	30	27	3	953	Gopher Canyon (Gopher Tank)

Source: RMWD Draft Water Master Plan, May 2006.

Water Demands

During preparation of the RMWD Draft Water Master Plan, a computer model to determine existing demand was performed. Based on the District's existing system, the model resulted in an average daily demand of 25.2 million gallons per day (mgd), a maximum day demand of 47.9 mgd, and a peak hour demand of 75.6 mgd (52,500 gallons per minute [gpm]). The total average rate of water supplied for 2004-05, based on RMWD billing records was lower than the model at 21.5 mgd. While approximately 9 percent of RMWD meters are agricultural meters, the water usage from these meters is approximately 37 percent of the total demand. It should be noted that rainfall during the 2004-05 season was much higher than average. Because the water demand within the District is largely

agricultural, the annual water usage was lower than normal. The number of customers and the total demand per account type in 2004-05 are shown in Table 2.N, total system demands are shown in Table 2.O, and average day demand by pressure zone is shown in Table 2.P.

Table 2.N: RMWD Water Demand in 2004-05

	Active Accounts	Percent of Accounts	Average Day Demand (gpd)	Percent of Demand	Average Day Demand Per Account	Average Day Demand Per Acre
Agriculture	632	9.2%	7,944,010	36.9%	12,570	2,863
Agriculture/Domestic	1,558	22.6%	7,341,122	34.1%	4,712	1,201
Domestic	4,655	67.6%	6,215,157	28.9%	1,335	1,252
Construction	37	0.5%	10,816	0.05%	292	N/A
Total	**6,882**		**21,511,105**			

Source: RMWD Draft Water Master Plan, May 2006.
gpd = gallons per day

Table 2.O: RMWD Summary of Water System Demands in 2004-05

Average Day	21.5 mgd	33.3 cfs	14,931 gpm
Minimum Month	8.6 mgd	13.3 cfs	5,972 gpm
Maximum Month	34.4 mgd	53.2 cfs	23,889 gpm

Source: RMWD Draft Water Master Plan, May 2006.
cfs = cubic feet per second

Table 2.P: RMWD Average Day Demand by Pressure Zone (2004-05)

Pressure Zone	Agriculture Demand (mgd)	Domestic w/ Ag Demand (mgd)	Domestic Demand (mgd)	Total Demand (mgd)
Magee	--	0.004	0.02	0.03
Rainbow Heights	0.138	0.200	0.08	0.42
Vallecitos	0.117	0.054	0.03	0.20
Gomez	0.591	0.388	0.06	0.99
North	1.207	0.609	0.28	2.10
U-1	0.035	0.103	0.07	0.21
Northside	0.414	0.637	0.31	1.36
Canonita	0.843	1.081	0.57	2.49
Beck	0.516	0.708	1.27	2.49
Gopher Canyon	2.827	2.216	1.36	6.40
Morro Reservoir	1.186	1.072	1.92	4.18
Morro Tank	0.064	0.319	0.25	0.63
Total	**7.94**	**7.34**	**6.22**	**21.5**

Source: RMWD Draft Water Master Plan, May 2006.

The District has developed generation factors for water demands for developed land uses. The generation factors, as detailed in Table 2.Q, were developed by RMWD based on existing usage.

Table 2.Q: RMWD Water Demand Generation Factors for Developed Lands

Land Use	Unit Demand
Rural Residential – Northern Area	500 gpd/ac
Rural Residential	1,000 gpd/ac
Single-Family Residential	1,500 gpd/ac
Multi-Family Residential	3,500 gpd/ac
Commercial, Industrial, Office	5,000 gpd/ac

Source: RMWD Draft Water Master Plan, May 2006.
gpd/ac = gallons per day per acre

The District's Draft 2006 Water Master Plan estimates ultimate water demand within the District based on known planned development projects and the Draft 2020 San Diego County land use data (which is not adopted by the County). Future development within RMWD is expected to be mostly single-family and rural residential development. The District's master planning effort included an extensive investigation of the existing water use per single-family residence to develop unit water demands for various lot sizes. The projected net increase in water demand for the planned development projects that are identified in the Draft Water Master Plan is approximately 3.3 mgd (3,700 acre-feet per year [afy]). This represents an increase in demand of approximately 13 percent over existing RMWD demands. In addition, the RMWD Draft Water Master Plan states that the ultimate average annual demand at build out is projected to be 33.6 mgd, which is approximately 37,600 afy. Total demands are projected to increase by about one-third over existing conditions at build out. The District's projected ultimate demand by pressure zone is provided in Table 2.R and projected demands for planned development within existing boundaries is shown in Table 2.S.

Table 2.R: RMWD Projected Ultimate Demands by Pressure Zone at Build Out

Pressure Zone	Existing ADD (mgd)	Projected ADD (mgd)	Percent Increase
Magee	0.03	0.57	1,797%
Rainbow Heights	0.52	1.25	140%
Gomez	1.17	1.47	26%
U-1	0.25	0.56	130%
Vallecitos	0.23	0.28	18%
Northside	1.56	1.64	5%
North	2.44	2.69	10%
Canonita	2.92	2.89	-1%
Beck	2.70	5.12	90%
Gopher Canyon	7.50	8.34	11%
Morro Reservoir	5.15	7.96	55%
Morro Tank	0.69	0.77	11%
Total	**25.2**	**33.6**	**33%**

Source: RMWD Draft Water Master Plan, May 2006.

Table 2.S: RMWD Projected Water Demands for Planned Development within Existing Boundaries

Project Name	Additional Planned Units	Projected ADD	
		Per Unit (gpd)	Total (gpd)
Hill Land Company	12	400	4,800
Pala Mesa Highlands	130	1,400	182,000
Lake Rancho Viejo Phase II	285	500	142,500
The Groves	85	3,000	255,000
Monserate Hill	3	6,000	18,000
Malabar Ranch/Brook Hills II	34	2,600	88,400
Pala Mesa Dr Sewer Ext.	2	2,500	5,000
Pala Mesa	13	2,600	33,800
Valley of the Kings	3	4,000	12,000
Citrus Lane	5	2,700	13,500
Kent	1	6,000	6,000
Vista de Palomar	4	2,900	11,600
Morris Ranch	89	2,700	240,300
Leatherbury	85	2,600	221,000
Rancho Camargo	14	3,500	49,000
Rancho Viejo LLC	46	400	18,400
Patapoff	10	5,000	50,000
San Luis Rey Downs	116	500	58,000
Polo Club	165	2,200	363,000
Hidden Hills	53	2,500	132,500
Hill Ranch	38	2,800	106,400
Campus Park	1,360	--	1,074,000
DR Horton	65	600	39,000
TM 82	78	300	23,400
Lake Vista Estates	21	2,700	56,700
Brisa Del Sol	27	3,500	94,500
Subtotal	**2,717**		**3,298,800**
Proposed Nonresidential			
Fallbrook High School			100,000
Proposed San Luis Rey River Park Sites (landscaped parks/fields)			
Vessels East Site	N/A	2,500 gpd/ac	40,000
SDCWA Site	N/A	2,500 gpd/ac	17,500
Model Airplane Site	N/A	2,500 gpd/ac	25,000
Gopher Canyon Site	N/A	2,500 gpd/ac	2,500
Subtotal	N/A		**85,000**
Total			**3,483,800**
Projected Net Demand Increase from Planned Development within Existing District = 3.32 mgd			

Source: RMWD Draft Water Master Plan, May 2006.

2.9 WATER SYSTEM INFRASTRUCTURE

The water system, as shown in Figure 2.2 at the end of this Section, is comprised of 7 pump stations, over 40 pressure reducing stations, 16 reservoirs/tanks, and 318 miles of pipeline ranging from 4 inches up to 42 inches in diameter. The District currently has 12 pressure zones that provide water service to District areas. Each pressure zone has at least one reservoir or tank. Because the District was formed through a conglomeration of several mutual water companies, many facilities are older than the 53 year age of the District. The District has stated that there are no known deficiencies within any of the pressure zones. Table 2.T provides a descriptive summary of each pressure zone.

Table 2.T: RMWD Existing Infrastructure within Pressure Zones

Morro Reservoir	
General Information	Located in the southwestern portion of the system; consists of 349,768 feet of pipe ranging from 4 inches to 36 inches in diameter
Water Supply	Primarily from Beck Reservoir; may be supplemented from Gopher Canyon/South/Hutton System
Morro Tank	
General Information	Located in the southwestern portion of the system; consists of 63,492 feet of pipe ranging from 4 inches to 20 inches in diameter
Water Supply	Primarily from Morro Reservoir System; may be supplemented from Beck Reservoir via Morro Reservoir System
Beck	
General Information	Located in the central portion of the system; consists of 218,348 feet of pipe ranging from 4-inches to 42 inches in diameter
Water Supply	Primarily from Connection 7/Canonita PSV Station; may be supplemented from Canonita System
Gopher Canyon, South, and Hutton	
General Information	Located in the southeastern portion of the system; consists of 347,559 feet of pipe ranging from 4 inches to 24 inches in diameter
Water Supply	Primarily from Aqueduct Connections 3, 2, and 6; may be supplemented from Beck and Morro Reservoirs via emergency pumps
Canonita	
General Information	Located in the central portion of the system; consists of 180,415 feet of pipe ranging from 4 to 24 inches in diameter
Water Supply	Primarily from Connections 7 and 8; may be supplemented from Beck System via emergency pumps
North Reservoir and Rice Canyon	
General Information	Located in the central northern portion of the system; consists of 116,780 feet of pipe ranging from 6 to 30 inches in diameter
Water Supply	Primarily from Aqueduct Connections 1,9,10; may be supplemented from Northside Reservoir or interconnection with Fallbrook PUD via an emergency pump
Vallecitos	
General Information	Located in the northern portion of the system; consists of 15,684 feet of pipe ranging 6 to 12 inches in diameter

Water Supply	Primarily from North Reservoir; supplemented from Aqueduct 1
U-1	
General Information	Located in the northwestern portion of the system; consists of 29,544 feet of pipe ranging from 6 to 14 inches in diameter
Water Supply	Primarily from North Reservoir System; may be supplemented from Northside Reservoir via North/Rice Canyon System
Gomez Creek	
General Information	Located in the northeastern portion of the system; consists of 67,573 feet of pipe ranging 6 to 18 inches in diameter
Water Supply	Primarily from Connection 10; may be supplemented from Rice Canyon Tank System or Rainbow Heights System
Rainbow Heights	
General Information	Located in the northern portion of the system; consists of 59,733 feet of pipe ranging 6 to 20 inches in diameter
Water Supply	Primarily from Aqueduct Connection 1; may be supplemented from Magee Tank System
Magee	
General Information	Located in the northeastern portion of the system; consists of 22,647 feet of pipe ranging from 8 to 16 inches in diameter
Water Supply	Rainbow Heights System
Northside	
General Information	Located in the western portion of the system; consists of 99,282 feet of pipe ranging from 4 to 24 inches in diameter
Water Supply	Primarily from Connection 1 via North/Rice Canyon System; may be supplemented from North Reservoir

Source: RMWD 2001 Water Master Plan.

There are seven booster pump stations in the RMWD distribution system that pump water up to higher zones with storage reservoirs. Some pumps are operated only during the night to take advantage of off-peak electricity charges. A summary of each pump station is provided in Table 2.U. RMWD also owns a trailer-mounted pump that can be used in emergency situations. In addition, the District can rent trailer-mounted pumps for planned facility shutdowns or emergencies.

To meet the District's projected buildout demand within the existing boundaries, the RMWD Draft Water Master Plan states that pump station capacity improvements will be required at the Morro Hills, Vallecitos, Northside, and possibly the Magee Pump Stations. The Morro Hills Pump Station requires a second pump for redundancy. It is recommended that two new pumps with a capacity of approximately 2,000 gpm each replace the existing 3,500 gpm pump. Smaller pumps are recommended to reduce high velocities in the discharge pipeline and more closely match the projected maximum day demand of the zone.

Table 2.U: RMWD Existing Pump Stations

Station	Suction/Discharge Zone	Pumps	Tested Operating Point [1]	Duty Capacity [2]
BPS # 1 Rainbow Heights	North (SDCWA Connection 1) / Rainbow Heights	(2) 250 hp	967 gpm @ 748'	2,600 gpm
		(1) 300 hp	952 gpm @ 752'	
		(1) 290 hp	814 gpm @ 752'	
BPS # 2 U-1	North (North Reservoir) / U-1	(3) 75 hp	503 gpm @ 345'	1,000 gpm
			580 gpm @ 345'	
			532 gpm @ 346'	
BPD # 3 Vallecitos	North (SDCWA Connection 1) / Vallecitos	(2) 75 hp	760 gpm @ 270'	800 gpm
			750 gpm @ 270'	
BPD # 4 Northside	North (SDCWA Connection 1) / Northside	(1) 150 hp	4,044 gpm @ 97'	1,900 gpm
		(1) 75 hp	2,252 gpm @ 65'	
BPD # 5 Morro Hills	Morro / Morro Tank	(1) 150 hp	3,455 gpm @ 118'	0 gpm
BPD # 6 Gomez (Huntley)	North (Rice) / Gomez	(2) 300 hp	1,566 gpm @ 541'	2,800 gpm
		(1) 250 hp	1,306 gpm @ 551'	
BPD # 7 Magee	Rainbow Heights / Magee	(1) 50 hp	717 gpm @ 229'	700 gpm
		(1) 100 hp	681 gpm @ 226'	

Source: RMWD Draft Water Master Plan, May 2006.
[1] Tested operating point obtained from the District's 10/2005 pumping system analysis
[2] Duty capacity is the total station capacity with the largest pump out of service; duty capacity was determined from computer simulations with the storage tanks half full and maximum day demands on the system.

The Draft Water Master Plan states that the existing Vallecitos Booster Pump Station has not been operational for some time and needs to be rebuilt. The Vallecitos Zone is currently supplied from the Rainbow Heights Zone through a pressure reducing valve. The Draft Master Plan recommends that two new pumps be installed at this station with a capacity of approximately 500 gpm each to replace the existing 800 gpm pump. Smaller pumps are recommended to minimize high velocities and pressure drops in the North Zone and also to more closely match projected ultimate demands. The Northside Booster Pump Station does not have adequate capacity based on the projected ultimate maximum daily demand (MDD) with the largest pump out of service. It is recommended that the smaller pump at this station be replaced with a larger capacity pump. Although the duty capacity of the Magee Booster Pump Station pump is slightly less than the projected MDD, the Draft Master Plan states that full build out of this zone is very questionable.

The RMWD utilizes over 40 pressure regulating stations to supply water to lower pressure zones from higher zones. These stations are comprised of one or more hydraulically actuated pressure reducing valves, which are globe valves that are set to maintain a downstream pressure. If the downstream pressure should rise above the valve pressure setting, the valve will close. Most of the pressure reducing stations are used to supply small reduced pressure zones without storage reservoirs that are supplied from the Morro, Gopher Canyon, Beck, and Canonita Zones. These stations typically have a main valve with a smaller bypass valve. Additionally, several stations separate major pressure zones

and are set to supply flow only in response to a large pressure drop, such as fire flow. A few pressure reducing stations are manually opened only to fill downstream reservoirs from upper zones. These may also include a pressure sustaining control to limit the pressure drop in the upstream (high) zone.

The system pressure allows for the sufficient delivery of water. Pressures that are too low may not provide an adequate rate of water supply, and pressures that are too high may cause damage to water infrastructure. The District's 2006 Draft Water Master Plan states that the maximum desired pressure is 150 pounds per square inch (psi) and the maximum pressure should be no greater than 200 psi. It is noted that, due to the hilly terrain and dominance of agricultural customers, there are currently many areas of the RMWD distribution system where pressures exceed 200 psi. The Draft Master Plan states that it is possible to reduce pressures in several areas by expanding or creating reduced pressure zones supplied by pressure reducing stations. In general, however, pressures cannot be reduced to most areas without significant zone reconfigurations involving the construction of new storage tanks and transmission mains.

The minimum allowable pressure is 40 psi under peak hour flow conditions and 20 psi at a fire flow location during a fire occurring under maximum day demand conditions. Under certain circumstances, RMWD will approve the installation of private pumps for areas that receive less than the minimum 40 psi operating pressure.

The RMWD Draft Water Master Plan notes that there are numerous areas that do not meet current fire flow criteria. In general, 4-inch diameter pipelines and pressure reducing valves cannot deliver a 1,500 gpm fire flow. Additionally, dead-end 6-inch-diameter pipelines can generally provide a 1,500 gpm fire flow only if the length of the pipeline is very short and the static pressures are high. Since RMWD has very few 4-inch-diameter pipelines, most of the fire flow deficient areas are located on 6-inch-diameter or dead-end pipelines. RMWD reported that the five fire districts that provide service within its boundary are aware of low pressure and flow areas and did not express concern during the public review period of the RMWD Draft Master Plan. Fire flow requirements have become more stringent over time and primarily apply to new development. There are no requirements placed on a water district to upgrade an existing distribution system when fire flow requirements change. The Draft Master Plan also notes that improvement projects are proposed to bring the existing water system up to compliance with minimum fire flow requirements based on existing development. Because meeting minimum fire flow requirements is mandatory for new development, the District stated that the proposed improvements will be adequate prior to completion and occupancy of any new development.

The District has 16 operational reservoirs and enclosed storage tanks. All storage tanks are circular above ground steel tanks ranging in size from 0.4 million gallons (mg) to 6.0 mg, and there are four larger open reservoirs constructed of reinforced concrete or asphalt that range in size from 7.8 mg to 203.7 mg. The reservoirs provide additional reserve storage capacity for planned or emergency shutdowns of the aqueduct supply system. Table 2.V shows the District's water storage need and capacity by reservoir.

The District's Draft Water Master Plan notes that there is an overall storage surplus of 113 mg based on daily and reserve storage requirements for a 10-day SDCWA shutdown. Considering only the daily storage requirements per zone, however, there is a slight storage deficit (less than 1 mg) in the Vallecitos and Canonita Zones, and a deficit of approximately 4.7 mg in the Gopher Canyon Zone. At

Table 2.V: RMWD Water Storage Capacity (Million Gallons)

Reservoir	Reservoir Capacity	Existing Demand		Daily Storage Requirements				Surplus (Deficiency)	Reserve Storage	
		ADD	MDD	Operational (0.15 x MDD)	Fire	Emergency (1 MDD)	Total		10-Day AAD	Surplus (Deficit)
Magee	3.0	0.03	0.06	0.01	0.18	0.06	0.2	2.8	62.0	(29.5)
Rainbow Hts	4.0	0.52	0.99	0.15	0.18	0.99	1.3	2.7		
Gomez	3.5	1.17	2.22	0.33	0.18	2.22	2.7	0.8		
U-1	2.0	0.25	0.47	0.07	0.18	0.47	0.7	1.3		
Vallecitos	0.4	0.23	0.44	0.07	0.30	0.44	0.8	(0.4)		
Northside	22.8	1.56	2.96	0.44	0.18	2.96	3.6	19.2		
North/Rice	11.8	2.44	4.64	0.70	0.30	4.64	5.6	6.2		
Canonita	6.0	2.93	5.55	0.83	0.30	5.60	6.7	(0.7)	56.3	140.5
Beck	203.7	2.70	5.14	0.77	0.30	5.1	6.2	197.5		
Hutton	4.0	7.49	14.23	2.14	0.30	14.2	16.7	(4.7)	133.3	1.9
Turner	4.0									
Gopher Canyon	4.0									
Morro Reservoir	151.5	5.15	9.79	1.47	0.30	9.8	11.5	140.0		
Morro Tank	4.0	0.69	1.32	0.20	0.18	1.32	1.7	2.3		
Total	**425**	**25.2**	**47.8**	**7.2**	**2.9**	**47.8**	**57.9**	**367**	**252**	**113**

Source: RMWD Draft 2006 Water Master Plan.
ADD = Average Daily Demand
MDD = Maximum Daily Demand

the District's projected buildout, as detailed in the Draft Water Master Plan, this storage deficit would increase to 1.1 mg in the Vallecitos and Canonita Zones and a deficit of 6.5 mg in the Gopher Canyon Zone. Because of this, a new reservoir with a capacity of approximately 0.5 mg will be required for the Vallecitos Zone and a 6.5 mg tank is needed for the Gopher Canyon Zone. It is noted that the surplus reserve storage in the Beck and Morro Zones needs to be pumped through temporary booster stations to make up for storage deficits in most of the other zones. The Draft Water Master Plan also states that the reservoirs have been designed to be extremely flexible in their ability to transfer water throughout the District.

The District's 2006 Draft Water Master Plan states that the quantity of potable water being held in the large reservoirs and the fact that they are not covered is affecting the District's ability to maintain water quality. Further complicating the issue is the fact that the water enters and leaves the reservoirs through a single inlet/outlet pipe. This reduces water circulation and "turnover" in the reservoirs, since the water farthest from the inlet/outlet does not readily mix with the fresher water coming into the reservoir. The treated water purchased from the SDCWA uses chloramines as the secondary or residual disinfectant. Chloramines reside in a system much longer than free chlorine, but due to the long residence time in the reservoirs and exposure to ultraviolet light, the District's 2006 Draft Master Plan states that the District struggles to maintain a residual in the open reservoirs. Because there is often no chloramine residual in the water leaving the reservoirs, RMWD practices breakpoint chlorination to remove the ammonia and produce a free chlorine residual in the reservoir effluent water. The water is chlorinated by using an oxidant and sodium hypochlorite solution that is generated on site.

The California Department of Health Services (DHS) issued a water quality citation and $2,000 fine on August 10, 2005, because the uncovered reservoirs pose a risk to water quality. The District was cited again and fined $13,000 on December 6, 2005, for failure to make several short-term improvements to its open reservoirs by the State-imposed deadline. The citations are referred to as the "open reservoir citations" and are being addressed by covering, filtering, or replacing the District's four potable water reservoirs. RMWD evaluated options for water treatment and reservoir covers, and determined that floating covers would be the most cost effective alternative for compliance with DHS standards. A floating cover for Morro Reservoir is currently being designed and will be installed in 2007. Floating covers will be installed on the remaining three reservoirs within the next four years. Until the District completes construction of the reservoir covers, chlorination facilities are being upgraded to meet more stringent disinfection requirements.

RMWD has estimated the amount of water storage available in the system under an emergency situation according to the following formula:

Emergency supply of water = (amount of storage + backup/emergency supply) / (system demand)
Calculations for RMWD: Amount of total storage = 410 mg; amount of available storage = 200 / 2 = 100 mg
Backup/Emergency Supply = interconnects
System Demand = 27.2 mg average, 61.6 mg maximum
Emergency Supply = 3.68 days at average demand, 1.62 days at maximum demand

Source: RMWD Water System Emergency Response Plan, December 2004.

Additional emergency water supplies are available through the District's interconnections with Fallbrook Public Utility District (PUD) and the City of Oceanside. This provides RMWD uninterruptible water service capability and enables RMWD to serve as an alternate water source for Fallbrook PUD and Oceanside if needed.

As part of the Draft Water Master Plan, the District has developed CIP. The projects within the CIP improve system reliability, increase the available fire flow, regulate system pressures, meet pumping and storage capacity requirements, and supply the entire distribution system from storage during a shutdown of the SDCWA Aqueduct system. The CIP projects involve the following: projects from the 2002 CIP, fire flow improvements, storage tank and pump station projects, emergency supply improvements, ultimate system capacity improvements, and zone reconfiguration projects. The CIP also provides estimated costs for the identified projects. As discussed in Section 2.3, infrastructure projects are funded through the operations and maintenance budget.

As shown in Table 2.W, RMWD has experienced an annual average of 85 water line breaks and leaks between 2001 and 2005. The District has stated that none of these system failures have resulted in enforcement actions by environmental agencies. Additionally, the District does not currently track the number of customers out of service during a break or the durations of the outages.

Table 2.W: Summary of RMWD Water System Breaks and Leaks

Year	Number of Breaks and Leaks
2001	107
2002	77
2003	67
2004	74
2005	99

Source: RMWD RFI Response, April 2006.

It should also be noted that the San Diego County Air Pollution Control District imposed a $6,250 fine on the District in May and July 2005, for failure to follow procedures for installing a natural gas-powered pump, emergency generator, and a catalyst. These two violations (numbers 216686 and 217083) and associated fines have been verified with the San Diego County Air Pollution Control District.

2.10 POTENTIAL EXTENSION OF RMWD WATER SERVICE

The District has stated that to extend the water service to newly developed areas, reservoir/tank capacity would need to be increased. Adjacent properties at higher elevations would require additional water boosters to convey the water. However, lower elevation demands can be served by the District's current system. The District requires developers to construct the water infrastructure necessary to provide water supply to its new developments.

In addition, the District's Addendum to the Draft Water Master Plan discusses the ability of RMWD to provide water services to the planning areas that are located within and adjacent to the existing

boundaries of San Luis Rey Municipal Water District (SLRMWD) at the projected densities that are delineated in the SLRMWD Master Plan. The RMWD Addendum to the Draft Water Master Plan states that the District would serve the proposed development areas by utilizing RMWD's existing aqueduct turnouts and connecting the new development areas to RMWD's existing distribution system. This infrastructure is shown in Figure 2.2 at the end of this Section. Specifically, the water supply is proposed primarily from the Beck Zone through an expansion of the 690 Zone that is proposed for planned development in Campus Park (within the existing RMWD boundary). Two primary pressure reducing stations are recommended to supply the 690 Zone. A third pressure reducing station located along Rice Canyon Road is proposed to supply peak summer demands from the North Zone. Storage tanks are proposed at a reservoir site identified in the SLRMWD Master Plan to provide operational, fire flow, and emergency storage and to reduce the required supply rate through the pressure reducing stations. Surplus storage capacity in the Beck Reservoir will provide the required 10 days of reserve storage.

The northwest portion of the expanded service area within the proposed Meadowood development is stated by the RMWD Draft Addendum as being at elevations too high to be supplied from the proposed 690 Zone and is proposed to be supplied from an expansion of the proposed Campus Park 800 Zone. The 800 Zone is proposed to be initially supplied from the Canonita Zone through a single pressure reducing station. A second supply to this zone is recommended by the Addendum to the Draft Water Master Plan from a new pressure reducing station along the existing pipeline in Pala Mesa Heights Drive, which is supplied from the Rice Reservoir in the North Zone. An additional supply to the 690 Zone is also proposed from the North Zone through a pressure reducing valve located along Rice Canyon Road. Storage for the 800 Zone is proposed to be supplied from surplus storage in the North Zone, and emergency reserve storage would be supplied from Beck Reservoir through the Canonita Zone via a proposed emergency pump station.

Table 2.X summarizes the projected demand in each zone and storage requirements based on criteria defined in the 2006 RMWD Draft Master Plan. It is noted that the demands in Table 2.X include projections for both Campus Park and the eastern service area expansion. Storage for the 690 Zone is proposed to be constructed in two phases and would be required after build out of Campus Park and before any significant construction in the expanded service area.

Table 2.X: Projected Zone Demands and Storage Requirements to Serve the Proposed Development Areas Currently within SLRMWD

Zone	Projected Demand		Required Storage		Recommended Storage Facility
	ADD (gpd)	Max Day (gpd)	Daily	10-Day Reserve	
690	4,711,350	8,951,565	10.6 mg	47 mg	2 new 5.5 mg Tanks
800	100,000	190,000	0.40 mg	1.0 mg	Rice Tank

Source: RMWD Draft Water Master Plan, May 2006.

The RMWD Addendum to the Draft Water Master Plan also states that the supply of water to the development areas delineated in the SLRMWD Master Plan will require pipeline improvements. Transmission mains and pressure reducing stations would need to be sized to deliver the peak hour flow to the 800 Zone and the maximum day demand to the 690 Zone, which corresponds to a flow

rate of over 6,000 gpm. As detailed in the RMWD Draft Addendum, the following necessary pipeline improvements would be required for RMWD to provide water service to development projected within and adjacent to the existing SLRMWD boundary.

- Upsize or parallel existing pipelines between Beck reservoir and the 690 Zone pressure reducing valves to supply the entire 690 Zone service area during an aqueduct shutdown. This would require a flow rate of approximately 4,000 gpm, which could be transported in a new 18-inch-diameter pipeline.
- Upsize the existing 8-inch-diameter pipeline in Rice Canyon Road, south of Huntley Road, to a 16-inch-diameter pipeline. This pipeline is proposed to supplement Beck Zone deliveries to meet peak summer demands.

2.11 WASTEWATER FACILITIES AND SERVICES

The District collects and conveys wastewater to the San Luis Rey Wastewater Treatment Plant (WWTP) in Oceanside (Oceanside WWTP) through a contractual agreement for treatment and disposal of up to 1.5 million gallons of sewage per day. The District currently provides services to over 1,905 connections, representing 3,501 EDUs. In addition, the District has numerous customers that have paid to connect to the system, but have not yet connected. This represents an additional 2,320 EDUs. One EDU is 250 gallons per day. Table 2.Y provides the EDU factors used by the District for planning purposes and Table 2.Z provides the percentage of each customer type and percentage of EDUs that each customer type utilizes.

Table 2.Y: Summary of District EDU Factors

Land Use Type	EDU Factor
Single-Family Residential	1.0 EDU per unit
Residential Apart/Condo	1.0 EDU per unit
Guest House/Granny Flat	0.8 EDU per unit
Residential Condominium	1.0 EDU per unit
Commercial	1.0 EDU per 1st 1,000 sq. ft + 0.6 per each additional 1,000 sq. ft.
Hotel/Motel	0.8 to 0.5 per room
Elementary School	1.0 EDU per 60 students
Junior High School	1.0 EDU per 40 students
High School	1.0 EDU per 30 students

Source: RMWD Wastewater Master Plan, 2000.

Table 2.Z: RMWD Percentage of Connection Types and Percentage of EDUs Per Connection Type (2004-05)

Connection Type	Percentage of Connection Per Customer Type	Percentage of Total EDUs
Single-Family	90%	52%
Multifamily	4%	17%
Mobile Home Park	--	11%
Commercial	2%	7%
Not Connected	3%	9%
Other	1%	4%

Source: RMWD Draft 2006 Water Master Plan, May 2006.

The RMWD wastewater infrastructure, as shown in Figure 2.2 at the end of this Section, is comprised of a gravity flow system of collection pipes, six pumping stations, and 10.5 miles of transmission main, which transports wastewater to the Oceanside WWTP. Specifically, the system includes approximately 56 miles of wastewater conveyance pipelines, including gravity sewers and forcemains. The collector pipelines range in size from 6 to 24 inches in diameter. Gravity pipe materials used throughout the system include polyvinyl chloride, ductile iron, and vitrified clay. Forcemains within the District are constructed of cast iron, PVC, and high-density polyethylene. Table 2.AA provides detail of the existing RMWD conveyance facilities.

Table 2.AA: RMWD Conveyance System Summary

Pipeline Diameter (in)	Total Length (Gravity - lf)	Total Length (Forcemain - lf)
6	0	3,107
8	190,283	0
10	14,884	4,155
12	40,916	2,942
15	25,757	0
18	702	0
21	2,247	0
24	11,371	0
System Totals	**286,160**	**10,204**

Source: RMWD RFI Response, April 2006; RMWD Draft Wastewater Master Plan, May 2006.
lf = linear feet
in = inches

The District's Draft Wastewater Master Plan states that analysis of the existing wastewater collection system with both dry and wet weather flows found several gravity pipelines to be deficient with respect to the design criteria of the Draft Master Plan. The deficient pipeline reaches identified are located within four separate areas of the interceptor system and are detailed below. The Draft Master Plan states that these pipeline reaches are planned for future capacity upgrades.

- The line along the San Luis Rey River from Gird Road to Lift Station 1 is currently 12 inches in diameter. The pipe is flowing 70 percent full and therefore above design capacity during peak dry weather flow. It is also surcharging during peak wet weather flow.
- The line from Lift Station 2 to the Stallion Metering Facility is the major collector for the entire District and conveys all of the wastewater generated by the District. The line is currently 14,093 feet long and constructed of 15-inch pipe. Although the line is within design capacity for peak dry weather flow, it is surcharging during peak wet weather flow.
- The third reach is from Lift Station 1 to Lift Station 2. This line is within the design capacity for peak dry weather flow; however, it is surcharging during peak wet weather flow. The other area with existing capacity deficiencies is a short section of pipeline where the pipe size decreases from 12 to 8 inches in diameter prior to the Plant B lift station.

The District also has six wastewater lift stations and approximately 1,162 manholes throughout its service area. Five of the lift stations are wet pit/dry pit package lift stations. One lift station (Fallbrook Oaks) utilizes submersible pumps. The wet pit/dry pit stations consist of two buried capsular compartments, the prefabricated steel lift station housing contains the pumps and pump controls, and the precast concrete structure acts as the station wet well. Tables 2.BB and 2.CC provide details of the District's lift stations, and characteristics of the forcemains that accompany each lift station are summarized in Table 2.DD.

Table 2.BB: RMWD's Wastewater Lift Stations

Lift Station	Number of Pumps	Built	Rehabilitated
1	3	1974	Pumps replaced in 1994
2	3	1974	Pumps replaced in 1993
Rancho Viejo	2	1990	Rehabilitated in 2000
Plant B	2	1964	Rehabilitated in 1998
Fallbrook Oaks	2	1988	-
Rancho Monserate	2	1972	Pumps replaced in 1994

Source: RMWD Sewer Master Plan, 2000.

Table 2.CC: RMWD Lift Station Capacity

Lift Station	Capacity (gpm)	Average Dry Flow	Peak Dry Flow
1	1,250	857	1,111
2	1,400	945	1,120
Rancho Viejo	1,610	116	165
Plant B	640	59	82
Fallbrook Oaks	500	6	17
Rancho Monserate	400	32	46

Source: RMWD Sewer Master Plan, 2000; RMWD RFI Response, April 2006; RMWD Draft Wastewater Master Plan, May 2006.

Table 2.DD: Summary of District Forcemain Characteristics

Forcemain	Diameter (in)	Length (ft)	Discharge Manhole
Lift Station 1	10	269	28F-M160
Lift Station 2	12/14	2,942	31C-M005
Plant B	10	3,886	20L-M020
Rancho Monserate	6	812	20L-M055
Rancho Viejo	6	623	20I-M215
Fallbrook Oaks	6	1,672	20L-M020*

Source: RMWD RFI Response, April 2006.
* Forcemain from Rancho Monserate conveys the wastewater approximately 1,672 feet, where it intercepts the Rancho Viejo Forcemain. The Rancho Viejo Forcemain transports the wastewater an additional 2,450 feet before it discharges into a manhole.

As shown in Table 2.CC, the Master Plan demonstrates that all lift stations have adequate capacity for the peak dry weather flow. However, the Draft Wastewater Master Plan notes the following deficiencies.

Lift Station 1 is not capable of keeping up with the peak wet weather flow of 1,472 gpm. Based on the standard design practice and existing and projected future peak wet weather flows, the station would need a firm capacity of 2,608 gpm. Similarly, Lift Station 2 has a discharge rate of 1,400 gpm, which is not capable of keeping up with current peak wet weather flows of 1,563 gpm. Based on the standard design practice and existing and projected future peak wet weather flows, the station would need a firm capacity of 2,613 gpm. Several spills were reported at Lift Station 2 in the last few years, which were due to level control system failures.

In addition to the existing limitations for pumping, Lift Stations 1 and 2 exhibit a number of other shortfalls that would be best documented in thorough condition assessment reports, such as deterioration of the steel dry well, confined space entry risks, wet well capacity limitations, wet well cracks and leaks, and electrical issues. An alternative analysis was presented by the District's engineer in January 2003 identifying options for increasing capacity to Lift Stations 1 and 2. The options included retrofit of the existing stations, installation of new wetwell/drywell stations, or new wetwells with submersible pumps. A Preliminary Engineering Report was also prepared by the District's engineer in November 2002 that identifies alternatives for improving these lift stations.

Plant B Lift Station has a 320 gpm firm pumping capacity, and the station is not capable of keeping up with current peak wet weather flows of 357 gpm, which is why the station overflows during heavy rain events. Based on standard design practices, existing and projected future flows for the station would need a firm capacity of 728 gpm.

To provide for future flows of 1.5 mgd and the projected capacities of each of the lift stations detailed above, the Draft Master Plan states that the Plant B forcemain should be upsized to 8 inches in diameter, Lift Station 1 forcemain needs to be increased to 12 inches in diameter, and the Lift Station 2 forcemain needs to be fully increased to 14 inches in diameter.

The Draft Master Plan also states that the District has already sold reserve capacity in the collection system to take flows to within 98 percent of the total available EDUs and potentially to 100 percent of the ultimate 1.5 mgd average flow rate. Therefore, the near-term potential for significant increases in average and peak flows is highly likely, and the District should be considering options for providing additional capacity immediately. Further, the Draft Master Plan expects the risk of surcharging the system and potential overflow to continue to increase rapidly in the near term as more connections are made.

Wastewater Flows

The flows from the District are conveyed through 2,650 ft of forcemain and 11,690 ft of gravity line to the Stallion Flow Metering and Sampling Station, which is owned and operated by RMWD. The wastewater is metered as it flows through the Stallion Flow Metering and Sampling Station to the Oceanside wastewater collection system for treatment. Flow metering records are maintained both by District staff and the Oceanside WWTP for the purpose of tracking wastewater production and for billing purposes.

The average wastewater flow for the 2004-05 fiscal year was estimated at 938,300 gallons per day (0.938 mgd). The District's current contract is for 1.5 mgd of capacity at the Oceanside WWTP. Therefore, based on the 2004-05 data, RMWD has approximately 561,700 gpd of capacity to serve reserved EDUs not currently connected.

The District's Draft Wastewater Master Plan determined that the average generation of wastewater within the District was 268 gallons per day per EDU. This is an increase over the existing EDU factor of 250 gallons per day per EDU. The Draft Wastewater Master Plan states that this could be due to the increasing age of the system. The District has video recorded much of the system, and there are significant cracks and sections of the sewer system that need to be lined and repaired. The Draft Wastewater Master Plan notes that these infrastructure deficiencies could likely be leading to an increased problem with infiltration of groundwater into the sewer system. The system's inflow and infiltration as determined in the Draft Master Plan is equivalent to 287.5 gpm, which is equivalent to 118.25 gallons per day per EDU. If the District were able to reduce the inflow and infiltration, the flow per EDU would be much closer to the District's planning number of 250 gallons per day per EDU.

The District's contract for treatment plant capacity includes a clause that states that if average dry weather flow exceeds 1.5 mgd for 10 or more days in any three consecutive months, the District will be required to pay 7.5 times the current costs on all flows that exceed 1.5 mgd until the flows do not exceed 1.5 mgd for three consecutive months. The Draft Wastewater Master Plan states that existing District flows could exceed this limit if the District does not invest in rehabilitating the existing system to decrease the inflow and infiltration during wet weather. The Draft Master Plan also states that projects identified through a highly aggressive inflow and infiltration study could significantly decrease existing and potential treatment costs and could save the District a substantial amount of money annually.

Oceanside WWTP Capacity

The District's wastewater is conveyed and treated at the Oceanside WWTP. The plant has a current permitted capacity of 13.5 mgd; when all upgrades are complete the plant will have a permitted capacity of 17.4 mgd. The District currently owns a total treatment capacity of 1.5 mgd at the WWTP. The District's historical average dry weather wastewater generation is approximately 0.946 mgd. Based on projected wastewater production increases, the District is projected to generate an ultimate average dry weather volume not to exceed 1.5 mgd. The Draft Master Plan notes that Oceanside has indicated that there are no plans to upgrade the wastewater treatment plant in the future. If the District wishes to increase its wastewater flows beyond 1.5 mgd, alternative treatment and disposal options will be required.

Other Wastewater Services

RMWD provides services through a contract that began in March 1986 to Oak Crest Estates, which is a mobile home park located in the northern portion of the District. Oak Crest Estates owns and operates a small wastewater treatment plant. It is an Imhof tank secondary treatment system with effluent disposal by waste spraying on nearby hillsides. The RMWD agreement provides for supervising the operation of the plant, weekly inspection visits, reporting to the State of California Regional Water Quality Control Board (RWQCB), and providing operational advice. The agreement requires Oak Crest to reimburse the District for laboratory charges, permit fees, or any other fees associated with the treatment plant.

Future Wastewater Services

A large portion of the existing residences within the District utilize septic systems to dispose of wastewater. Private septic systems are acceptable within the County provided that the density is sufficiently low, soil conditions are appropriate, and public sewer lines are not available within 300 feet. Per the 2000 Wastewater Master Plan, approximately 68.4 percent of the parcels in the District were developed in 2000; however, only 13.7 percent were provided with sewer service from the District. The District projects that very low-density development that has primarily utilized on-site septic systems will continue, and it is likely that a large portion of the District will remain on septic systems for the foreseeable future. Because of this, general population growth within the District is not the most accurate indicator for the need to expand the public sewer system.

Additionally, the District has adopted Ordinance 01-02, which states that "no parcel that is greater than 250 feet from the sewer mains and trunk lines active when the 2000 Sewer Master Plan was adopted shall be allowed to connect to the sewer system." Therefore, only parcels within 250 feet will ever connect to the existing system as long as this Ordinance is in place. The Ordinance further states that "sewer capacity must be reserved on a first come first served basis and will only be reserved to a total flow of 1.5 mgd or 6,000 EDU's whichever comes first." As of February 17, 2006, the District had sold 5,908.76 of the 6,000 EDU's. It is therefore likely that some parcels within the service area will not be able to connect to the sewer system. Therefore, the District's sewer system has no underutilized sewer facilities that could be shared with other agencies and has minimal capacity for growth. Likewise, the District has stated that additional sewer service, either inside or outside the District's service area, will require construction of additional conveyance, treatment, and disposal

facilities. The District's Addendum to the Draft Wastewater Master Plan addresses alternatives to the District to provide wastewater services to additional customers.

Wastewater System Capital Improvements to Service up to 1.5 mgd in Existing Boundaries

The Draft Master Plan evaluates the infrastructure needs that would be required to provide for 1.5 mgd wastewater flows. Several lift station improvements would be required, as detailed previously. In addition, several pipeline improvements would be required, which are listed in Table 2.EE.

Table 2.EE: RMWD Pipeline Improvement Required to Provide for 1.5 mgd

Pipeline	Length (ft)	Diameter (in)	Design Capacity (gpm)	Ultimate Flow (gpm)	Required Diameter (in)
LS1_NW	10,191	12	353	1,474	18
SLR Inceptor	7,863	12	353	937-998	15-18
LS1_LS2	7,447	12	353	1,563	18
LS2_Outfall	14,093	15	826	1,575	21
LS1_NE	4,377	8	157	450-524	12-15
Plant B Collector	7,667	8-12	157-353	477	15

Source: RMWD Draft Wastewater Master Plan, May 2006.

The District's Draft Wastewater Master Plan includes a CIP and costs for both existing system projects and future system projects. The costs detailed for existing system projects total $20,245,000; costs for future system projects total $4,520,000. The total cost for the RMWD CIP is $24,765,000. These improvements are to be financed with revenue from the existing sewer rates and connection fees.

The District has had an average of 4 sewage spills per year within the last five years. None of the spills resulted in claims against the agency or enforcement actions. Table 2.FF lists the spills per year.

Table 2.FF: RMWD Summary of Wastewater Spills Within the Last 5 Years

Year	Number of Spills
2001	5
2002	1
2003	3
2004	8
2005	3

Source: RMWD RFI Response, April 2006.

2.12 POTENTIAL EXTENSION OF RMWD WASTEWATER SERVICE

The District's Addendum to the Draft Wastewater Master Plan discusses the District's potential methods to expand its wastewater service area either within the existing District boundary (outside the 250-foot buffer) or by providing service to lands east of the current District boundary through the

process of annexation. The District's Draft Addendum has defined expansion to the eastern service area as those lands that are currently within the SLRMWD and have a maximum demand of 10,000 EDUs. It is noted that the 250-foot service buffer, as identified by ordinance, may be rescinded or altered by Board action. Therefore, the limitation or expansion of sewer service within the RMWD existing boundary is managed by Board discretion and the capacity of infrastructure. The Draft Addendum includes several different alternatives; however, discussion within this MSR will focus on the alternatives of extending service beyond the existing 250-foot buffer and service to the build out of lands currently within SLRMWD. It should be noted that the discussion below is from the RMWD Addendum to the Draft Wastewater Master Plan and that each alternative utilizes information from the SLRMWD Master Plan.

RMWD Alternative to Increase Treatment Capacity Contract with Oceanside by 10,000 EDUs

The projected average wastewater flow from the SLRWD Master Plan is approximately 2.1 mgd, which is 140 percent more than the planned ultimate flow of the RMWD. Conveying this much additional flow through RMWD will require substantial improvements above and beyond those identified in the Draft Wastewater Master Plan. Conveyance, treatment, and discharge capacity of facilities within the Oceanside WWTP will also require substantial upsizing to accommodate the projected flows. The Addendum to the Draft Wastewater Master Plan details the following needed infrastructure upgrades. The associated projected capital expenses and projected revenues are provided in Table 2.GG.

RMWD Infrastructure Upgrades: The current Draft Master Plan does not anticipate capacity-related upgrades for a 10,000 EDU addition to the system. A preliminary capacity analysis was conducted to determine approximate levels of improvements. Based on this preliminary analysis, the required upgrades to pipelines and pump stations to take the current collection system to ultimate build out will cost approximately $56.2 million, an 87 percent increase over the current CIP of $30.1 million.

Oceanside Infrastructure Upgrades: The following upgrades would need to be made for the City of Oceanside to accommodate the additional 2.1 mgd flow from RMWD.

- Gravity Pipeline to the North Valley Lift Station and Oceanside WWTP. The existing pipeline varies increasingly from 18- -inches in diameter to 30 inches and is estimated to have approximately 4 mgd of capacity.
- Additional Treatment Capacity at the Treatment Plant. Planning number estimates for providing additional treatment capacity equal $13 per gallon.
- Upsizing the Land Outfall and Ocean Outfall.

Table 2.GG: Projected Expenses and Revenues to RMWD Expansion of Capacity at Oceanside WWTP

Short-Term Capital Expenses	Cost
Upsize RMWD mains	$30 million
Upsize pump stations	$1.2 million
Upsize Oceanside Mains	$12 million
Upsize Oceanside Lift Station	$5.8 million
Upsize Oceanside Treatment Plant	$32.5 million
Upsize Oceanside Outfall	$34 million
Total	**$115.5 million**
Long-Term Capital Expenses	
Increased Oceanside maintenance/ownership costs	$200,000 per year
Increased Oceanside treatment costs	$3 million per year
Short-Term Revenue	
Connection fees paid by developer for 850 immediate EDUs	$13.5 million
Long-Term Revenue	
Connection fees revenues at build out	$145 million
10,000 new rate payers at $56 per month	$560,000 per year
Revenue from future developments	Unknown

Source: RMWD Draft Wastewater Master Plan Addendum, May 2006.

RMWD Alternative to Construct and Operate 2.5 mgd Treatment Plant

This alternative would construct and operate a new 2.5 mgd wastewater treatment plant. The operation of the plant would combine secondary treatment and disposal of effluent through percolation ponds. The District would need to locate the treatment plant on a site that provides adequate percolation given the planned treatment capacity. The Addendum to the Draft Wastewater Master Plan assumes that a plant could be located near the upper end of the existing collection system around the intersection of SR-76 and I-15; however, it also notes that locating the treatment plant at the bottom of the system is also a potential solution.

RMWD and Pardee Homes, who is the developer of the proposed Meadowood development, have signed a preannexation agreement regarding the provision of wastewater service. This agreement states that Pardee would develop and construct a wastewater treatment facilities and other infrastructure to serve the Meadowood development. The wastewater treatment facility would be designed to accommodate the minimum capacity of wastewater to serve 1,465 EDUs, plus 1,250 EDUs or the number of EDUs developed within Meadowood. Based on this agreement the facility would have a minimum capacity of 678,750 gallons per day. The wastewater treatment facility is to be constructed on 14 acres of vacant property that is currently owned by RMWD and located adjacent to the RMWD's office. It should be noted that numerous residents within RMWD have signed a petition against construction of this wastewater treatment plant.

City of Oceanside Infrastructure Upgrades: The Oceanside infrastructure would not require any upsizing or upgrades. The District could continue to use and maximize its current contract to send up to 1.5 mgd of flow to Oceanside.

RMWD Infrastructure Upgrades: Depending on the location of the treatment plant, the number of upgrades will vary. Redirection and replacement of some current infrastructure will be necessary to transport flow to the new disposal facility. One or more forcemains would likely need to be added to convey some flow from existing lift stations to the new WWTP. All new infrastructure upstream of the plant would be developer funded.

The Addendum to the Draft Master Plan states that this alternative would result in postdevelopment high net revenues without affecting service rates and provide for the potential opportunity of selling recycled water in the future. The associated projected capital expenses and projected revenues are provided in Table 2.HH.

Table 2.HH: Projected Expenses and Revenues to RMWD Construct and Operate a New 2.5 mgd WWTP

Short-Term Capital Expenses	**Cost**
Upsize RMWD mains	$30 million
Upsize pump stations	$5 million
Design and construct a 2.5 mgd WWTP	$33 million
Design and construct percolation ponds	$18 million
Long-Term Capital Expenses	
Operation and maintenance of the WWTP	$2.5 million per year
Short-Term Revenue	
Connection fees paid by developer for 850 immediate EDUs. Funds used for construction of the WWTP	$13 million (net revenue is $0)
Long-Term Revenue	
Connection fees revenues at build out	$145 million
10,000 new rate payers	Unknown

Source: RMWD Draft Wastewater Master Plan Addendum, May 2006.

Table 2.II provides a summary of the capital expenses and revenues for these alternatives as provided in the RMWD Addendum to the Draft Wastewater Master Plan.

Table 2.II: Summary of Expenses and Revenues for the Wastewater Service Expansions

Alternative	Capital Expenses	Capital Revenue	Net Revenue
Upgrade Oceanside	$141,603,098	$159,907,740	$18,304,642
New 2.5 mgd WWTP	$84,943,571	$159,907,740	$74,964,169

Source: RMWD Draft Wastewater Master Plan Addendum, May 2006.

2.13 RECYCLED WATER

The District does not currently provide recycled water to properties within the District's boundaries. There are no formal plans for future recycled water service. However, the potential new wastewater treatment plant may be capable of producing recycled water. If construction of this plant were to occur, RMWD would also have to build a distribution system for the recycled water.

2.14 SERVICE/PLANNING AREA DISCUSSION

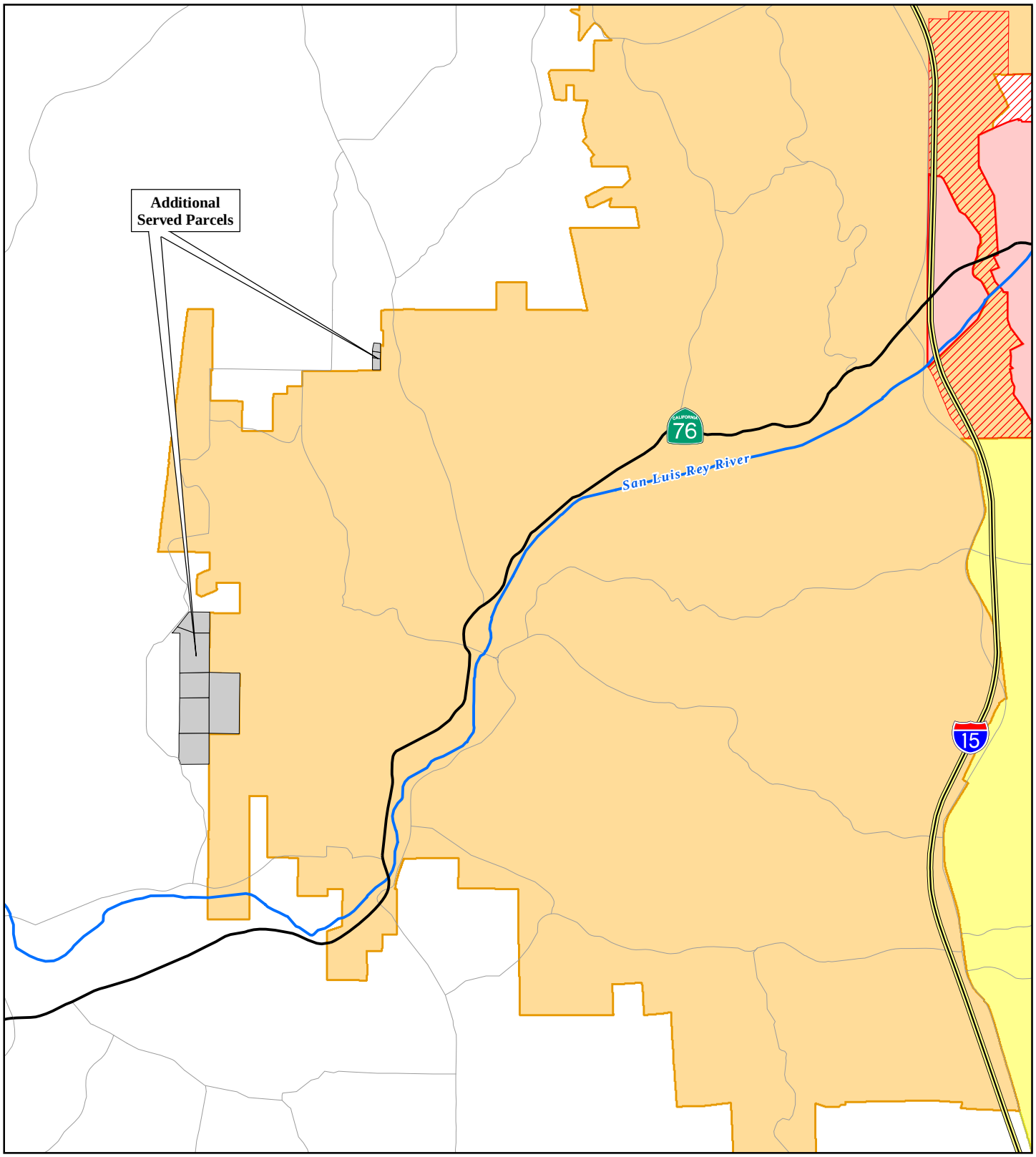
RMWD's existing SOI encompasses 75 square miles and is generally coterminous with the District's boundary. There are two areas that are not coterminous; these include a small square-shaped area in the northeastern portion of the District that is not within either the SOI or District; instead, it is a non-contiguous portion of the Pauma MWD. In addition, there is a non-contiguous inverted "L"-shaped area located north of Pala Road and west of Pala Temecula Road that is within the District's territory but not within the SOI. The District's existing boundary and SOI are shown in Figure 2.2.

LAFCO adopted the RMWD SOI in 1984. Since then, the SOI has been amended eight times. Three of those amendments involved both inclusion of lands within the SOI and annexation of territory into the District. Four of the SOI amendments consisted of detachment of lands from both the District and its SOI in conjunction with annexation of those lands to the Fallbrook Public Utility District and its SOI. The remaining amendment was approved by LAFCO in 1985 and encompassed 40 acres of land that were retained in RMWD's service area, but removed from the SOI with portions being added to Vallecitos Water District, Vista Irrigation District, and Bueno Colorado MWD.

It should also be noted that there is a portion of SLRMWD territory bounded by the San Luis Rey River on the south and I-15 on the west that is completely surrounded by RMWD. That acreage was included in SLRMWD's SOI and removed from RMWD's SOI. Additionally, in the southwestern portion of RMWD located north of Mission Avenue and west of Mission Road, an area of RMWD's territory and SOI overlay a portion of the City of Oceanside.

The District currently provides services to several areas that are outside of its existing boundary and SOI. RMWD currently provides water service to a large agricultural area known as Gilligan Groves, located to the south of the District along the border with Oceanside. The area is within the Oceanside service area but is more efficiently served by RMWD. This arrangement has been in place since the 1960s. Additionally, the District provides water service to nine other parcels that are located outside of the District's boundary. The assessor's parcel numbers for the areas being served are listed below and shown on Figure 2.1.

- 121-190-29
- 121-190-30
- 122-030-84
- 122-030-85
- 122-030-28
- 122-030-27
- 123-230-66
- 123-230-67
- 123-230-68



LSA

Legend

- Existing San Luis Rey MWD Sphere of Influence
- Proposed San Luis Rey MWD Sphere of Influence
- San Luis Rey MWD/ SDCWA and MWD Boundary
- Valley Center MWD Sphere of Influence
- Valley Center MWD/ SDCWA and MWD Boundary
- Rainbow MWD Sphere of Influence
- Rainbow MWD/ SDCWA and MWD Boundary
- Additional Parcels Served by RMWD

N

0 3,000 6,000

Feet

SOURCE: NAIP (2004).

i:\slr0601\gis_adtl_parcels.mxd (08/22/06)

FIGURE 2.1

San Diego LAFCO MSR and SOI Update

Additional Parcels Served by RMWD

There are several areas that are currently within the RMWD boundary that are being served by other Districts. The Blower property is an area located in the northeastern portion of the District, to the west of Live Oak Park Road and to the east of Tumblecreek Lane. A Temporary Service Agreement was executed in 1996 for Fallbrook PUD to provide water service to this area. That agreement expired; however, Fallbrook PUD continues to provide service to those parcels. RMWD has stated that the area may be more economically and efficiently served by Fallbrook PUD and does not intend to block Fallbrook PUD from continuing to serve these three parcels. However, RMWD has requested that the property owner begin the boundary change process with LAFCO as soon as possible.

In 2003, LAFCO placed a Special Study Area designation on territory located in the I-15 and Old Highway 395 corridor, as shown on Figure 2.2. Some of the subject parcels are located in RMWD and others are in VCMWD. Boundaries between these Districts are currently delineated by Old Highway 395. Based on the information gathered, it appears that the development of I-15 has created a physical barrier, which is a physical constraint to providing services to parcels that are currently within these Districts but on the other side of I-15. It appears that due to the physical constraint of I-15, parcels within the Special Study area to the west of I-15 would be more easily served by RMWD, and parcels to the east of I-15 would be more easily served by VCMWD. Therefore, it would appear appropriate to include Special Study areas west of I-15 into the RMWD SOI and Special Study areas to the east of I-15 into the VCMWD SOI.

Ability to Extend RMWD Service to the Lands Within the Existing San Luis Rey MWD and Planning Areas, including Advantages and Disadvantages

Part of the MSR and SOI Update process is to evaluate the existing and future service provision capabilities of agencies and to determine the most efficient arrangement of service boundaries. Therefore, this MSR and SOI Update evaluates the potential for RMWD to extend water and wastewater services to the areas that are currently within the boundaries of SLRMWD and the proposed development areas as detailed in Section 3.4. The proposed development areas are identified as the "Planning Areas" in this discussion and identified on Figure 3.1.

SLRMWD's proposed SOI and planned development areas are located directly east of the existing RMWD boundary and SOI. The planning areas are generally coterminous with RMWD's existing SOI with the exception of a square-shaped area north of SR-76 and south and east of the Warner Property; also, portions of the planning areas are already within RMWD. These areas include the Campus Park and Lake Rancho Viejo development areas. The developed portion of Lake Rancho Viejo is currently being served by RMWD and RMWD is planning on serving the remainder of the development upon completion. The existing RMWD SOI and location of the planning areas are shown on Figure 2.2.

As noted in Section 2.10, RMWD has stated that it would provide water service to the planning areas by utilizing RMWD's existing aqueduct turnouts and connecting the planning areas to RMWD's existing distribution system. Implementation would require improvements to pipelines, transmission mains, and pressure reducing stations. Storage tanks as shown in the SLRMWD Master Plan would be developed for operational, fire flow, and emergency needs.

As stated in Section 2.12, RMWD has developed two alternatives to provide wastewater service to the planning areas. The first alternative is to increase the treatment plant capacity contract with the City

of Oceanside; the second alternative is to construct and operate a 2.5 mgd wastewater treatment plant within RMWD boundaries. As noted earlier, RMWD and the developer of the proposed Meadowood development have signed a preannexation agreement for the provision of wastewater services, including the construction of a wastewater treatment facility on the property adjacent to the RMWD office. The facility would have a minimum capacity of 678,750 gallons per day

RMWD has stated that funding for expansion of the water and wastewater systems would be obtained through sales of water meters and connection fees. In addition, the preannexation agreement between RMWD and the developer would provide for a wastewater treatment facility with a specific capacity. This agreement has an effective date of July 15, 2004. It should be noted that the District is limited in borrowing money through loans or bonds due to Ordinance 95-1, which requires a two-thirds vote to incur additional public debt when the District is already carrying cumulative debt in excess of $1 million for capital improvements.

Extension of RMWD water and wastewater services to the planning areas would require a number of jurisdictional changes, including SOI and boundary expansions and concurrent annexation of the planning areas to MWD and the SDCWA. Annexation of lands into MWD and SDCWA would require the payment of annexation fees to both agencies. The annexation fees are currently $2,929 per acre for SDCWA and $3,460 per acre for MWD. RMWD has stated that the cost of the SDCWA and MWD annexation fees would be born by the properties annexing.

In summary and in addition to the boundary changes described, the provision of service to the planning areas by RMWD would require numerous activities by RMWD. These include:

- Participation in construction of extensive water, wastewater, and recycled water infrastructure to serve the planning areas, as no infrastructure within the planning areas currently exists.
- Capacity increases of existing RMWD facilities.
- Revision of Ordinance 01-02, which limits the expansion of wastewater services.
- In association with the infrastructure development, the District would need engineering reports; numerous permits from regional agencies, including a Conditional Use Permit and National Pollutant Discharge Elimination System Permits (NPDES) for construction and operation of a wastewater treatment facility; and appropriate California Environmental Quality Act (CEQA) documentation.
- Generation and implementation of funding sources.
- Updates of the District's planning documents, such as the CIP and Master Plans, and any necessary CEQA-related documentation.
- Incremental staffing increases to provide adequate services and maintenance.
- Potential restructuring of the Board of Directors to provide representation of the new areas.

Advantages

There are advantages of the planning areas being served by RMWD, as listed below.

- The District already provides both water and wastewater services (although wastewater is not provided Districtwide) and is a member of SDCWA and MWD. Additionally, the District has existing relationships with outside vendors providing engineering services.
- RMWD has stated that it could provide water service to the planning areas by utilizing RMWD's existing aqueduct turnouts and connecting the planning areas to RMWD's existing distribution system. This structure could streamline infrastructure development and save costs. However, this would still require significant improvements to pipelines, transmission mains, and pressure reducing stations.

Disadvantages

There are several disadvantages of the planning areas being served by RMWD, as listed below.

- There are several deficiencies within the existing RMWD infrastructure, including areas of high water pressure, areas that do not meet fire flow criteria, reservoir water quality issues, deficient gravity pipelines, lift station deficiencies, and sewer line cracks. The RMWD Draft Water Master Plan acknowledged that there are numerous areas that have inadequate fire flow. The document mentions that improvement projects are proposed to bring the water system up to compliance with minimum fire flow requirements based on existing development. According to the report, the District is also experiencing difficulty in maintaining water quality for the following reasons: (1) the reservoirs are currently not covered; and (2) the water enters and leaves through a single inlet/outlet pipe, which reduces water circulation and results in fresh water not readily blending in with already-stored water. While the District noted that steps are being taken to cover the reservoirs, there is no mention of measures that can be taken to increase water circulation. Thus, it would appear efficient for the District to focus on existing infrastructure issues prior to planning a large expansion of its service area.
- Based on SANDAG projections and the County's Draft 2020 land use designations within both RMWD and the planning areas, it appears that significant growth may occur. Several infrastructure expansions/upgrades are necessary for RMWD to meet the anticipated needs of its existing service area, including pump station replacements, capacity increases to reservoirs, lift station improvements, and pipeline improvements. It may be difficult for the District to concurrently expand existing infrastructure and plan a large expansion of its service area while maintaining adequate service levels.
- RMWD only provides wastewater to a small portion of its existing territory (approximately 14 percent of parcels). The District has an ordinance that limits expansion of its existing service area and the number of EDUs of wastewater service that the District can provide. The District has sold a large majority of these EDUs and has stated that it is likely that some parcels within the District's existing service area will not be able to connect to the sewer system. Thus, it may be difficult, if not impossible, for the District to expand wastewater service to existing District residents. It should be noted that the Addendum to the 2006 Draft Wastewater Master Plan identifies alternatives for potentially developing increased sewer capacity.
- The District has received recent violation notices and fines from the California Department of Health Services and the San Diego County Air Pollution Control District.
- The District has had numerous claims against its insurance carrier within the last 10 years.

- The District has had operating losses in the fiscal years ending June 2004 and 2005.
- The District does not have specific policies that regulate reserve funds and does not have a designated operating reserve.
- Based on past and present history, governance of the RMWD has been unstable. There have been numerous changes to the Board's membership within each of the five divisions, as well as a high level of employee turnover, especially in the position of general manager. The general manager is responsible for overseeing the District's day-to-day operations and managing District affairs. Having had 11 general managers over the previous 12 years, the District suffers from a chronic lack of continuity in providing consistent leadership. That pattern is continuing, as evidenced by the present situation where the general manager hired in October 2005 on a contractual basis only has a contract through February 2007 and the District's Board President resigned in August 2006. In addition, the District has recently had several reorganizations. Due to this, it may be difficult for the District to maintain its existing staff, increase services to provide for growth within its existing boundaries, and incrementally increase staffing to extend and provide adequate service to a larger service area.
- The costs related to the significant expansion of the existing infrastructure and service area may result in impacts to existing rates for services. Service rates may need to be increased to cover the costs related to planning, development, and operation of new infrastructure; as well as costs related to the potential expansion or capacity increase of the existing system to accommodate increased demands. However, the District has stated that it has policies to ensure that there is no cost to existing rate payers for expansion of facilities to serve new customers.

2.15 MSR DETERMINATIONS FOR RAINBOW MWD

The Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 requires that the following nine determinations be included in MSRs. The following determinations have been prepared pursuant to the standards developed by San Diego LAFCO, as detailed in Appendix A, and based on the District information detailed previously.

Determination 1: Infrastructure Needs and Deficiencies

In authorizing the preparation of MSRs, the State Legislature has focused on one of LAFCO's core missions—encouraging the efficient provision of public services. Infrastructure needs or deficiencies, which refer to the adequacy of existing and planned public facilities in relation to how public services are, and will be, provided to citizens, impacts the efficient delivery of public services. Infrastructure can be evaluated in terms of capacity, condition, availability, quality, and correlations among operational, capital improvement, and finance plans. It is recognized that there may be unmet infrastructure needs due to budget constraints or other factors; however, identification of deficiencies may promote public understanding and support for needed improvements.

Determination 1.0: To meet the RMWD projected demand at buildout within the existing boundaries, pump station capacity improvements will be required at the Morro Hills, Vallecitos, Northside, and possibly the Magee Pump Stations.

Determination 1.1: There are currently many areas of the RMWD distribution system where pressures exceed 200 psi. It is possible to reduce pressures in several areas by expanding or creating reduced pressure zones supplied by pressure reducing stations. In general, however, pressures cannot be reduced to most areas without significant zone reconfigurations involving the construction of new storage tanks and transmission mains.

Determination 1.2: Numerous areas do not meet current fire flow criteria. Improvement projects are proposed to bring the existing water system up to compliance with minimum fire flow requirements.

Determination 1.3: There is an overall storage surplus of 173 MG. However, considering each separate zone, there is a storage deficit (less than 1 MG) in the Vallecitos and Canonita Zones, and a deficit of approximately 4.7 MG in the Gopher Canyon Zone. At the District's projected buildout, this storage deficit would increase to 1.1 MG in the Vallecitos and Canonita Zones, and a deficit of 6.5 MG in the Gopher Canyon Zone. A new reservoir with a capacity of approximately 0.5 MG will be required for the Vallecitos Zone, and a 6.5 MG tank is needed for the Gopher Canyon Zone.

Determination 1.4: The quantity of potable water being held in the RMWD large reservoirs and the fact that they are not covered is affecting the District's ability to maintain water quality. Further complicating the issue is the fact that the water enters and leaves the reservoirs through a single inlet/outlet pipe. The California Department of Health Services issued a water quality citation and $2,000 fine on August 10, 2005, because the uncovered reservoirs pose a risk to water quality. The District was cited again and fined $13,000 on December 6, 2005, for failure to make several short-term improvements to its open reservoirs by the State-imposed deadline. The citations are being addressed by covering, filtering, or replacing the reservoirs. Until the District completes construction of the reservoir covers, chlorination facilities are being upgraded to meet more stringent disinfection requirements.

Determination 1.5: RMWD has experienced an annual average of 85 water line breaks and leaks between 2001 and 2005. The District has stated that none of these system failures have resulted in enforcement actions by environmental agencies.

Determination 1.6: The San Diego County Air Pollution Control District imposed a $6,250 fine on the District in May and June 2005 for failure to follow procedures for installing a natural gas-powered pump, emergency generator, and catalyst.

Determination 1.7: Analysis of the existing wastewater collection system found several gravity pipelines to be deficient with respect to the design criteria of the Draft Master Plan. The deficient pipelines are located within four separate areas of the system. These pipeline reaches are planned for future capacity upgrades.

Determination 1.8: There are several lift station deficiencies, which include capacity deficiencies, level control system deficiencies, deterioration of the steel dry well, confined space entry risks, wet well capacity limitations, wet well cracks and leaks, and electrical issues. Near-term potential for significant increases in average and peak flows is highly likely. The risk of surcharging the system and potential overflow is expected to continue to increase rapidly in the near term as more connections are made.

Determination 1.9: The District has video recorded much of the sewer system and has found significant cracks and sections of the sewer system that need to be lined and repaired. These infrastructure deficiencies could likely be leading to an increased problem with infiltration of groundwater into the sewer system. A highly aggressive inflow and infiltration program could significantly decrease existing and potential treatment costs and could save the District a substantial amount of money annually.

Determination 1.10: The District does not provide sewer service throughout its service area. As of February 17, 2006, the District had sold 5,908.76 of the 6,000 allowable EDUs and is holding roughly 60 EDUs in reserve for water customers whose existing septic tank systems may fail in the future. Hence, the existing RMWD sewer system has minimal capacity for growth. Likewise, additional sewer service, either inside or outside the District's service area, will require construction of additional conveyance, treatment, and disposal facilities.

Determination 1.11: The District has had an average of four sewage spills per year within the last five years. None of the spills resulted in claims against the agency or enforcement actions.

Determination 1.12: For RMWD to provide water, wastewater, and recycled water service to the lands currently within SLRMWD, the District would need to develop extensive infrastructure, as no infrastructure within the area currently exists. RMWD has stated that it would be able to utilize existing aqueduct connections and turnouts; however, significant water infrastructure improvements would still be required in order to accommodate the increase in needed capacity.

Determination 2: Growth and Population

Efficient provision of public services is linked to an agency's ability to plan for future need. For example, a water purveyor must be prepared to supply water for existing *and* future levels of demand, and also be able to determine *where* future demand will occur. MSRs will give LAFCO, affected agencies, and the public the means to examine both the existing and future need for public services and will evaluate whether projections for future growth and population patterns are integrated into an agency's planning function.

Determination 2.0: Land use within the District's service area is transitioning from mainly agricultural to more rural residential development.

Determination 2.1: The amount of developable land remaining in the District is 18 percent of the total land area, or approximately 9,300 acres. Approximately 6,100 acres (66 percent) of the developable land is classified with a rural residential land use.

Determination 2.2: SANDAG has projected that population growth within the unincorporated Community Plan Areas within RMWD will average 2.65 percent annually and housing growth will average 2.58 percent annually through 2030.

Determination 3: Financing Constraints and Opportunities

LAFCO must weigh a community's public service needs against the resources available to fund the services. During the MSR, the financing constraints and opportunities, which have an impact on the delivery of services, will be identified and enable LAFCO, local agencies, and the public to assess whether agencies are capitalizing on financing opportunities. For example, a MSR could reveal that two or more water agencies that are each deficient in storage capacity and which individually lack financial resources to construct additional facilities, may benefit from creating a joint venture to finance and construct regional storage facilities. Service reviews may also disclose innovations for contending with financing constraints, which may be of considerable value to numerous agencies.

Determination 3.0: The District has had operating losses in the fiscal years ending June 2004 and 2005. Having operating expenditures exceeding operating revenues would appear to create financing constraints.

Determination 3.1: The District does not have specific policies that regulate reserve funds. However, the District has stated that the current fee structure allows approximately $5 million per year in water funds and $1 million per year in sewer funds to be available for infrastructure upgrades the following year. There are currently no designated operating reserves.

Determination 3.2: RMWD is limited in borrowing money through loans or bonds due to local Ordinance 95-1, which was enacted in 1995 by the District's Board. This ordinance requires a two-thirds vote to incur additional public debt whenever the District is already carrying cumulative debt in excess of $1 million for capital improvements.

Determination 3.3: The District requires new facilities that are needed to serve new development must be funded by the developer, and the new facilities are to be dedicated to the District upon completion.

Determination 3.4: If the District's average dry weather flow exceeds 1.5 mgd for 10 or more days in any three consecutive months, the District will be required to pay 7.5 times the current costs on all flows that exceed 1.5 mgd until the flows do not exceed 1.5 mgd for three consecutive months. The existing District flows could exceed this limit if the District does not invest in rehabilitating the existing system to decrease the inflow and infiltration during wet weather. This appears to be a potential financing constraint.

Determination 3.5: For RMWD to provide services to the proposed development areas currently within SLRMWD, RMWD would need to generate and implement funding sources to develop infrastructure and fund the costs of annexation of the additional lands to SDCWA and MWD ($6,389 per acre, which totals over $19 million if the District were to annex the entire existing SLRMWD area). However, RMWD has stated that the cost of the SDCWA and MWD annexation fees would be born by the properties annexing.

Determination 3.6: To comply with recent more stringent regulations related to covering the reservoirs, the District will incur significant expenses.

Determination 4: Cost Avoidance Opportunities

LAFCO's role in encouraging efficiently provided public services depends, in part, on helping local agencies explore cost avoidance opportunities. The MSR will explore cost avoidance opportunities including, but not limited to: (1) eliminating duplicative services; (2) reducing high administration to operation cost ratios; (3) replacing outdated or deteriorating infrastructure and equipment; (4) reducing inventories of underutilized equipment, buildings, or facilities; (5) redrawing overlapping or inefficient service boundaries; (6) replacing inefficient purchasing or budgeting practices; (7) implementing economies of scale; and (8) increasing profitable outsourcing.

Determination 4.0: In an effort to increase efficiency and avoid costs, the District has reestablished the meter replacement program. This is a 10-year program that will ultimately replace all of the old meters with remote read meters. The meter replacement program is expected to save money for the District both in reduced costs and by providing more accurate meter reads.

Determination 4.1: RMWD's membership in the SDCWA supports the SDCWA's public information, public education, and water conservation programs. This membership also provides for shared financing, construction, operation, and maintenance of the SDCWA Aqueduct System.

Determination 5: Opportunities for Rate Restructuring

When applicable, the MSR will review agency rates, which are charged for public services, to examine opportunities for rate restructuring without impairing the quality of service. Agency rates will be scrutinized for: (1) rate setting methodologies; (2) conditions that could impact future rates; and (3) variances among rates, fees, taxes, charges, etc., within an agency and region. MSRs will identify strategies for rate restructuring, which would further the LAFCO mission of ensuring efficiency in providing public services.

Determination 5.0: The District reviews its rates annually as part of the budget process. In May 2004 the District adopted water rate increases that are to become effective at intervals through January 2007. In addition, the Board increased pump zone charges in June 2006.

Determination 5.1: As an opportunity to rate restructuring, the District has reviewed a tiered rate structure whereby the charge per unit would change based on consumption. The intent of this formula was to encourage conservation and provide a rate break for low usage. Upon review, the District determined that this method was impractical and difficult to administer. Therefore, the District is not currently anticipating any changes to the water rate structure.

Determination 6: Opportunities for Shared Facilities

Public service costs may be reduced and service efficiencies increased if service providers develop strategies for sharing resources. For example, service providers in San Diego County currently share communication centers, wastewater treatment facilities, and distribution lines. Sharing facilities and excess system capacity decreases duplicative efforts, may lower costs, and minimizes unnecessary resource consumption. The MSR will inventory facilities within the study area to determine whether facilities are currently being utilized to capacity and whether efficiencies can be achieved by

accommodating the facility needs of adjacent agencies. Options for planning for future shared facilities and services will also be considered.

Determination 6.0: The District currently does not share any facilities. Additionally, no opportunities for shared facilities have been identified.

Determination 7: Government Structure Options, including Advantages and Disadvantages of Consolidation or Reorganization of Service Providers

The MSR provides a tool to comprehensively study existing and future public service conditions and to evaluate organizational options for accommodating growth, preventing urban sprawl, and ensuring that critical services are efficiently and cost-effectively provided. While the MSR does not require LAFCO to initiate changes of organization based on MSR findings, LAFCO, local agencies, and the public may subsequently use MSRs to pursue changes to services, local jurisdictions, or spheres of influence. LAFCO may examine efficiencies that could be gained through: (1) functional reorganizations within existing agencies; (2) amending or updating spheres of influence; (3) annexations or detachments from cities or special districts; (4) formation of new special districts; (5) special district dissolutions; (6) mergers of special districts with cities; (7) establishment of subsidiary districts; or (8) any additional reorganization options found in Government Code § 56000 et. seq.

Determination 7.0: Due to the physical service constraints caused by I-15, it would appear appropriate to include Special Study areas west of I-15 into the RMWD SOI and include Special Study Areas that are adjacent to RMWD and east of I-15 into the VCMWD SOI.

Determination 7.1: Territory in RMWD currently receiving service from Fallbrook PUD on a contractual basis should be evaluated for potential reorganization between the two Districts.

Determination 7.2: Extension of RMWD water and wastewater services to the planning areas would require a number of jurisdictional changes, including SOI and boundary expansions and concurrent annexation of the planning areas to MWD and the SDCWA. In addition, the RMWD Board of Directors may need to be restructured to provide representation to the new areas.

Determination 7.3: There are several advantages and disadvantages in having the planning areas served and governed by RMWD.

- Advantages include: (1) RMWD already provides water and wastewater services; (2) water supplies could be obtained through existing aqueduct turnouts and RMWD's existing distribution system; and (3) RMWD is already a member of MWD and SDCWA.
- Disadvantages include: (1) RMWD has existing infrastructure deficiencies; (2) the existing wastewater service area is limited and District ordinance limits its expansion; (3) recent citations from State and regional environmental agencies; (4) history of numerous insurance claims; (5) recent operating revenue issues; (6) lack of financial reserve policies; (7) history of inconsistent workforce and governance; (8) costs related to the expansion of services may impact rates; and (9) it may be difficult for the District to accommodate the projected growth both within existing boundaries and within the planning areas.

Determination 8: Evaluation of Management Efficiencies

Management efficiency refers to the effectiveness of an agency's internal organization to provide efficient, quality public services. Efficiently managed agencies consistently implement plans to improve service delivery, reduce waste, eliminate duplications of effort, contain costs, maintain qualified employees, build and maintain adequate contingency reserves, and encourage and maintain open dialogues with the public and other public and private agencies. The MSR will evaluate management efficiency by analyzing agency functions, operations, and practices, as well as the agency's ability to meet current and future service demands. Services will be evaluated in relation to available resources and consideration of service provision constraints.

Determination 8.0: Based upon the number of employees, the District appears to have a somewhat inconsistent workforce, having 7 retirements, 30 resignations, and 9 terminations over the past five years. In addition, the District has undergone several recent significant reorganizations, and has had 11 general managers over a 12-year period.

Determination 8.1: The District has had 23 claims made against its insurance carrier within the last 10 years. The costs resulting from the claims between 1995 and July of 2005 totaled $1,235,749.73.

Determination 8.2: The District has records of customer complaints for the last nine months (May 2005 – February 2006), which total 88 complaints. These records to not indicate what the customer issue was or how the issue was resolved. There are no formal records of complaints prior to May 2005.

Determination 9: Local Accountability and Governance

In making a determination of local accountability and governance, LAFCO will consider the degree to which the agency fosters local accountability. *Local accountability and governance* refers to public agency decision making and operational and management processes that: (1) include an accessible and accountable elected or appointed decision making body and agency staff; (2) encourage and value public participation; (3) disclose budgets, programs, and plans; (4) solicit public input when considering rate changes and work and infrastructure plans; and (5) evaluate outcomes of plans, programs, and operations and disclose results to the public.

Determination 9.0: RMWD has an inconsistent history of governance. Within each of the District's divisions, many directors have resigned, retired, or been recalled prior to the end of their term within the last 10 years. Due to this, several directors have been appointed and several recall elections have occurred.

Determination 9.1: The District has records of customer complaints for the nine months between May 2005 and February 2006. These records do not indicate what the customer issue was or how the issue was resolved. There are no formal records of complaints prior to May 2005. More accurate and long-term records of customer complaints would provide a better indicator of what customer issues are and how they are best resolved.

Determination 9.2: The District provides for local accountability by holding board meetings and having agendas available pursuant to the Brown Act. In addition, the District publishes a monthly newsletter, which is included in monthly service bills.

2.16 SOI DETERMINATIONS FOR RAINBOW MWD

As detailed in Section 1.0, Government Code Section 56425 requires written determinations with respect to the following four factors to update an agency's SOI. Based upon the information above, the following determinations are recommended to update the existing RMWD SOI.

Present and Planned Land Uses in the Area

RMWD encompasses 51,200 acres of unincorporated land in northern San Diego County. Land within the existing RMWD SOI is largely undeveloped and mostly designated as agricultural and vacant. Lesser areas of spaced rural residential land uses are scattered throughout the District. There are pockets of denser development generally consisting of commercial areas along SR-76 and residential developments adjacent to the main tributary roads such as Gird Road, Gopher Canyon Road, Tecolate Drive, and West Lilac Road. While agricultural lands currently make up a large portion of land within RMWD, only a small percentage of those lands are designated as prime agricultural land, as shown in Figure 2.3.

San Diego County is currently going through a General Plan Update. Within this Update, the 2020 Land Uses have not yet been adopted and are shown as proposed on Figure 2.4. The proposed land uses within RMWD are significantly different than the existing land use designations. The major difference is that large areas of lands currently designated agriculture or vacant are proposed as spaced rural residential.

SANDAG has projected that population growth within and around the RMWD area will average 2.65 percent annually, and housing growth will average 2.58 percent annually through 2030. The known planned developments within RMWD total 2,717 residential units. The growth projections and existing planned developments are consistent with the expected transition from a predominantly agricultural area to that of large single-family homes and mixed agricultural/residential usage.

Present and Probable Need for Public Facilities and Services in the Area

As stated previously, it is projected by SANDAG that the population of the RMWD area will grow approximately 2.65 percent annually and that most of the anticipated growth within the District will be in housing units. Currently 2,717 residential units are being planned. The need for water and wastewater infrastructure and services will increase incrementally along with growth. Pursuant to SANDAG projections and the County's proposed land uses, demands for services can be expected to increase significantly through 2030.

Present Capacity of Public Facilities and Adequacy of Public Services that the Agency Provides or is Authorized to Provide

Overall, the present capacities of the District's facilities and the services that the District is providing are adequate; however, several service-related issues currently exist. As detailed above, existing issues that could affect present service provision include: (1) infrastructure deficiencies within the water and wastewater infrastructure, (2) reservoir water quality issues, and (3) recent citations from State and regional environmental agencies. In addition, the provision of public services may be hindered by the recent history of changes in staffing and governance. The District's existing wastewater service capacity is limited due to the capacity of the District's infrastructure and the Oceanside WWTP; because of this, the District has an ordinance that limits the expansion of the wastewater service area. The District has stated that it is likely that some parcels within the District's existing service area will not be able to connect to the sewer system.

Existence of any Social or Economic Communities of Interest

Communities of social and economic interest include proposed development and anticipated growth that is expected to occur within RMWD's SOI. As previously stated, at this time there are several approved and planned future developments within the existing SOI. These developments are social and economic communities of interest for RMWD.

In addition, the area currently within SLRMWD and the planning areas would be considered a social and economic community of interest if included within the RMWD SOI.

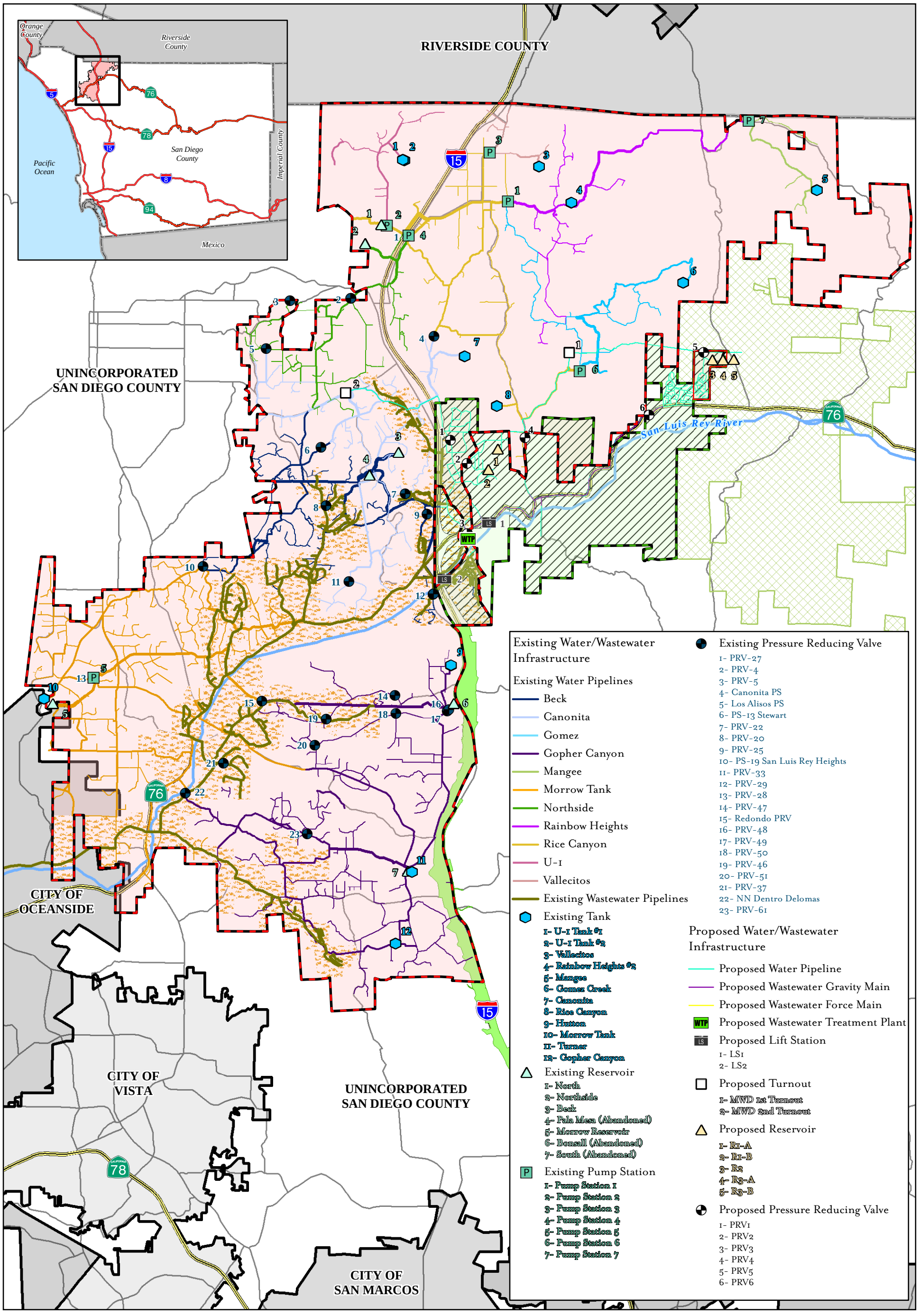


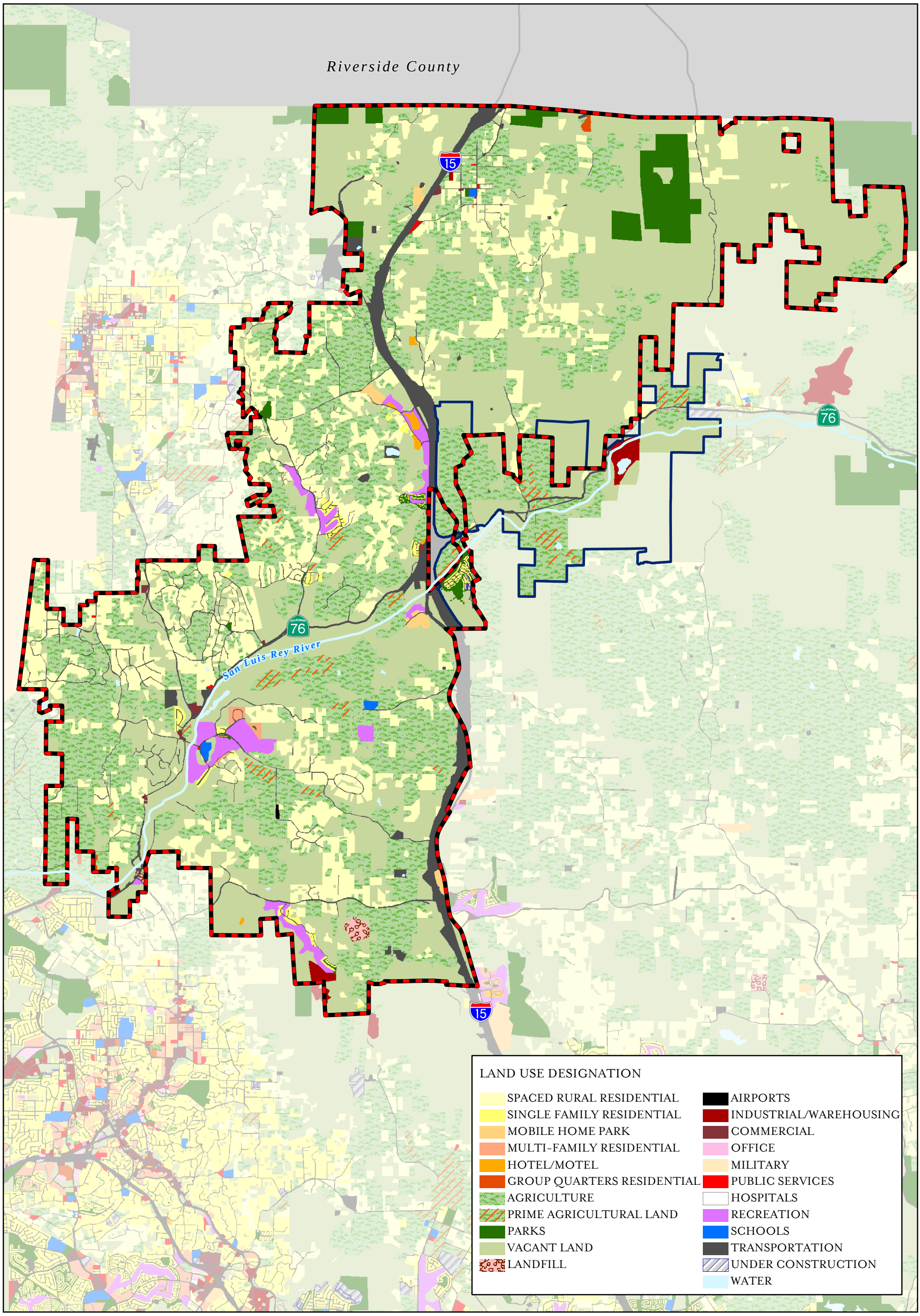
FIGURE 2.2

San Diego LAFCO MSR and SOI Update

Rainbow MWD Water and Wastewater Infrastructure

SOURCE: SANGIS (2004), Rainbow MWD (2006).

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LSA

FIGURE 2.3

Legend

Rainbow Sphere of Influence

Planning Areas

0 3,750 7,500

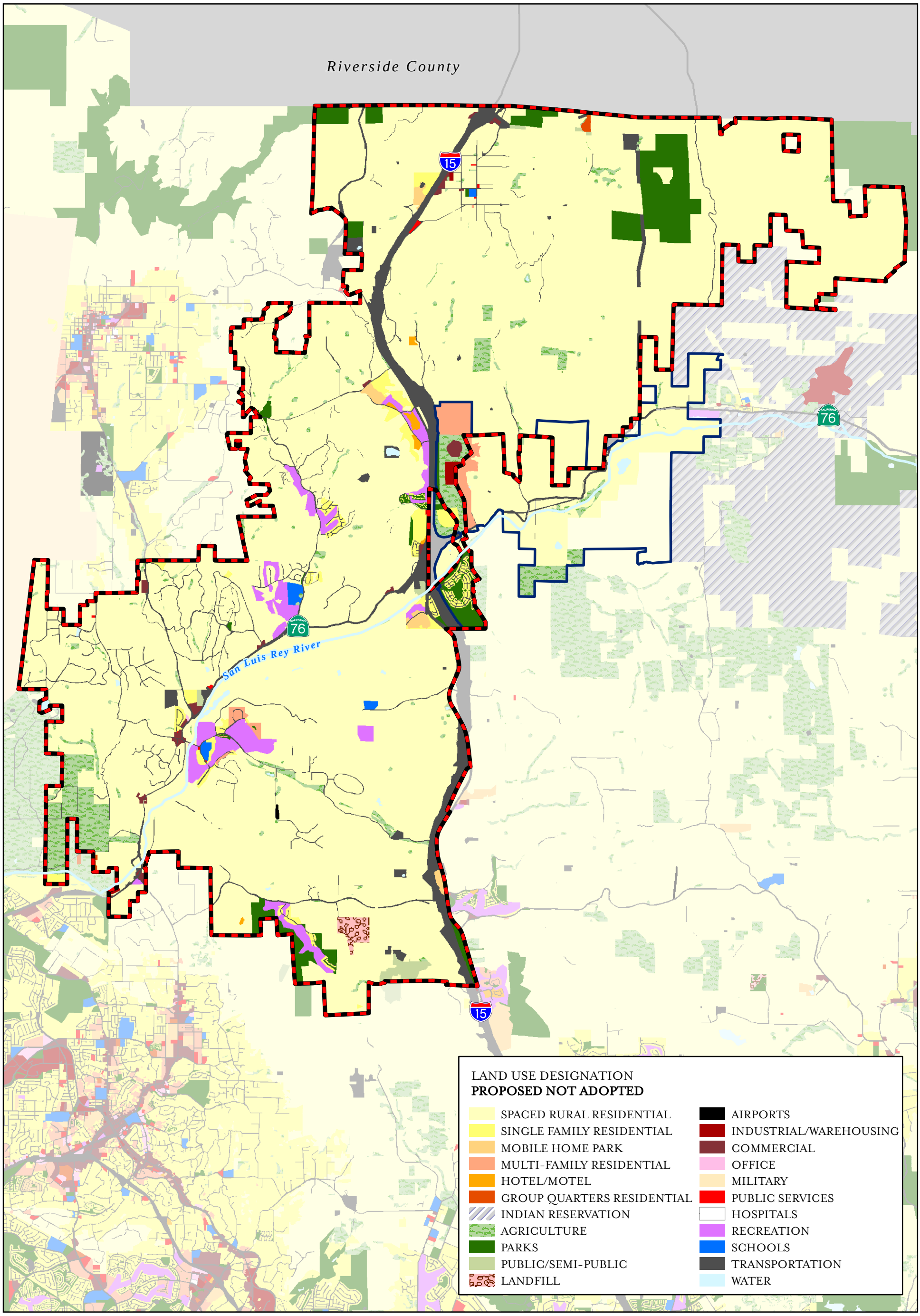
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SOURCE: SANDAG GIS (2001).

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San Diego LAFCO MSR and SOI Update

Rainbow MWD Existing Land Use (2000)



LSA

FIGURE 2.4

Legend

Rainbow Sphere of Influence

Planning Areas

N

0 3,750 7,500

FEET

SOURCE: SANDAG GIS (2001).

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San Diego LAFCO MSR and SOI Update

Rainbow MWD Proposed Land Use (2020)

2.A RAINBOW MWD SUPPLEMENTAL DATA APPENDIX

Table 2.A1: Ten-Year History of RMWD's Election, Recall, and Appointment Results

Division 1	1992-1996 Director Richard Baughman (Elected) 1996-2000 Director Richard Baughman (Elected) 2000-2003 Director Richard Baughman (Elected - Resigned) 2003-2004 Director Tom Clemens (Appointed - Retired) 2004–August 2006 Director Larry Sundram (Elected - Resigned)
Division 2	1992-1996 Director Davis Roach (Elected) 1996-2000 Director Joyce Tomlinson (Elected) 2000-2003 Director Joyce Tomlinson (Resigned) 2003-2004 Director Bob Craig (Appointed) 2004-Present Director Jack Griffiths (Elected)
Division 3	1994-1997 Director Susan Marsh (Elected - Recalled) 1997-1998 Director Maxine Qualls (Recall Election) 1998–2002 Director John Sjursen (Elected) 2002-2006 Director Bill Bopf (Elected)
Division 4	1994-1997 Director Sheila Manning (Elected – Resigned) 1997 Director Russ Hatfield (Appointed) 1998-2002 Director Russ Hatfield (Elected) 2002-2004 Director Tom Cole (Elected – Resigned prior to recall) 2005-2006 Director Russ Hatfield (Recall Election)
Division 5	1994-1997 Director Don Lande (Elected – Resigned) 1997 Director Tito Steere (Appointed) 1998-2004 Director Paul Christensen (Elected - Retired) 2004-2005 Director Bob Glick (Appointed - Recalled) 2005-Present Director Rua Petty (Recall Election)

Source: RMWD RFI Response, April 2006

Table 2.A2: RMWD Board of Directors Meetings for the Past Three Years

2003	2004	2005	2006
January 8	January 7	January 5	January 20
February 5	February 4	February 2	February 17
March 5	March 3	March 2	March 17
April 2	April 7	April 6	April 21
May 14	May 12	May 11	May 19
June 4	June 2	June 1	June 16
July 2	July 7	July 6	July 21
August 6	August 4	August 3	August 18

September 3	September 1	September 7	September 15
October 1	October 6	October 5	October 20
November 5	November 3	November 2	November 17
December 3	December 8	December 7	December 15

Source: RMWD RFI Response, April 2006

Table 2.A3: Summary of RMWD Insurance Claims Resulting in Costs, 1995 through July 2005

Incident Date	Claim Type	Total Claim Cost
Employee Related Claims		
1/21/03	Wrongful termination	$616,508.08
4/13/95	Sexual Harassment	$47,109.83
N/A	Labor related claim	$42,000
Infrastructure Related Claims		
12/19/02	Water main break	$3,972.03
8/29/02	Water main break	$3,850.00
8/29/02	Water main break	$2,505.60
8/29/02	Water main break	$72,399.32
12/12/02	Water main break	$148,921.41
12/12/02	Water main break	$5,692.56
2/2/02	Water main break	$1,465.71
12/12/02	Water main break	$101,869.61
9/16/02	Water main break	$20,087.18
8/29/02	Water main break	$3,752.40
3/17/03	Water main break	$17,477.35
8/18/99	Water pressure broke line	$250.00
8/1/99	Water leak destroyed property	$14,677.17
8/06/99	Water pressure broke line	$273.75
Property Loss Related Claims		
4/24/95	District driver accident	$619.17
4/30/03	District driver accident	$1,939.59
3/20/03	District driver accident	$1,453.37
8/29/95	District driver accident	$1,087.35
8/29/95	District driver accident	$250.00
Miscellaneous Claims		
10/01/98	Sexual harassment and retaliation by resident	$127,588.25
Total Claim Cost		**$1,235,749.73**

Source: RMWD ACWA Joint Powers Insurance Claim Summary. Run Date 8/17/05

Table 2.A4: SDCWA Rate Breakdown and Comparison

Charge	2005	2004
Water delivery charge	$461/AF	$418/AF
Transportation charge	$55/AF	$55/AF
Agricultural credit	$132/AF	$114/AF
Infrastructure access charge	$14,847/mo	$15,471/mo
Capacity reservation charge	$40,392/mo	$37,552/mo
Readiness-to-serve charge	$-11,566/mo	$-12,193/mo
Customer service charge	$53,501/mo	$54,793/mo
Emergency storage charge	$20,441/mo	$20,189/mo

Source: Rainbow Municipal Water District, Financial Statement, 2005.

3.0 SAN LUIS REY MUNICIPAL WATER DISTRICT

3.1 DISTRICT INTRODUCTION AND GOVERNANCE

The San Luis Rey Municipal Water District (SLRMWD) was formed on October 17, 1958, pursuant to the Municipal Water District Act of 1911 (California Water Code sections 71000, et seq.). The District encompasses approximately 3,000 acres along the San Luis Rey River valley in northern San Diego County. The District is bounded on the west by I-15, on the east by the Pala Indian Reservation, and on the north and south by two member agencies of the San Diego County Water Authority (SDCWA): Rainbow Municipal Water District (RMWD) to the north and Valley Center Municipal Water District (VCMWD) to the south.

SLRMWD was formed with the principal mission to protect the groundwater that existing landowners pump from wells located in the San Luis Rey River Basin. SLRMWD has historically been "passive" and does not currently provide water or wastewater services. There are currently no water or wastewater service providers within the SLRMWD boundary. SLRMWD's purpose has been to protect the quality, quantity, and access to water supplies for the pumpers and water rights holders within its boundaries. SLRMWD acts as a liaison between the landowners and governmental agencies on joint legal, engineering, and planning issues dealing with water resources and potential future services. These activities include: monitoring of groundwater issues and legislation, support of landowner water rights, groundwater basin management, and participation in processes to activate SLRMWD's latent powers for the provision of water and wastewater services. Several specific aspects of the District's activities are detailed below.

- Water Rights on the San Luis Rey River. SLRMWD has engaged in administrative proceedings before the State Water Resources Control Board (SWRCB) to protect the interests of its water rights holders. The District monitors proceedings conducted by the SWRCB on water rights applications filed along the San Luis Rey River specifically concerning the Bonsall and Pala Basins. Additionally, the District monitors activities such as the San Luis Rey River Indian Water Rights Settlement, with Colorado River water to be supplied to the San Luis Rey River Indians through a transfer between the Imperial Irrigation District and SDCWA. The District also monitors the SDCWA's Groundwater Resources Development Planning.
- Gregory Canyon Landfill Project. The District continues to closely monitor the regulation, design, environmental review, and permitting process for the Gregory Canyon Landfill project to assure that the local water supply is protected. The location of the landfill is shown on Figure 3.1.
- Species and Habitat Protection Issues. Because new species and habitat listings under the Endangered Species Act can be enforced to limit or prohibit groundwater pumping by private pumpers in the District, the District monitors the proceedings of the federal and State government environmental agencies and environmental advocacy groups, with emphasis on

those proceedings that could restrict water production, water use, or construction and operation of water management facilities

- Activation of Latent Powers. The District is currently pursuing activation of its latent powers in order to provide retail water and sewer services to properties within its boundary. As this is a complex activity, additional detail is provided in Section 3.3.

The District is governed by a five-member, publicly elected Board of Directors. As a Municipal Water District, each of the five Directors represents one Division that includes approximately the same number of registered voters. The Board members are elected to four-year terms. Division seats come up for election every even-numbered year. Odd and even-numbered divisions are elected on alternating years. Therefore, no more than three Directors are elected at one time. If at election time the San Diego County Registrar of Voters informs the District that there are insufficient candidates to hold an election. Then the District would request that the San Diego County Board of Supervisors re-appoint the incumbent Director(s).

Should a Director resign during his/her term of office, a notice of a vacancy is posted in readily accessible areas for public viewing in three separate places within the District at least 15 days prior to the next regularly scheduled District Board meeting. If no qualified person comes forward to fill the vacancy, the District contacts the San Diego County Registrar of Voters office for a list of registered voters in the District's Division where the seat has become vacant, and the District's President canvasses said voters for a volunteer to fill the vacancy. At the regularly scheduled Board meeting, the remaining Board members will appoint a qualified person to fill the vacant Division Director's term of office, notify the San Diego County Board of Supervisors of its action, and request confirmation of the new appointment.

The District's Board of Directors has a history of long-term stability. Similarly, the District has never had a recall or a challenge for a Director's seat on the Board. A 10-year history of the Board of Directors membership is provided in Table 3.A.

Table 3.A: SLRMWD 10-Year History of the Board of Directors

Division	Director History
Division 1:	Robert Pankey (1958-1998) William Pankey (1999-2006)
Division 2:	Victor Pankey (1976-2006)
Division 3:	Rodney Guild (1958-2005) Thomas Veysey (2005-2006)
Division 4:	John Stange (1994-2000) Brian Fritz (2000-2006)
Division 5:	Pieter Verboom (1982-1998) John Parker (1998-2002) Claren Yarger (2002-2006)

Source: SLRMWD RFI Response, March 2006.

The SLRMWD Board members are volunteers; they receive no compensation or tangible benefits. Travel expenses for District business is paid by each Director and is not reimbursed by the District. The Board is considering the adoption of policies that would comply with AB 1234 requirements in the second quarter of 2006. AB 1234 mandates two hours of ethics training.
The board meets regularly on the third Wednesday of each month at 4:00 p.m. The public is invited to attend each meeting. Topics to be discussed or acted on at the Board meeting are itemized in an agenda, which is posted on the gate at 5328 Highway 76 and on the District's Web site 72 hours before the meeting. In addition, the District Secretary maintains postal and e-mail lists by which agendas are distributed to requestors. Since September 2005, Board meetings have been held at the Pala Convention Center located roughly 100 yards outside the District's boundary. This location has adequate meeting space to accommodate the public, adequate parking, Americans with Disabilities Act (ADA) access, and audiovisual resources to easily present information to the public. Minutes of the meeting are prepared, reviewed, and adopted by the Board after consideration at the following meeting. The District's records are kept at the offices of the District and/or the office of the District's legal counsel. Table 3.A1 in the SLRMWD Supplemental Data Appendix provides a list of the District's Board meetings for the last three years. Over the last three years, the District scheduled 38 regular meetings and 4 special meetings. Of the regularly scheduled meetings, 14 or approximately one-third were not held due to lack of subject matter or quorum. However, since January 2005 meetings have been held every month. To provide additional information to the landowners, the District also publishes an annual newsletter, which is mailed (certified, return receipt) to every landowner in the District.

The District has not had any violations of the Brown Act or Political Reform Act. General Counsel is intimately involved in reviewing Agenda items to identify any potential conflicts and to provide direction to the Board and/or individual Board members to conform strictly with the Brown Act, Political Reform Act, and conflict of interest laws. Similarly, direction is solicited from General Counsel whenever a potential conflict is identified.

The District has not received any customer complaints in the last 10 years. The District has received two verbal questions over the last 10 years related to the annual property tax assessment. If a landowner attends the annual hearing on the assessment, he or she is provided an explanation by the Board at the meeting. In other cases, either a Board member or General Counsel will contact the landowner and respond to the questions (Board members' phone numbers are provided to all District residents).

The District does not have any direct employees. The District uses contract professionals to provide legal, geotechnical, engineering, environmental, and management services as required by its activities. The contract professionals have entered into formal agreements with the District that define the scope of work and minimize risk to the District through provisions requiring the professionals to demonstrate coverage for errors and omissions, liability, and automobile insurance. Since there are no regular employees, the Board of Directors interfaces directly with the District's contract professionals on an as-needed basis.

The District has contracted with its General Counsel since 1980 to provide various administrative and clerical services to the District, including agenda and board packet preparation and distribution; minutes preparation; monitoring of various issues at the direction of the Board; and records management in addition to regular professional legal services for compliance with State and other

regulations governing the administration of the District. Expenditures to the District's legal counsel are summarized in Table 3.A2 of the SLRMWD Supplemental Data Appendix. It should also be noted that the District has had no claims against it in the past five years by employees or other parties. In addition, the District has contracted since 2005 for management assistance related to activation of its latent powers and annexation to the SDCWA and MWD. Both of these arrangements were implemented in an effort to allow the District's Board of Directors to meet the requirements of its governing responsibilities while controlling the cost of receiving the services.

The District's professional service procurement practices are to solicit multiple proposals for work and perform due diligence to gather sufficient information for the Board to determine the best value to the District prior to making an award. The District has historically only procured professional services, so compliance with the State public works bidding requirements are not required. The District has procured several services over the past five years with one proposal. The details of these services are provided in Table 3.A3 of the SLRMWD Supplemental Data Appendix.

The Board of Directors takes an active role in administrative matters. The President handles many administrative matters, and the Vice President is the District Finance officer who handles all of the District's financial matters. However, checks are required to be signed by any two other Board members; the Vice President is not an authorized check signatory.

3.2 FISCAL INFORMATION

The District adopts an annual budget and has independent audits prepared annually. The District's Revenue is gained through water availability charges, a share of the property tax, investment income, and developer reimbursement for costs based on agreements for the District performing various activities, such as mitigation monitoring for Gregory Canyon Landfill and pursuing the activation of latent water and wastewater powers and annexation to the SDCWA and MWD. Within the last couple of years:

- Property tax revenues have declined due to the ERAF tax shift.
- The Water Availability Charge has remained constant for the last three years.
- Reimbursement from property developers has increased 400 percent in the last year due to requests to provide retail water and wastewater services and to provide baseline water quality monitoring in the lower Pala Basin of the San Luis Rey River.

As shown in Table 3.B, the District's revenues have exceeded expenditures for the past two years and are expected to remain so in the current fiscal year. Also, the District's expenses and revenues have increased within the last two years, which is a result of implementation of the District's Cost Advancement, Cost Reimbursement, and Indemnification Agreement for the Activation of Latent Powers and consultant expenses related to the procedures required to initiate the activation of latent powers.

Table 3.B: SLRMWD Revenues and Expenditures

	Year Ending June 2004	Year Ending June 2005	2005-06 Budget
Total Expenditures	$90,185	$154,257	$503,278
Total Revenues	$117,259	$166,209	$505,278
Net Income (loss)	$27,074	$11,952	$2,000

Source: SLRMWD Annual Budget FY 2005-06; SLRMWD Financial Statements, June 30, 2005.

All District expenditures must be approved by the Board of Directors, except expenditures of less than $1,500 in the as-needed engineering services agreement with Infrastructure Engineering Corporation. These expenditures may be authorized by the District's Activation Consultant to facilitate the time schedule.

Water Availability Charge and Service Rates

On July 18, 1984, the Board of Directors approved imposing a water availability charge assessment as a method of raising revenue for payment of operating and legal expenses. On September 22, 1989, Senate Bill No. 1157 was passed by the Legislature. This bill authorized the San Luis Rey Municipal Water District to increase the water availability charge from a maximum of $10 per acre, to a maximum of $30 per acre per year until January 1, 2001. On October 7, 1999, Senate Bill 807 passed, which extended the authorization to charge up to $30 per acre until January 1, 2005. Water code Section 71631.7 now sunsets on January 1, 2015, as a result of Assembly Bill 2733 (signed on September 15, 2004). The proceeds in excess of $10 per acre shall only be used for the unique and special water management issues that exist within the District, such as San Luis Rey River water rights. During the fiscal year ended June 30, 2005, the water availability charge rates were $20 per acre. The rates are reviewed and adopted annually at a public meeting, which is noticed via mail to each of the property owners in the District.

The District does not currently have a retail rate structure. If the District were to begin to provide retail water and wastewater services, a retail rate structure would be implemented to cover the costs of providing these services. The expected rates for water and wastewater services are detailed in Table 3.A4 of the SLRMWD Supplemental Data Appendix.

Investments and Reserve Policies

The District has no existing investments. However, in December 2005 SLRMWD adopted an investment policy for the District. The Policy's primary objectives are safety, liquidity, and return. The policy also requires the District's investment officer to prepare regularly scheduled reports to the Board. The District's Finance Officer (Vice President) implements the policy in order of priority. The District has recently contracted with the Local Agency Investment Fund (LAIF) to more efficiently manage the District's financial resources, which include funds that are currently idle and future investments.

At this time, the District has not yet established policies for reserves. Due to the limited historical financial activity of the District, the Financial Officer made decisions regarding the reserve levels and reported his actions to the full Board for Board concurrence.

Capital Improvement Plan and Funding

SLRMWD has adopted a Water and Wastewater Master Plan, which includes a CIP that details the needs and costs for all infrastructure to provide water and wastewater services to the District's study area at build out. This includes a potable water system, wastewater collection and treatment system, and recycled water system. The estimated cost for the potable water system is $84 million (Phase I: $55 million, Phase II: $29 million). The estimated cost for the wastewater system ranges from $46 million to $62 million, depending on which wastewater treatment alternative is selected. The estimated costs for the recycled water system is $33 million (Phase I: $13 million, Phase II: $20 million).

The District requires new developments that create a demand for facilities to finance the construction and startup of the initial facilities. The District may assist with the funding through formation of Community Facilities District(s) and/or Improvement Districts to accommodate some of the needs for regional and/or multi project/core District facility construction financing. However, the District will require the individual development applicants to finance the infrastructure that is specific to their projects.

The SLRMWD Land Secured Financing Policy states that it is the District's intent to support projects that address a public need and provide a public benefit. These policies are also designed to comply with Section 53312.7(a) of the Government Code. The minimum principal amount of any land-secured financing shall be $250,000.

3.3 POTENTIAL ACTIVATION OF LATENT POWERS

SLRMWD is currently not a member of the SDCWA or MWD, as its customers currently use local supplies primarily for agricultural purposes. At the time the District was formed, the District determined that it would not seek annexation to SDCWA until such time as development within the District warranted securing additional supplemental water supplies. Recently, the District has been approached regarding the provision of water and wastewater services to several planned developments within and adjacent to the District boundaries, consisting of both residential and commercial/industrial use.

In February 2005, landowners and known developers within the District were sent a notice to determine the level of interest in receiving water and sewer services from SLRMWD. From the responses received, the District has decided to go forward with the initial studies needed to determine whether the District will be able to provide water and sewer services to customers within the District. To initiate retail service, the District is required to apply to the San Diego LAFCO for activation of its latent powers. Latent powers are defined by San Diego LAFCO as those powers authorized by the principal act under which the district was formed, but not currently exercised. In addition, SLRMWD would need to become a member agency and annex into SDCWA. It should be noted that annexation

to SDCWA also requires annexation to MWD and the concurrent adoption of amendments to both agencies' spheres of influence.

The District has determined that the costs associated with the initial studies should be borne by those seeking service. In May 2005, the District adopted a policy regarding advance funding, cost reimbursement, and indemnification associated with the District's process for activation of its latent powers. The Cost Advancement, Cost Reimbursement, and Indemnification Agreement for the Activation of Latent Powers provides for the inclusion of additional landowners in the future to assist in offsetting the costs of the activation of latent powers, which is estimated to be $965,000 and take two years. The District has stated that there is potential for additional parties to join the agreement and participate in the funding. The activation of latent powers annexation to SDCWA and MWD will be financed through front-loaded increments designed to avoid placing the District in any financial risk. It should be noted that the cost of concurrent annexation to SDCWA and MWD is $6,400 per acre. SLRMWD currently encompasses approximately 3,200 acres. Therefore, the expense associated with annexation of the entire existing District territory would total $19,320,000. SLRMWD has stated that the cost of the SDCWA and MWD annexation fees would be born by the properties annexing.

SLRMWD has prepared a proposed three-year operating budget that would be implemented pursuant to the activation of latent powers and the start of service provision. This includes SLRMWD expected staffing requirements, revenues, and expenditures. This information is detailed in Tables 3.A5, 3.A6, 3.A7, and 3.A8 of the SLRMWD Supplemental Data Appendix, but does not include costs associated with SDCWA and MWD annexations.

As indicated previously, the new infrastructure that would be needed pursuant to the activation of latent powers would be financed by the various project developers and by the formation of Community Facilities Districts or Improvement Districts in conjunction with SLRMWD and in conformance with the SLRMWD Land-Secured Financing Policy.

3.4 POPULATION AND GROWTH

The District is currently comprised of a variety of lower-density land use types, including farmland. The 2000 census indicated that the population within the District was 74. In 2002, the Registrar of Voters stated that there were 44 registered voters within the District. It is estimated that there are 30 or fewer registered voters in 2006.

SANDAG has prepared growth projections for unincorporated Community Plan Areas within the County. SLRMWD generally encompasses lands within the Pala-Pauma and Fallbrook Community Plan Areas. SANDAG has projected that population growth within these areas will average 2.75 percent annually, and housing growth will average 2.70 percent annually through 2030. Table 3.C provides the SANDAG projections for these Community Plan Areas.

Table 3.C: SANDAG Growth Projections within SLRMWD

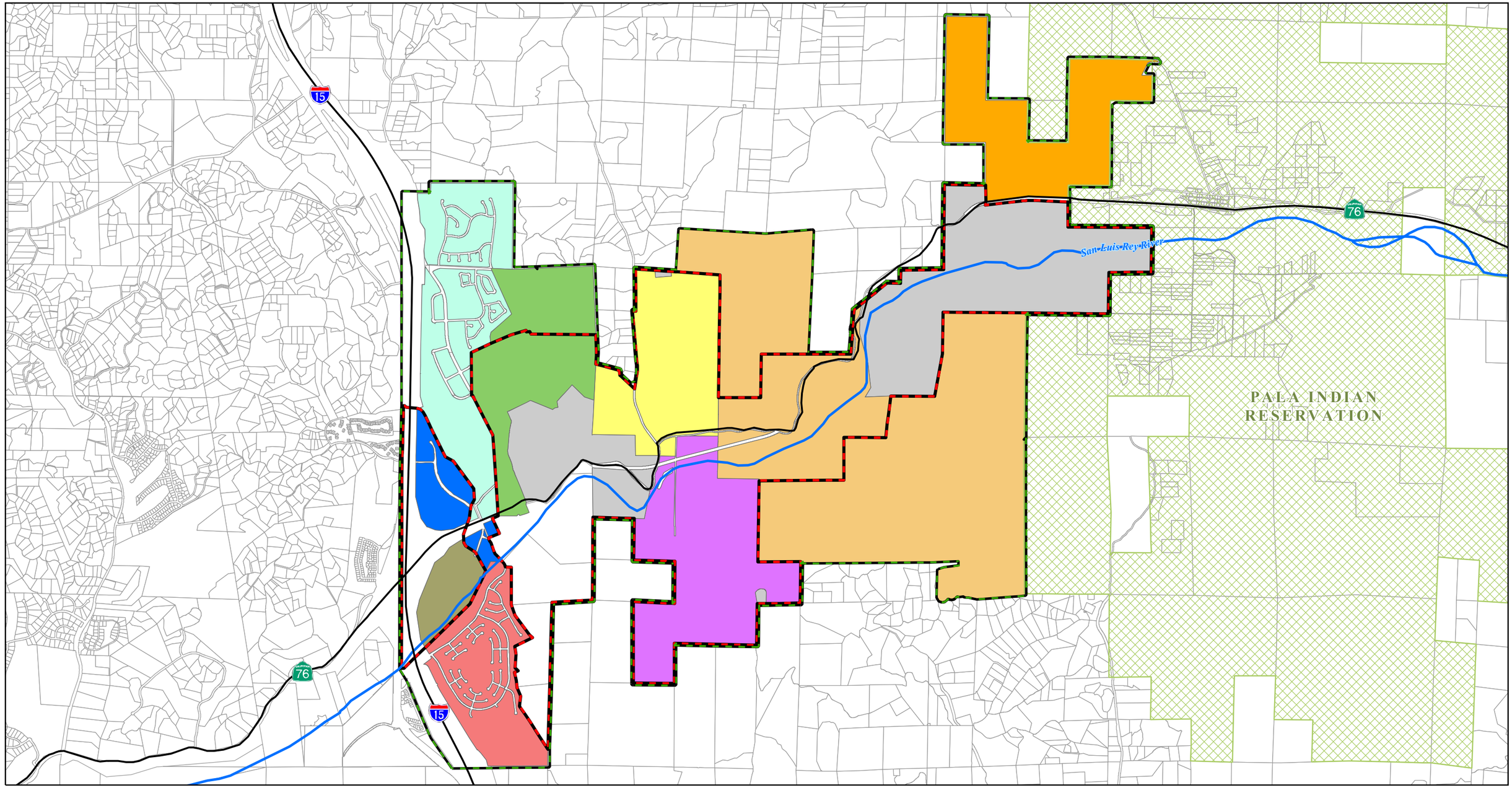
	2000	2010	2020	2030	2000 to 2030 % Change	Annual Growth Rate
Pala-Pauma Community Plan Area						
Population	6,176	7,084	8,362	13,450	118%	3.9%
Housing Units	2,071	2,293	2,671	4,333	109%	3.6%
Fallbrook Community Plan Area						
Population	39,599	44,789	52,720	58,624	48%	1.6%
Housing Units	14,046	15,705	19,489	21,773	55%	1.8%

Source: SANDAG Final 2030 Cities/County Forecast, December 2003.

Table 3.D: Build Out of Land Use Plans Within Existing SLRMWD Boundaries by Project

Land Use	Build Out Projections
Meadowood Project	
Single-Family Residential	380 units
Las Casitas Residential	150 units
Multi-Family Residential	625 units
School	11 acres
Landscaped Areas, Parks, Groves	87 acres
Campus Park West	
Single-Family Residential	109 units
Townhomes	353 units
General Commercial	12 acres
Office/Professional	8 acres
Highway Commercial	9.6 acres
Open Space/Landscape/Park	25.5 acres
Fritz Holdings	
Single-Family Residential	546 units
Townhomes	219 units
Pala Rey Ranch	
Single-Family Residential	1,200 units
City Home[1]	
Single-Family Residential	109 units
Townhomes	353 units
General Commercial	12 acres
Office/Professional	8 acres
Highway Commercial	9.6 acres
Open Space/Landscape/Park	25.5 acres
County of San Diego Land Use Areas[2]	
Estate Residential (1du/2, 4 ac)	26 units
General Agricultural	107 acres
Impact Sensitive (1 du/20 ac)	30 units
Intensive Agriculture (1 du/4, 8 ac)	6 units
Multiple Rural Use (1 du/4, 8, 20 ac)	50 units

[1] Specific information is not available; assumed to be the same as Campus Park West.
[2] Average density utilized where applicable.
Source: SLRMWD Master Plan for Water and Wastewater Services, Pala Road North Concept Land Use Plan, October 2005.



LSA

LEGEND

- Existing San Luis Rey Sphere of Influence
- Proposed San Luis Rey Sphere of Influence
- Pala Indian Reservation

Planning Areas

- Campus Park
- Campus Park West
- City Home
- County of San Diego
- Fritz Holdings
- Gregory Canyon Landfill
- Lake Rancho Viejo
- Meadowood
- Pala Rey Ranch
- Warner Property

0 1,500 3,000
FEET

SOURCE: County of San Diego (2006), IEC (2006), SanGIS (2005).

i:\slr0601\gis\slr_planarea.mxd (07/17/06)

FIGURE 3.1

San Diego LAFCO MSR and SOI Update

San Luis Rey Planning Areas

The SLRMWD service area is poised for much higher growth in the near future than what is anticipated in the SANDAG projections. There are currently four proposed projects within or partially within the existing SLRMWD boundary, as shown in Figure 3.1. These include: Meadowood, Campus Park West, City Home, and the Gregory Canyon Landfill (not a development project, but would require water services). It should be noted that approximately 60 percent of the Meadowood project is located in the District with the remainder not in any district that provides water or wastewater services. There are two sites (Fritz Holdings and Pala Rey Ranch) within existing boundaries that also have the potential for development. In addition, there are three projects that are outside but adjacent to SLRMWD boundaries that are proposed for development. Campus Park and Lake Ranch Viejo (Lake Rancho Viejo is currently two-thirds built out) are entirely in RMWD along with a portion of the Warner Property. The build out of these developments is detailed in Tables 3.D, 3.E, and 3.F. These projections were based upon the current County of San Diego General Plan information and supplemented with data from individual development land use plans. Landscaped areas, parks, and agricultural groves are included because they will create water demand.

Table 3.E: Build Out of Land Use Plans Outside of Existing SLRMWD Boundaries by Project

Land Use	Build Out Projections
Campus Park	
Single-Family Residential	531 units
Multi-Family Residential	829 units
Town Center	1.24 acres
Day Care	0.14 acres
Highway Retail	2.80 acres
Light Industrial	27.55 acres
Transit Facility	1.8 acres
Parks	15 acres
Lake Ranch Viejo	
Single-Family Residential	764 units
Landscape	85 acres
Warner Property	
Single-Family Residential	682 units
Multi-Family (Condominiums)	318 units
Parks/Equestrian	4.7 acres

Source: SLRMWD Master Plan for Water and Wastewater Services, Warner Property Supplemental Analysis.

Table 3.F: Summary of Development/Land Use Projections

Land Use	Build Out Projections
Within Existing Boundaries	
Residential Units	4,156 units
School, Commercial, Industrial, Office	70.2 acres
Landscaping, Parks, Groves, Agricultural	245 acres
Outside of Existing Boundaries	
Residential Units	3,124 units
School, Commercial, Industrial, Office	33.53 acres
Landscaping, Parks, Groves, Agricultural	104.7 acres

Source: Tables 3.D and 3.E.

To provide demand estimates and infrastructure needs to ensure adequate water and wastewater services to the proposed developments identified previously, SLRMWD has prepared a Water and Wastewater Master Plan, which includes a CIP. The CIP includes facility and cost estimates for water, wastewater, and recycled water facilities to ensure adequate service is maintained through the build out condition. There will be significant additional costs associated with SDCWA and MWD annexation fees. However, as stated previously SLRMWD has stated that the cost of the annexation fees would be born by the properties annexing.

Of particular concern to LAFCO is the conversion of prime agricultural land to other uses as well as the potential adverse effect of development on agricultural soil. To assist LAFCO in guiding development away from prime agricultural lands and open space, the San Diego LAFCO has adopted an Open Space and Agricultural Land Preservation Policy (Policy L-101), which is attached as Appendix B. One component of the policy discourages proposals that would convert prime agricultural or open space lands to other uses unless such an action would be contrary to the planned, orderly, efficient development of an area.

SLRMWD encompasses land that is largely undeveloped and primarily currently designated for agricultural purposes. Four large areas of prime agricultural land are located in the District and also are included in areas planned for future development (City Home, Fritz Holdings, Pala Rey Ranch, and Warner Property). All documents pertaining to the development of territory containing agricultural land need to contain a thorough discussion of the location and impacts to prime agricultural land, as defined in Government Code Section 56064.

3.5 WATER SUPPLY RESOURCES

Bonsall/Pala Basin Hydrogeology

The District is located in an area that is underlain by an existing alluvial aquifer. This aquifer, known as the Bonsall Basin, is part of the Lower San Luis Rey River Valley and is located within the area designated as the Lower San Luis Hydrologic Area by the RWQCB. The Bonsall Basin is approximately 9 miles long with an average width of about 0.05 mile and maximum width of 1 mile. The Pala groundwater basin is located east of the Bonsall Basin.

The Bonsall Basin is a relatively shallow and narrow alluvium filled river basin underlain by crystalline bedrock. The thickness of the alluvium ranges from approximately 50 feet in the Bonsall Narrows area to 75 feet or more in the Monserate Narrows area. The ground surface elevation ranges from approximately 280 feet above sea level (asl) in the Monserate Narrows area to about 120 feet asl in the Bonsall Narrows area. The maximum groundwater storage capacity of the basin is reported to range from 18,000 acre-feet (United States Geologic Survey [USGS], 1974) to as much as 40,000 acre-feet. The disparity in storage estimates can be attributed to the lack of information on the extent of the alluvium throughout the basin. The usable storage volume in the basin has been estimated at about 9,000 acre-feet.

It is estimated that current groundwater yield within the limits of the District is approximately 2,400 afy or about 2 mgd. It is estimated that the long-term dependable yield of the portions of both the Bonsall and Pala Basins that lie within the District's boundaries can be increased to approximately 3,850 afy or 3.4 mgd with "reasonable management practices."

Bonsall/Pala Basin Project Concept

The SDCWA implemented a study that developed a project concept that would provide for an average annual yield of 3.6 mgd of potable water from the Bonsall Basin. It was assumed that this yield would be accomplished by either providing seasonal artificial replenishment of groundwater and/or reducing existing extraction by agricultural users in the eastern portion of the basin.

The SDCWA study identified several major constraints to a groundwater project in the Bonsall Basin. First, there are significant potential environmental issues. Prolonged use of groundwater has the potential to locally depress the groundwater table and potentially adversely impact riparian vegetation and the species it supports. Secondly, the disposal of brine from the groundwater purification facility needs to be coordinated with other agencies and the associated facilities constructed at substantial cost. Lastly, any groundwater project will need to address the project's potential impacts to existing groundwater users and water rights issues. For these reasons, the SDCWA has elected to pause its groundwater investigation and feasibility study activities in the Bonsall Basin for the time being.

SLRMWD Water Planning Documents

The District has adopted a groundwater management plan. The objective of the plan was to maximize local use of water resources and available basin storage capacity to protect against inconsistent management of the District's water resources and to coordinate water management activities with land use planning agencies.

As a part of the activation of latent powers and application to become a member of SDCWA, SLRMWD also prepared and adopted a Water and Wastewater Master Plan, which provides a general overview of the facilities SLRMWD would construct to provide water and wastewater services to properties within its proposed service area. The Master Plan outlines a conceptual plan and opportunities for providing domestic water supply to potentially developable areas within the District. The following discussion regarding water supplies and retail water and wastewater services was generated from data in the SLRMWD Water and Wastewater Master Plan.

Potential SLRMWD Groundwater Project

There is no existing retail, residential, or commercial water use within SLRMWD. However, groundwater supply is being utilized by landowners through privately owned wells used for primarily agricultural use.

The SLRMWD Master Plan states that a potential SLRMWD groundwater project could supply a substantial portion of the District's potable water needs. For the purposes of the Master Plan, it was assumed that a groundwater facility would be located east of I-15 with extraction wells located throughout the basin. It is further assumed that two phases of a groundwater project would be considered, with the initial phase consisting of a lower-yield project that would not require artificial recharge and a second phase that would include artificial recharge in order to increase the yield. The key issue that would need to be resolved is sustainable yield of the basin that can be achieved without artificial recharge. It can be assumed this would be about equal to what is currently being pumped from the eastern portion of the basin by the existing agricultural users. As mentioned previously, the SDCWA's conjunctive use project was estimated to be able to provide a yield of 3.6 mgd. Additionally, artificial recharge can be performed using either imported (raw) water or recycled water that may be available from a future wastewater treatment plant.

The Master Plan also includes two infrastructure options for groundwater supply. These options are summarized below.

- Option One: five extraction wells, 6,000 ft of water lines ranging in size from 12-16 inches in diameter, 73,000 feet of 8-inch brine line, one 260 gallons per minute (gpm) brine pump station, and a 2.0 mgd desalter facility.
- Option Two: 6,000 feet of water lines ranging in size from 12-16 inches in diameter, 73,000 feet of 8-inch brine line, one 417 gpm brine pump station, and a 4.0 mgd desalter facility.

To dispose of brine, the Master Plan identified a 10-mile-long brine disposal pipeline to convey brine from the Bonsall Basin to the Oceanside WWTP where it would then be pumped via land outfall to the City's existing ocean outfall. An alternative to constructing a 10-mile long brine disposal pipeline could be to utilize a regional wastewater treatment plant (as discussed further in Section 3.7) to treat a portion of RMWD wastewater flows in the area. This would free up capacity in RMWD's existing land outfall and may allow SLRMWD to use this existing line for brine disposal.

Since development of the Master Plan, studies have established that early use of groundwater is infeasible due to the high costs of brine concentrate disposal. SLRMWD's current plan is to operate exclusively on imported water until the time technology improves or other economical avenues of brine concentrate disposal become available.

Potential Imported Water Sources

Due to SLRMWD's geographical location, there are several potential imported water supply sources that are listed and then detailed below.

- MWD facilities with annexation into SDCWA

- SDCWA facilities with annexation into SDCWA
- Potential inter-agency connections with RMWD

Future infrastructure within SLRMWD has the potential to connect to both MWD's First Aqueduct within SLRMWD and MWD's Second Aqueduct to the west of SLRMWD. Both turnouts should be sized at a capacity of 12.2 mgd, which would provide for Peak Week Demand, as shown on Table 3.G. The Master Plan recommends that SLRMWD construct Connection No. 1 first to meet initial supply requirements and then construct Connection No. 2 in the future to meet ultimate (built out) supply requirements and add additional water supply reliability. Adding a supply connection to each aqueduct would also provide increased reliability in the event of an emergency on one of the aqueducts and would allow SLRMWD to continue to provide service during the annual planned shutdowns for maintenance performed by both MWD and the SDCWA. It is important to note that these connections would require SLRMWD to annex into the SDCWA and MWD service area and become a member agency. An additional advantage of connecting to MWD facilities is a current rate cost reduction from SDCWA.

Yuima MWD is in the planning stages of a constructing new turnout on the First Aqueduct. As of July 2006, Yuima has completed the preliminary design and conceptual allocation of costs, and has conceptual agreements for cost sharing with adjacent tribes who would benefit from the imported water resources. In addition, SLRMWD is in the process of developing an agreement with the Yuima MWD for jointly utilizing this turnout and to jointly own/operate the portion of the proposed Northern Route Pipeline between the First Aqueduct and the Warner Property. SLRMWD and Yuima MWD are also exploring joint participation in the first 3+ miles for service to the eastern portion of SLRMWD. Participation in this pipeline is an opportunity for joint participation and development of a joint use facility. However, according to the SLRMWD Master Plan, the ability of SLRMWD to secure water supplies is not dependent upon implementation of this joint pipeline project. If this pipeline is not developed, SLRMWD plans to construct its own infrastructure utilizing water resources from the same aqueduct.

Table 3.G: Supply Requirements for Turnout Connections

Connection	Ultimate Average Day Demand (mgd)	Ultimate Peak Week Demand (mgd)
Connection 1 East	6.1	12.2
Connection 2 West	6.1	12.2

Source: SLRMWD Master Plan for Water and Wastewater Services.

Prospective Interagency Connections

Two potential locations exist for possible interagency connections for imported water supply between SLRMWD and RMWD. One potential connection is at the end of an 18-inch water main in Pala Mesa Drive, which is on a bridge over I-15 commonly known as "the bridge to nowhere." The second potential connection is at the end of a 16-inch water main in Rice Canyon Road at the intersection of Huntley Road. This potential connection is in RMWD's north pressure zone. Each of the potential connections would supply enough hydraulic grade line (HGL) to adequately serve the proposed SLRMWD distribution system (as depicted in the Master Plan) through a Pressure Reducing Station.

It should be noted that these preliminary discussions with RMWD were informal in nature, and there is no commitment from RMWD to actually provide supply, emergency or otherwise, through these potential connections. Also of note is that SDCWA is prohibited from allowing the distribution of water to territory outside its boundary. This restriction was incorporated into the legislative act that created the agency in 1944.

Water Generation Rates and Water Demand at Build Out

The Water Master Plan provides water generation rates for the SLRMWD service area, which are provided in Table 3.H. These recommended factors were developed based upon an analysis of generation rates used by neighboring water utilities including Vallecitos Water District, RMWD, Rancho California Water District, Valley Center MWD, and Elsinore Valley MWD. Unit water generation rates have been developed based upon EDUs. It is assumed that an EDU is the amount of water that one single-family home will use per day. For the purposes of the Master Plan, 1 EDU of water is assumed to be equivalent to 500 gpd.

Table 3.H: SLRMWD Water Generation Rates

Land Use Category	Density (du/acre)	Water Generation Rate	
		EDU	gpd/du
Low-Density	0-2	2.00	1000
Single-Family	2-8	1.00	500
Multi-Family	8+	0.75	375
Commercial/Industrial	N/A	N/A	3000 gal/acre
School	N/A	N/A	1500 gal/acre
Parks	N/A	N/A	4000 gal/acre
Agriculture	N/A	N/A	2000 gal/acre

Source: SLRMWD Master Plan for Water and Wastewater Services, October 2005.
N/A = Not Applicable

The projected water demand at build out of the entire SLRMWD study area is provided in Table 3.I. The projections were based on the current County of San Diego General Plan land uses, supplemented with detailed information received from each of the development projects within the area. It should be noted that the following proposed development areas are currently outside of SLRMWD's existing boundary and SOI: Campus Park, Lake Rancho Viejo, Warner Property, and a portion of Meadowood. As shown, the ultimate projected water demand for the SLRMWD study area is almost 6.0 mgd.

Table 3.I: Water Demand at Build Out of the SLRMWD Study Area

Area	Water EDUs	Water Use (gpd)
Meadowood	1,785.5	892,500
Campus Park West	844.0	422,000
Campus Park	2,148.0	1,074,000
County of San Diego	909.7	454,850
Gregory Canyon Landfill	142.0	71,000
City Home	846.0	423,000
Lake Rancho Viejo	1,444.0	722,000
Fritz Properties*	1,628.0	905.0
Pala Rey Ranch*	1,320.0	1,400.0
Warner Property	931.0	465,500
Total	**11,997.7**	**5,998,850**

Source: Warner Property Supplemental Analysis, February 6, 2006.
*Potential Development expected to occur after 2010

3.6 PROPOSED WATER INFRASTRUCTURE

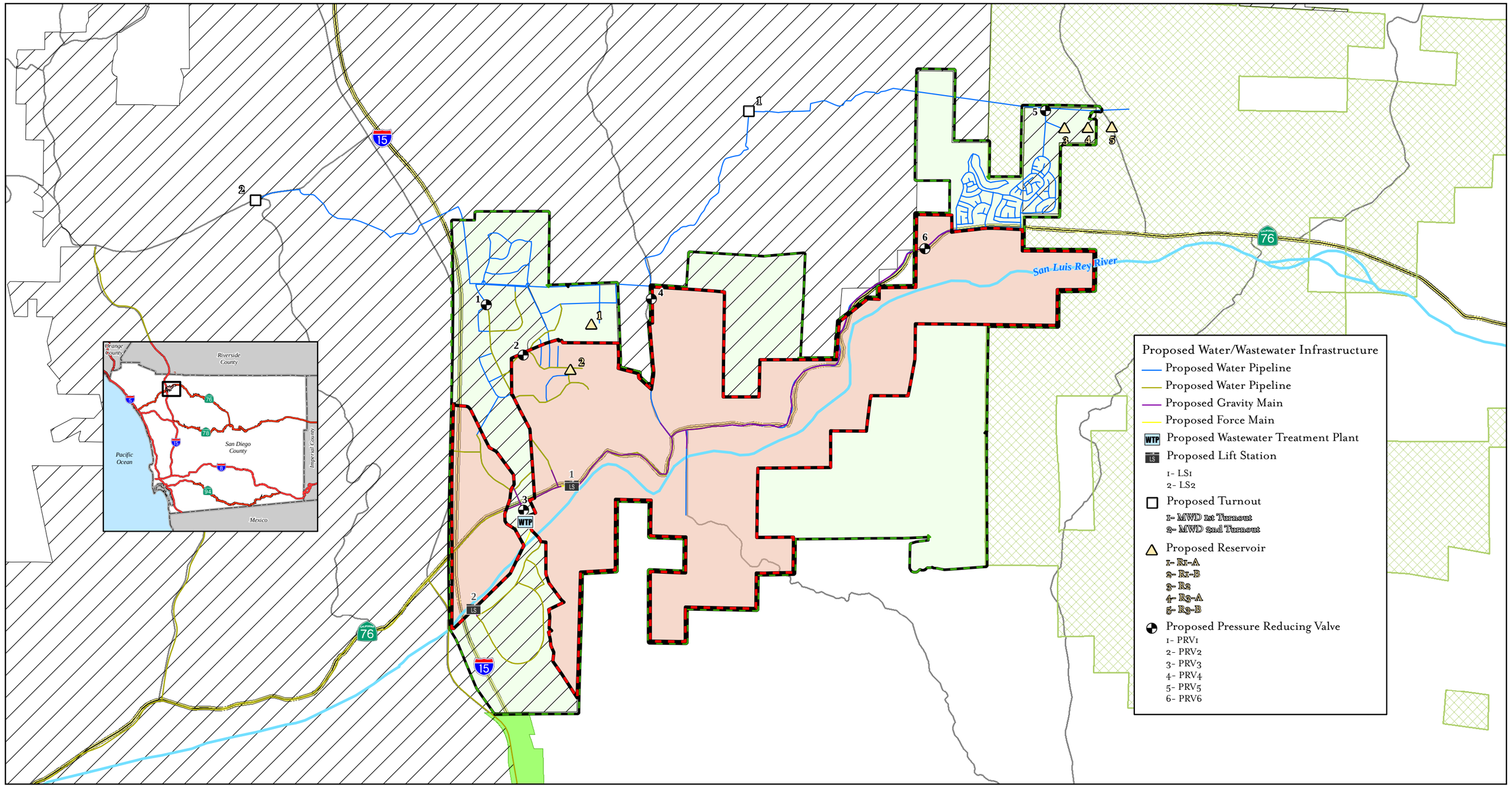
The SLRMWD Master Plan includes a list of infrastructure that would be needed to provide retail water services to the build out of the development areas within the SLRMWD study area. This is summarized below and shown in Figure 3.2.

- 171,370 feet of potable water pipeline ranging in size from 8 to 27 inches in diameter
- 5 potable water reservoirs ([2] 7.6 mg facilities; [2] 6.6 mg facilities; [1] 2.6 mg facility)
- 6 pressure reducing stations, ranging in capacity from 2,500 gpm to 12,300 gpm
- 2 MWD supply turnouts, both 13.1 mg capacity

The water system that is detailed in the SLRMWD Master Plan is designed to provide the same level of service to all customers by locating pressure regulating stations in a manner that gives all customers water service pressures between a minimum peak hour demand pressure of 40 pounds per square inch and an absolute maximum pressure of 150 psi. Water quality differences would be based on customer requirements with residential, commercial, and institutional customers receiving potable water; irrigated common, public and traffic areas receiving recycled/non-potable water; and agricultural and industrial customers receiving water of an appropriate quality to meet their requirements.

Pressure Zones and Water Storage Requirements Based on Proposed Infrastructure

Four pressure zones were established in the Master Plan based upon the elevation required to maintain the established pressure design criteria. As planned these zones would not be linked, as they



LSA

Legend

- Existing San Luis Rey Sphere of Influence
- San Luis Rey MWD
- Proposed San Luis Rey Sphere of Influence
- Special Study Area
- Pala Indian Reservation
- Existing Rainbow MWD

0 1,750 3,500
FEET

SOURCE: County of San Diego (2006), IEC (2006), SANGIS (2005).

i:\slr0601\gis\slr_infrastructure.mxd (08/22/06)

FIGURE 3.2

San Diego LAFCO MSR and SOI Update

San Luis Rey MWD Proposed Water and Wastewater Infrastructure

would require a pump station or a dedicated pipeline to transfer waster from Zone 1 to Zone 4 or vice versa. Water from Zone 4, however, would be able to supplement water into Zone 2 and Zone 3 if the transmission main within State Route 76 (SR-76) were completed.

Based upon the storage criteria recommended in the Master Plan, storage requirements for each pressure zone have been calculated and separated into near-term and ultimate phases (Phase I and Phase II). Due to the proposed timing of prospective development, some water storage requirements would be more immediate than others. If built the Meadowood, Campus Park West, Campus Park, Gregory Canyon Landfill, and Warner Property areas would place a more immediate need on SLRMWD's required storage capacity. Due to environmental constraints, the proposed reservoir sites would be located within the Meadowood and Warner planning areas. The proposed storage data is presented in Table 3.J.

Table 3.J: Proposed Water Storage and Water Storage Development Phasing

Reservoir	Proposed Capacity (mg)	Phase	Location
R1-A	6.6	I	Meadowood
R1-B	6.6	I	Meadowood
R2	2.6	I	Warner Property
R3-A	7.6	II	Warner Property
R3-B	7.6	II	Warner Property
Total Phase I	15.8	-	-
Total Phase II	15.2	-	-
Grand Total	31.0	-	-

Source: Warner Property Supplemental Analysis, February 6, 2006.

The Master Plan recommended the following water storage criteria:

- Operational Storage (200 percent of average day demand) + Fire Flow Storage (0.8 mg Total) + in-District Emergency Storage (300 percent of average day demand) = 500 percent of average day demand plus 0.8 mg

The water storage shown in Table 3.I would provide a minimum of 5.2 average days of storage. The District has also proposed to develop groundwater resources to extend the water supply to provide for a 10-day lapse of imported service. In the event of a loss of supply from the SDCWA and/or MWD, SLRMWD would be entirely dependent on water storage to meet supply requirements. SDCWA and MWD recommend that agencies have 10 days of emergency storage to meet supply requirements until SDCWA and/or MWD facilities are repaired and returned to service.

3.7 PROPOSED WASTEWATER INFRASTRUCTURE AND SERVICE

The District is not currently providing wastewater services, and there are no existing wastewater collection or treatment facilities within SLRMWD. However, the District has developed a

Wastewater Master Plan, which provides different options for providing service to the proposed development areas within and adjacent to existing SLRMWD boundaries.

Wastewater Generation Rates

SLRMWD utilizes EDUs to plan for future services. An EDU is an estimation of the amount of wastewater that one single-family home will discharge into the sewer system per day. One EDU of wastewater is assumed to be equivalent to 250 gpd. Table 3.K provides SLRMWD's wastewater generation rates.

Table 3.K: Wastewater Generation Rates

Land Use Category	Density (du/acre)	Wastewater Generation Rate	
		EDU	gpd/du
Low Density	0-2	1	250
Single Family	2-8	1	250
Multi Family	8+	1	250
Commercial/Industrial	N/A	10 EDU/acre	2,500 gal/acre
School	N/A	5 EDU/acre	1,250 gal/acre
Parks	N/A	1 EDU/acre	250 gal/acre
Agriculture	N/A	0 EDU/acre	0

Source: SLRMWD Master Plan for Water and Wastewater Services, October 2005.

Wastewater Demand at Build Out

The wastewater service demand projections for the SLRMWD study area are shown in the Table 3.L. The projections are based upon the current County of San Diego General Plan land uses supplemented with build out information regarding the development projects. It should be noted that three of the proposed development areas are currently outside of SLRMWD's existing boundary and SOI and are wholly or partially within RMWD.

Table 3.L: Wastewater Flow Projections from Build Out of the SLRMWD Study Area

Area	Wastewater Projected EDUs	Wastewater Projected (gpd)
Meadowood	1,165.0	291,250
Campus Park West	879.0	219,750
Campus Park	2,193.8	548,450
County of San Diego	240.9	60,213
Gregory Canyon Landfill	0.0	0
City Home	881.0	220,250
Lake Rancho Viejo	764.0	191,000
Fritz Properties*	905.0	226,250
Pala Rey Ranch (McCarthy)*	1,400.0	350,000
Warner Property	1,001.0	250,250
Total	**9,429.7**	**2,357,410**

Source: Warner Property Supplemental Analysis, February 6, 2006.
*Potential development expected to occur after 2010

Wastewater flow projections indicate an ultimate average wastewater flow of approximately 2.4 mgd within the SLRMWD service area. Approximately 1.3 mgd of this flow is attributed to near-term development from the Meadowood, Campus Park West, Campus Park, and Warner Property projects. The remaining 1.1 mgd is attributed to future flow.

Proposed Wastewater Infrastructure

The SLRMWD Master Plan includes details regarding the infrastructure that would be necessary to provide wastewater services to the build out of the SLRMWD study area. Based on the estimated timing of the proposed developments within the study area, the infrastructure was divided into Phase I and Phase II. This infrastructure included in the Master Plan is summarized below and shown in Figure 3.2.

- A total of 5.5 miles of linear gravity mains are included in Phase I, with an additional 0.3 mile proposed in Phase II. These range in size from 8 to 24 inches in diameter.
- Two lift stations, 1.8 mgd and 0.5 mgd.
- A total of 0.1 linear mile of force mains in Phase I and 0.8 linear mile in Phase II; 350 feet will be 12 inches and 4,000 feet will be 8 inches.

The SLRMWD Master Plan includes three different infrastructure options for providing future wastewater treatment services to the SLRMWD study area. Further detail regarding each of the options is provided below.

Option 1: Construction of a water reclamation facility to treat wastewater flows generated by development within and adjacent to the existing SLRMWD boundary. In December 2002, R.W. Beck conducted an investigation of alternatives available for treating and disposing of wastewater that would be generated by the Meadowood development. The recommendation from this investigation was to construct a 1.3 mgd water reclamation facility at a site owned by RMWD west of I-15. This alternative is known as the "RMWD Alternative."

In February 9, 2005, a memorandum prepared by R.W. Beck discussed a "San Luis Rey MWD Alternative" to the initial "RMWD Alternative." This evaluation examined five potential sites within SLRMWD to construct a WWTP to treat the wastewater to Title 22 standards. The evaluation examined treating flow from Meadowood (1,250 EDUs) and an additional 800 EDUs from an additional development on the Campus Park West site for a total of 2,050 EDUs (0.51 mgd). The estimated cost of the 0.51 mgd tertiary plant is $12.3-$13.0 million.

Both of these studies recommended initial disposal of the treated effluent on percolation ponds until future reclaimed water use is developed. It is assumed that ultimately a 2.4 mgd water reclamation plant with 202 mg of wet weather storage will be required if construction of a water reclamation facility for SLRMWD is selected as the preferred wastewater treatment alternative.

Both the December 2002 report and the February 2005 report only examined a portion of the expected build out area within SLRMWD, while the Master Plan study examined wastewater

treatment to the entire SLRMWD study area at build out. Table 3.M summarizes the capacities and areas of the proposed water reclamation facilities.

Table 3.M: Summary of Water Reclamation Facility Capacities

Analysis Description	Capacity (mgd)	Area Served
R.W. Beck, December 2002	1.29	Meadowood, Rottman, Campus Park West, and all current and known future flows in the Eastern portion of RMWD
R.W. Beck, February 2005	0.51	Meadowood and Campus Park West
SLRMWD Master Plan for Water and Wastewater Services	2.4	Build out of the SLRMWD study area

Source: SLRMWD Master Plan for Water and Wastewater Services, October 2005

Option 2: Discharging wastewater to the City of Oceanside (City). As an alternative to constructing a water reclamation facility, wastewater flows generated from the SLRMWD study area could be discharged into the Oceanside WWTP through RMWD wastewater facilities located in SR-76 (Pala Road). RMWD has a 24-inch trunk sewer located in Pala Road that potentially has additional capacity; however, at the intersection of Pala Road and Gird Road, this line becomes a 12-inch main and is currently undersized.

With the exception of the 24-inch trunk sewer located in Pala Road, the 12-inch gravity mains and both lift stations have limited capacity, according to RMWD staff. Therefore, if SLRMWD wishes to discharge wastewater into the Oceanside WWTP, construction of new wastewater transmission facilities or the upsizing of RMWD's existing facilities would be required. In addition, this option would require 73,000 feet of 24-inch trunk sewers and two 4.2 mgd lift stations to be constructed within the SLRMWD study area.

Preliminary options for wastewater treatment and disposal through the City include:

- The City is in the planning stages of a water reclamation plant at the Oceanside WWTP site. According to the Oceanside WWTP Expansion Pre-Design Report (Carollo Engineers, December 1998), the plant is tentatively sized for 5 mgd with a possible expansion to 10 mgd. Wastewater from SLRMWD could potentially be treated by this new water reclamation facility.
- The City is also examining the feasibility of diverting wastewater flow out of its Haymar line (which is currently being pumped into the Oceanside WWTP through the Buena Vista Lift Station) and diverting that flow to the Encina Water Pollution Control Facility through the Vista Carlsbad Interceptor. This could potentially free up to 2 mgd of treatment capacity at the Oceanside WWTP.

Option 3: Construction of a regional water reclamation facility. This regional plant would treat the 2.4 mgd generated by the SLRMWD service area at build out in addition to the wastewater flows

currently discharged and planned to be discharged into the Oceanside WWTP by RMWD (1.5 mgd). The total plant capacity is currently proposed to be 3.9 mgd with a 327 mgd wet weather storage reservoir, one 1.5 mgd lift station, and 38,000 feet of 12-inch force mains.

The Master Plan determined that the two most viable options for wastewater treatment within SLRMWD are the construction of a 2.4 mgd wastewater treatment plant or the construction of conveyance facilities to the City of Oceanside's WWTP. However, additional cost information from the City will need to be obtained before a full comparison can be performed.

None of the agencies mentioned have been officially engaged in negotiations to actually carry out the ideas suggested, and no commitments to any flow capacities being available to SLRMWD have been made by any of these agencies. The potential wastewater treatment alternatives are conceptual proposals for Master Planning purposes only.

3.8 PROPOSED PROVISION OF RECYCLED WATER

The development of a recycled water system will reduce the volume of potable water that would be required to meet the projected water demand. This would reduce imported and groundwater supplies and would reduce the needed capacity of the potable water infrastructure. Based upon SLRMWD's projected development, the Master Plan includes plans for a recycled water system. This system has been divided into two phases: one phase for the users located in the SLRMWD study area and a second phase for the additional potential users outside of the SLRMWD study area. Table 3.N provides a list of the potential water users.

Table 3.N: Potential Recycled Water Users

Data Source	Potential User	Distance from WWTP (miles)	Acreage	Irrigation Use Factor (gpd/acre)	Potential Recycled Water Use (Average Annual Demand-gpd)
Meadowood	School	0.50	11	4,000	44,000
Meadowood	Parks	0.50	6	4,000	24,000
Meadowood	Landscaped Slopes	0.25-2.00	33	4,000	132,000
Meadowood	Landscaped Parkways	0.25-2.00	6	4,000	24,000
Meadowood	Groves	1.00	42	2,000	84,000
Campus Park West	Open Space/Landscape	0.25	22.7	2,000	45,400
Campus Park West	Parks	0.50	2.8	4,000	11,200
Campus Park	Parks	1.50	15	4,000	60,000
Lake Rancho Viejo	HOA Landscape	<0.25	85	4,000	340,000
Gregory	Gregory Canyon	2.00	80	890	71,000

Data Source	Potential User	Distance from WWTP (miles)	Acreage	Irrigation Use Factor (gpd/acre)	Potential Recycled Water Use (Average Annual Demand-gpd)
Canyon Land	Landfill				
Master Plan	Sycamore Ranch Golf Club	2.60	200	4,000	800,000
Master Plan	Caltrans District 11	0.50	?	?	?
Master Plan	Pala Mesa CC	3.30	164	4,000	656,000
Master Plan	Fallbrook Country Club	4.70	18	4,000	432,000
Master Plan	Live Oak Park	6.00	30	4,000	120,000
Master Plan	Sullivan Middle School	4.00	10	4,000	40,000
Master Plan	Bonsall Elementary School	6.20	10	4,000	40,000
Warner Property	Park/Equestrian Use	4.00	4.7	4,000	18,800
Total	--	--	**830.2**	--	**2,942,400**

Source: Warner Property Supplemental Analysis, February 6, 2006.

The infrastructure that would be needed to provide the recycled water service is listed below.

- A total of 9.4 linear miles of pipeline are proposed in Phase I and 15.8 linear miles are proposed in Phase II. These pipelines range in size from 8 to 16 inches in diameter
- A 3,000 gpm recycled water pump station in Phase I and an upgrade to a 7,300 gpm recycled water pump station for Phase II
- Two recycled water reservoirs: 2.1 mg facility for Phase I and a 5.2 mg facility for Phase II

3.9 PROPOSED SLRMWD SOI AND SERVICE PROVISION DISCUSSION

The existing SLRMWD SOI encompasses 3,207.77 acres and is coterminous with the District's boundary, as shown on Figure 3.1. In 1987, LAFCO adopted this coterminous SOI for SLRMWD. It should be noted that on the western boundary a segment of the SLRMWD SOI is split from and not adjacent to the majority of SLRMWD by a corridor of RMWD territory. This has resulted in having a portion of SLRMWD and its SOI being non-contiguous to the remainder of the District.

SLRMWD is currently requesting an expansion to the existing SOI. The expansion would encompass all of the planned developments that are adjacent to the existing boundary/SOI. The proposed expansion totals 2,977.5 acres. Of this proposed expansion area, 1,628.35 acres are currently not within any District and 1,349.15 acres are currently within RMWD. The existing and proposed

SLRMWD SOI are shown on Figures 3.1 and 3.2. It should be noted that this request is occurring prior to a request for an activation of latent powers, as detailed above, and an annexation of these areas in order to provide services to the proposed development areas.

As detailed previously, SLRMWD has prepared a Master Plan that identifies the District's plans for providing water and wastewater services to the planning areas. The District has stated that all of the planning areas could be efficiently served by the future facilities as identified in the Master Plan. Two of the planning areas are currently within RMWD (Campus Park and Lake Rancho Viejo), along with a portion of the Warner property. SLRMWD has stated that inclusion of these areas into the SLRMWD would provide for a cohesive district and efficient provision of service. Specifically, Lake Rancho Viejo and Campus Park were part of the District until the 1980s. Lake Rancho Viejo and Campus Park are located between two existing portions of SLRMWD. Lake Rancho Viejo is south of SR-76 and Campus Park is located north of SR-76 in the westernmost portion of SLRMWD. These planning areas are shown on Figure 3.1. The District retains groundwater storage rights in these areas, and the proposed developments are consistent with the suburban densities of the other proposed developments within SLRMWD.

In addition, SLRMWD has stated that the Campus Park development will have access in common with the Meadowood development, which is adjacent to the east. SLRMWD plans to have a single set of water and wastewater facilities for these projects. SLRMWD has stated that this would be more efficient than having separate parallel utilities for each project.

The Warner Property, which is approximately 450 acres and located immediately adjacent to the north, at the east end of the existing SLRMWD boundaries (as shown on Figure 3.1) has approached SLRMWD regarding a request to be included in the activation process and receive future services from SLRMWD. Yuima MWD has proposed and is planning a 'Northern Pipeline,' which would provide imported water resources and would cross the Warner Property. Inclusion of the Warner Property and implementation of the Northern Pipeline would allow a joint use facility and provide a Phase 2 site for centralized potable water storage within SLRMWD.

SLRMWD is proposing to provide water and wastewater services throughout the entire proposed SOI, except when the actual specific demands of the development do not require a particular service. For example, water and wastewater service would be available to the Gregory Canyon Landfill and would be utilized for administration and/or maintenance facilities of the development. The actual landfill operations, however, would use only recycled or non-potable groundwater for dust control and compaction. Likewise, areas that may be designated as permanent open space could be provided services if the landowner requested such service and met the other required land use conditions of the County.

As discussed previously, there is no existing water or wastewater infrastructure within the existing SLRMWD; therefore, any agency that provides services to the planning areas would need to develop a full range of water and wastewater infrastructure. In addition, the wastewater treatment in the region is provided by a pipeline to the Oceanside WWTP that is near capacity. Significant new development in the area would require a new wastewater treatment facility or a new pipeline to the Oceanside WWTP and significant upgrades to the existing Oceanside WWTP facility. Therefore, it appears that facilities that are detailed within the SLRMWD Master Plan would be required for the provision of service to the planning areas to meet demand regardless of which agency is the service provider.

As discussed previously, SLRMWD has adopted a Water and Wastewater Master Plan, which includes a CIP that details the needs and costs for all infrastructure to provide water and wastewater services to the planning areas at build out. SLRMWD has stated that the infrastructure needed to provide services would be financed by project developers and by the formation of Community Facilities Districts or Improvement Districts in conjunction with SLRMWD and in conformance with the SLRMWD Land-Secured Financing Policy, which is detailed previously.

The provision of water and wastewater services to the planning areas by SLRMWD would require a number of jurisdictional changes, including: (1) SOI and boundary expansions, (2) LAFCO approval of SLRMWD latent powers, (3) becoming a member agency of SDCWA, and (4) annexation of lands to SDCWA and MWD. Becoming a member agency would be guided by SDCWA annexation policies that were adopted in February 2006. Among other provisions, the policies state, "Priority shall be given to proposals for annexation to an existing member agency. Addition of territory through annexation of a new member agency shall be discouraged in order to promote efficiency in water supply delivery and governance."

If SDCWA membership and annexation of lands into MWD and SDCWA were approved, it would require the payment of annexation fees to both agencies. The annexation fees are currently $2,929 per acre for SDCWA and $3,460 per acre for MWD. Thus, annexation of the entire existing District territory would cost more than $19 million. SLRMWD has stated that the cost of the SDCWA and MWD annexation fees would be born by the properties annexing. In addition, the District's Cost Advancement, Cost Reimbursement, and Indemnification Agreement for the Activation of Latent Powers provides funding for costs associated with these processes. The activation of latent powers and SDCWA/MWD annexations would be financed through front-loaded increments designed to avoid placing the District in any financial risk.

In order to manage, operate, and administer the provision of water and wastewater services, the District would also need to hire a full range of staff, including management, engineering, operational, and administrative. Because the existing Board of Directors does not have experience in providing water and wastewater services, the District staff would need to be experienced and bring a level of expertise that could be used to educate the Board of Directors. It should be noted that it is not uncommon for board members of special districts to be lacking experience and expertise and to be educated through staff reports on specific service provisions or infrastructure issues. Similarly, it is not uncommon for districts to hire experienced staff with specific expertise.

In summary, the provision of service to the planning areas by SLRMWD would require numerous activities. These include:

- LAFCO approval of latent powers.
- Becoming a member agency of SDCWA and annexation into SDCWA and MWD.
- Participation in the construction of extensive water, wastewater, and recycled water infrastructure to serve the planning areas, as no infrastructure within the planning areas currently exists. This would be implemented pursuant to the SLRMWD Master Plan.
- In association with the infrastructure development, the District would need engineering reports; numerous permits from regional agencies, including a conditional use permit and

NPDES for construction and operation of a wastewater treatment facility; and appropriate CEQA documentation.

- Implementation of funding sources.
- Hiring all levels of staff, including engineering, to manage, operate, and administer the provision of water and wastewater services.

Advantages

There are several advantages of the planning areas being served by SLRMWD, as listed below.

- Based on information gathered for this MSR, the District has a history of stable membership of the Board of Directors.
- The District has existing knowledge of local issues, such as groundwater rights, potential for groundwater use, and issues related to the Gregory Canyon Landfill project.
- SLRMWD has an ongoing dialogue and concurrence on District direction with landowners regarding potential developments within SLRMWD and implementation of water and wastewater services.
- SLRMWD has developed a master plan and CIP for developing infrastructure to provide water, wastewater, and recycled water services.
- The District has adopted financial/revenue policies that provide financial stability to the District and a method of funding infrastructure, which would be necessary to provide water and wastewater infrastructure and services.

Disadvantages

There are several disadvantages of the planning areas being served by SLRMWD, as listed below.

- For SLRMWD to have authority to provide retail water and wastewater services, LAFCO would need to approve the activation of latent powers for these services, SDCWA would need to approve SLRMWD as a member agency, and the SLRMWD area would need to be annexed into SDCWA and MWD.
- Because there are no existing facilities, a full range of water, wastewater, and recycled water infrastructure would need to be developed.
- To provide water and wastewater services, the District would need to hire a full range of experienced staff.
- While SLRMWD has adopted financial/revenue policies that enhance financial stability and provide a method for funding infrastructure, it should be noted that the District has no personnel, expertise, infrastructure, or facilities in place, and currently serves an area with a population of 74 (2000 census).

3.10 POTENTIAL FOR REORGANIZATION

SLRMWD is opposed to reorganization and/or dissolution of the District. SLRMWD has been providing services to landowners regarding the protection of groundwater since 1958. The existing District services are expected to continue to be needed in the future. As the constitution and land uses within the District are changing, the District is proposing to expand its service provision to meet the anticipated future service needs.

Potential Reorganization with RMWD

SLRMWD is opposed to reorganizing with RMWD. As detailed in Section 2.0, RMWD has an unstable history of governance and staffing, recent citations from State and regional environmental agencies, numerous claims against its insurance carrier, recent operating losses, and existing areas of infrastructure that need to be upgraded.

Due to these issues, it appears that RMWD should focus attention on currently existing issues rather than take on additional responsibilities. In addition, RMWD does not have experience or existing expertise in providing the groundwater services that are currently being provided by SLRMWD. The SLRMWD objective is to provide residents continuity and reliability in the provision of services. Based on the existing issues facing RMWD, it may be able difficult for RMWD to meet this objective.

As detailed previously, there are several planned developments within the existing SLRMWD boundary. These developments are proposed to be developed at suburban densities. SLRMWD has been coordinating with these developers and has planned for the expected infrastructure within its Master Plan. Members of the RMWD Board of Directors have articulated in election platforms and interviews with the press that they do not want these types of new developments and would work to stifle the projects or make them financially infeasible in conformance with the desires of the “no-growth” faction within RMWD. However, the Board in its entirety have not taken a formal position on this matter. It should be noted that growth and land use issues are not part of a municipal water district's area of responsibility. The County Board of Supervisors has jurisdiction over land use matters and is the decision-making body for development related projects within unincorporated areas.

While both RMWD and SLRMWD are currently rural/agricultural districts, SLRMWD is proposing to become a suburban district with some areas of dedicated open space and residual agriculture. Thus, it could create conflict within RMWD to attempt to integrate these two essentially different characters (rural/agricultural and suburban), having customers with differing service needs and desired land uses into a single entity.

Potential Reorganization with VCMWD

SLRMWD is not in favor of reorganizing with VCMWD. The District does not have experience or existing expertise to provide the groundwater services that are currently being provided by SLRMWD. However, VCMWD has stated that it could avail itself of expertise and provide groundwater services by securing the services of outside engineering and legal expertise. In addition,

80-85 percent of the District's water sales has been and will continue to be to agricultural users. However, a majority of the District's metered accounts are rural and suburban residential customers. Of VCMWD's 9,601 active accounts, 7,886 are residential and commercial. Therefore, VCMWD has experience serving residential customers, similar to the type of development anticipated for the existing SLRMWD territory and the opportunity may exist for SLRMWD and VCMWD to reorganize.

3.11 ADDITIONAL GOVERNMENT STRUCTURE/SERVICE PROVISION ALTERNATIVES INCLUDING THE POTENTIAL FOR DISSOLUTION

This section evaluates the possibility of dissolving SLRMWD and provides alternatives regarding the provision of existing and potential service needs and government structure options to the lands that are currently within and adjacent to the SLRMWD boundary and SOI.

Due to the proposed development projects within or adjacent to the existing SLRMWD boundary, as detailed in Section 3.4 and Figure 3.1, and the expected transition from a predominantly agricultural area to that of a suburban residential community, which is consistent with the County's Draft 2020 General Plan land uses, shown in Figure 3.4 this area may require the provision of water and wastewater services in the future. As mentioned previously, SLRMWD currently does not have the authority to provide water and wastewater services and is currently not a member agency of SDCWA. In anticipation of the potential need for water and wastewater services, several government structure and service provision alternatives are evaluated below.

As stated previously, SLRMWD is opposed to dissolution of the District. SLRMWD has been providing services since 1958 and has a stable financial and governance history. The existing District services are expected to continue to be needed in the future, and the District is proposing to expand its service provision to meet the anticipated future service needs as the area evolves into non-agricultural uses.

The government structure/service provision alternatives that are evaluated within herein are listed below:

- Alternative 1: Status Quo/No Changes
- Alternative 2: Implementation of the Proposed SLRMWD Action Plan
- Alternative 3: Dissolution of SLRMWD and the Division of Existing SLRMWD Territory
- Alternative 4: Dissolution of SLRMWD and Expansion of RMWD
- Alternative 5: Dissolution of SLRMWD and Expansion of VCMWD
- Alternative 6: Functional Reorganization of Service Responsibility

Alternative 1: Status Quo/No Changes

Under this alternative there would be no change to the existing SOIs for the three agencies and no changes to assist in potential future service water and wastewater service provision within the area.

This alternative would not resolve any of the existing or potential future boundary and service issues in the area. Specific issues are detailed as follows:

- This alternative does not resolve the issue that a non-contiguous island area of SLRMWD currently exists within the RMWD boundary. In addition to this being a boundary issue, this may be a future service issue. As shown on Figure 3.1, Lake Rancho Viejo is currently within RMWD and is approximately two-thirds developed. The developed areas are being served by RMWD. Two proposed development areas (Campus Park West and City Home) are located within the SLRMWD island area, which is located to the west and north of the Lake Rancho Viejo development. If Campus Park and City Home were to be approved for development by the County, water and sewer services would be required. It would appear efficient and cost effective to have one agency provide services to these development areas. However, it should be noted that significant infrastructure would need to be developed for this area to receive water and wastewater services from any agency. Implementation of this alternative would not resolve this potential service issue.
- This alternative does not resolve the issues related to the existing Special Study Area. As detailed in Sections 2.14 and 4.14, because of the physical service constraints caused by development of I-15, it would appear appropriate to include Special Study areas west of I-15 in the RMWD SOI and include Special Study Areas that are adjacent to RMWD and east of I-15 in the VCMWD SOI. Implementation of this alternative would not resolve this boundary and service issue.
- This alternative does not concretely resolve the potential future water and wastewater service needs of the areas that are currently within SLRMWD or outside of the RMWD or VCMWD service areas. It appears that under this alternative SLRMWD would continue pursuit of the ability to provide water and wastewater services within its existing boundary by pursuing its proposal to become a member agency of SDCWA, proposing activation of latent powers from LAFCO, proposing annexation of development areas into SDCWA and MWD, and planning and development of infrastructure. As outlined previously, the provision of water and wastewater services by SLRMWD would require numerous approvals by different agencies, generation and implementation of funding sources, development of extensive infrastructure, and acquisition of experienced District staff. If these actions were to occur and SLRMWD obtained the ability to provide water and wastewater services, the future water and wastewater service needs within the existing SLRMWD boundary would be resolved.
- This alternative would not resolve or provide a solution to the infrastructure and governance issues that historically and currently characterize the RMWD. As detailed throughout Section 2.0, there are several existing deficiencies within RMWD's infrastructure, including inadequate fire flow, water pressure issues, water quality issues, deficient gravity pipelines, lift station deficiencies, and sewer line cracks. Also as detailed in Section 2.0, RMWD is challenged in maintaining Board membership and staffing. The District has had numerous changes to the Board of Directors within each of the five divisions, as well as high employee turnover, especially the general manger position. However, it should be noted that the District is currently attempting to hire a new general manager with expertise in water and wastewater service provision. Implementation of this alternative would have no effect nor provide a solution to this issue.

Alternative 2: Implementation of the Proposed SLRMWD Action Plan

Under this alternative, the SLRMWD proposal, as detailed throughout Section 3.0 and below, would be implemented. This alternative could resolve the potential future water and wastewater service needs in the area.

SLRMWD has been approached regarding the provision of water and wastewater services to several planned developments within and adjacent to the District boundaries. In response, the District is proposing several actions, which include expansion of its SOI, activation of latent powers, and becoming a member agency of SDCWA. The District is also planning to implement funding sources, annex development areas into SDCWA and MWD (upon SDCWA membership), and begin implementation of its Master Plan for water and wastewater facilities and services.

As detailed in Section 3.9, the existing SLRMWD SOI encompasses 3,207.77 acres and is coterminous with the District's boundary, as shown on Figure 3.1. SLRMWD is currently requesting an expansion to the existing SOI, which would encompass all of the planned developments that are adjacent to the existing boundary/SOI. The proposed SOI expansion totals 2,977.5 acres. Of this proposed expansion area, 1,628.35 acres are not within any District and 1,349.15 acres are currently within RMWD. The existing and proposed SLRMWD SOI are shown on Figures 3.1 and 3.2.

SLRMWD's SOI expansion request is occurring prior to a request to LAFCO for activation of latent powers (as detailed in Section 3.3) and concurrent with a request to become a member agency of SDCWA. SDCWA has adopted annexation policies, which among other provisions, state, "Priority shall be given to proposals for annexation to an existing member agency. Addition of territory through annexation of a new member agency shall be discouraged in order to promote efficiency in water supply delivery and governance."

If SDCWA membership were approved, SLRMWD would request an annexation of development areas into MWD and SDCWA in order to provide imported water services. The annexation would require the payment of annexation fees, which are currently $2,929 per acre for SDCWA and $3,460 per acre for MWD ($6,389 total per acre). If SLRMWD were to request annexation of the entire existing District territory, the total cost would be more than $19 million. SLRMWD has stated that the cost of the annexation fees would be born by the properties annexing. It should be noted that the cost to annex lands into SDCWA and MWD would be the same for any agency proposing to serve this area.

As outlined previously, SLRMWD has developed several funding methods for the costs associated with all of the proposed actions, including the annexation fees and costs for infrastructure development. These methods include: a Cost Advancement, Cost Reimbursement, and Indemnification Agreement; Land Secured Financing Policy; formation of Community Facilities Districts and Improvement Districts; and "front loaded" increments from landowners.

As discussed previously, there is no existing water or wastewater infrastructure with the ability to serve non-agricultural uses within the existing SLRMWD; therefore, any agency that provides services to the planning areas would need to develop a full range of water and wastewater infrastructure. SLRMWD has prepared a Master Plan that identifies the District's plans for providing water and wastewater services to the existing and proposed SOI. Details regarding the SLRMWD

Master Plan are provided in Sections 3.5 through 3.9. The District has stated that this area could be efficiently served by the future facilities as identified in the Master Plan. SLRMWD has stated that inclusion of these areas into the SLRMWD and implementation of the Master Plan would provide for a cohesive district and efficient provision of service.

In order to manage, operate, and administer the provision of water and wastewater services, SLRMWD would need to hire a full range of staff. The District staff would need to be experienced and bring a level of expertise that could be used to educate the Board of Directors. It should be noted that it is not uncommon for districts to hire experienced staff and for board members to be educated through staff reports on specific service provisions or infrastructure issues.

Implementation of this alternative along with activation of latent powers, SLRMWD becoming a member agency of SDCWA, and the other activities outlined throughout Section 3.0 would resolve the potential future water and wastewater service needs in the area. Additional detail and evaluation of this alternative, including advantages and disadvantages, are provided in Section 3.9.

Alternative 3: Dissolution of SLRMWD and Division of Existing SLRMWD Territory

Under this alternative SLRMWD would be dissolved and the existing SLRMWD territory would be divided between RMWD and VCMWD. The San Luis Rey River would be delineated as the boundary because the river bisects SLRMWD. In addition, this delineation was identified by LAFCO because the river is a natural feature of the topography that can be an impediment, both physically and environmentally, to the installation of infrastructure. However, SLRMWD has a different view and has stated that the river it is not an impediment or barrier to infrastructure installation. SLRMWD has stated that the river is no more of a barrier than a freeway. Similar to a freeway, construction of infrastructure across the river would require different construction techniques and materials than cut-and-fill construction. Throughout California, numerous agencies have critical infrastructure that crosses rivers and streams. Moreover, SLRMWD has stated that there is no significant engineering or environmental issues to be overcome. Crossing rivers and streams is simply an economic issue. Developing infrastructure that does not cross rivers can be less expensive and require less regulatory interaction, but reliable, cost effective river and stream infrastructure crossings are installed regularly. SLRMWD has stated that it would plan its river crossing facilities in a manner to insure cost effective and reliable facilities. Similarly, VCMWD has stated that if VCMWD were to serve the area currently within SLRMWD, infrastructure options regarding crossing the San Luis Rey River would be based on a future detailed cost/benefit analysis.

Under this alternative, areas north of the river would become part of RMWD and areas south of the river would become part of VCMWD. The services that are currently being provided by SLRMWD would be provided by the respective districts, and the districts would extend water and sewer infrastructure as necessary to serve the proposed developments. As part of the extension of water service, each district would have to annex the new territory to SDCWA and MWD and pay the annexation fees totaling $6,389 per acre. Each District has stated that the cost of the SDCWA and MWD annexation fees for areas served would be born by the properties annexing.

Under this alternative the Gregory Canyon Landfill area would be divided between RMWD and VCMWD. The proposed landfill currently has a design capacity of approximately 31 million tons of

waste and an expected service life of approximately 30 years. As stated previously, it is expected that the landfill would need water and wastewater services to the administration and/or maintenance facilities and that the actual landfill operations would use only recycled or non-potable groundwater for dust control and compaction. Currently, all of the landfill facilities and service needs are located south of the river. However, future unforeseen changes to landfill land uses and activities could result in the need for services in other areas. Depending on the currently unforeseen needs, the provision of potable and non-potable water and wastewater services could be divided between different districts in the future. Therefore, it may be preferable to have the landfill located within one of the three agencies evaluated within this MSR.

Expansion of RMWD Territory South to River. RMWD is generally coterminous on its southeastern boundary with the existing SLRMWD boundary, with the exception of a small island area that part is of the proposed Meadowood development, which is currently not within any district. Additionally, and as mentioned previously, a non-contiguous island area of SLRMWD currently exists within the RMWD boundary. This area consists of the proposed Campus Park West and City Home developments.

As thoroughly detailed throughout Section 2.0 and in Alternative 1, RMWD currently only provides wastewater services to a small portion of its territory and has limited capacity for expansion to its existing territory. Due to this, the District has an ordinance that limits the expansion of wastewater services. Additionally, there are several existing deficiencies within RMWD's infrastructure, and RMWD is challenged in maintaining consistent Board membership and staffing. The District has had numerous changes to the Board of Directors within each of the five divisions, as well as high employee turnover, especially in the position of general manger. Due to these existing constraints and the disadvantages listed in Section 2.14, it appears that it would be difficult for RMWD to largely expand its service area, develop extensive infrastructure, generate the necessary funding for infrastructure development, and gain expertise in a new service to continue providing the services that are currently being received by SLRMWD landowners while maintaining adequate service levels to its existing customer base.

Expansion of VCMWD Territory North to River. A portion of the existing SLRMWD southern boundary is currently coterminous with VCMWD's northwestern boundary. However, the entire southeastern portion of SLRMWD's boundary is bounded by lands that are not currently within any district and consist of Gregory Canyon Landfill or Pala Indian Reservation lands. Implementation of this alternative would require VCMWD to annex the area consisting of Gregory Canyon landfill and currently not within any district in order to not create a non-contiguous island area.

As stated previously, VCMWD does not currently provide wastewater services in the northern portion of the existing VCMWD area. Therefore, if VCMWD were to provide wastewater and recycled water services to the areas currently within SLRMWD and south of the river, VCMWD would need to develop a wastewater infrastructure plan and infrastructure to serve this area. Based on the existing land use plan and proposed developments identified in Figure 3.1, areas south of the river to be served by VCMWD under this alternative include: Pala Rey Ranch, consisting of 1,200 single-family units; Gregory Canyon Landfill, which is not expected to need extensive potable water or wastewater service; and County of San Diego areas that are not currently proposed for development.

It should be noted that the Gregory Canyon Landfill separates the Pala Rey Ranch development and the County areas; therefore, if the County areas south of the river and to the northeast of the landfill were proposed for development and served by VCMWD, it appears that separate wastewater (and potentially, water facilities) would need to be developed for this County area and Pala Rey Ranch.

In addition, a portion of Pala Rey Ranch crosses the river. Depending upon the final land use plan for this proposed development, both water and wastewater infrastructure may need to cross the river to provide cohesive service to the entire development, or under this alternative the development would be served by two different agencies (VCMWD and RMWD). Having two different agencies provide service to this one development and the potential construction of extra service infrastructure does not appear to be the most efficient and cost effective provision of service.

Regarding water service, VCMWD stated that there is a possibility that some of the property in the proposed SLRMWD SOI on the south side of the river near the northern boundary of VCMWD could be served by upsizing and extending existing water transmission facilities. Under this alternative this would appear to include the portions of Pala Rey Ranch and Gregory Canyon Landfill that are south of the river. However, depending on the landfill service needs and placement of infrastructure serving the landfill, it may not be cost effective or efficient to extend VCMWD water infrastructure northward beyond the landfill to the County of San Diego areas if they were proposed for development.

As detailed in Section 4.14, VCMWD has stated that initially the District would secure preliminary funding assurances from landowners/developers or preliminary approvals to form funding vehicles (Improvement Districts, Assessment District) from impacted property owners to secure financing to annex lands into SDCWA and MWD and construct the necessary infrastructure. It should be noted that the District's Capital Improvement Spending Limit Ordinance limits the expenditure of District funds for capital improvements. However, this limitation does not apply to funds expended by property owners, developers, or others for capital projects that will be dedicated to the District or to funds from assessment or improvement districts formed in the manner provided by State law. Additional detail and evaluation of the ability of VCMWD to extend services northward, including advantages and disadvantages, are provided in Section 4.14.

As discussed above, there are several service, infrastructure, boundary, and potential funding constraints related to implementation of this alternative. However, if these issues were overcome, this alternative could resolve the potential future water and wastewater service needs in the area.

Alternative 4: Dissolution of SLRMWD and Expansion of RMWD

Under this alternative SLRMWD would be dissolved and RMWD would be expanded to include the existing SLRMWD area, which is 3,207.77 acres. Implementation of this alternative would require RMWD to gain expertise in, and assume responsibility over, the current services being provided by SLRMWD to its existing landowners. As specified in LAFCO's 1994 survey of authorized services and detailed on page 3-1 SLRMWD's current services include groundwater protection as well as property owner advocacy in the provision of legal, engineering, and environmental consulting services. There would also need to be a restructuring of the RMWD Board to provide representation to the new areas. In addition, RMWD would develop and/or extend a full range of water and wastewater infrastructure and District staffing as necessary to serve the proposed developments. The

extension of water services would require the annexation of lands into SDCWA and MWD, which would require the payment of annexation fees, which are currently $2,929 per acre for SDCWA and $3,460 per acre for MWD ($6,389 total per acre). If the entire existing SLRMWD territory were to be annexed, the total cost would be more than $19 million. RMWD has stated that the cost of the annexation fees would be born by the properties annexing.

Detail regarding RMWD's proposed methods of extending infrastructure and services to the existing SLRMWD area is provided in Section 2.0. This section also provides a complete analysis of RMWD's ability to implement this plan while extending services within its existing boundary in regard to infrastructure, finances, and governance and staffing. This evaluation also includes a list of advantages and disadvantages to this alternative within Section 2.14.

In summary and as stated in Alternatives 1 and 3, RMWD currently only provides wastewater services to a small portion of its territory and has limited capacity for expansion to its existing territory. Due to this, the District has an ordinance that limits the expansion of wastewater services. Additionally, there are several existing deficiencies within RMWD's infrastructure, and RMWD is challenged in maintaining Board membership and staffing. The District has had numerous changes to the Board of Directors within each of the five divisions, as well as high employee turnover, especially in the position of general manager. Due to these existing constraints and the disadvantages listed in Section 2.14, it appears that it would be difficult for RMWD to expand its service area, develop extensive infrastructure, generate the necessary funding for infrastructure development, and gain expertise in a new service to continue providing the services that are currently being received by SLRMWD landowners while maintaining adequate service levels to its existing customer base.

Alternative 5: Dissolution of SLRMWD and Expansion of VCMWD

Under this alternative SLRMWD would be dissolved and VCMWD would be expanded to include the existing SLRMWD area, which is 3,207.77 acres. Implementation of this alternative would require VCMWD to gain expertise in, and assume responsibility over, the current services being provided by SLRMWD to its existing landowners. There would also need to be a restructuring of the VCMWD Board to provide representation to the new areas. In addition, VCMWD would develop and/or extend a full range of water and wastewater infrastructure and District staffing as necessary to serve the proposed developments. The extension of water services would require the annexation of lands into SDCWA and MWD, which would require the payment of annexation fees, which are currently $2,929 per acre for SDCWA and $3,460 per acre for MWD ($6,389 total per acre). If the entire existing SLRMWD territory were to be annexed, the total cost would be more than $19 million. As stated previously, VCMWD has stated that the cost of annexation fee for areas served by VCMWD would be born by the properties annexing.

Detail regarding VCMWD's proposed methods of extending infrastructure and services to the existing SLRMWD area is provided in Section 4.0. This section also provides a complete analysis of VCMWD's ability to implement an extension of services and infrastructure while extending services within its existing boundary in regards to infrastructure, finances, and governance and staffing. This evaluation also includes a list of advantages and disadvantages to this alternative within Section 4.14.

In summary, VCMWD has stated that it would likely use much of the SLRMWD Master Plan as the basis for moving forward with the extension of infrastructure and services. VCMWD has stated that as actual projects are implemented, there could be minor changes in location and configurations based upon specific site conditions and final land use and demand factors. Specifically regarding water service, VCMWD stated that a possible major variation to the plan would be the possibility of serving lands south of the SLRMWD by upsizing and extending existing VCMWD facilities northward, rather than having pipelines crossing the San Luis Rey River from north to south. VCMWD's determination of that specific issue, among others, would be based upon a future detailed cost/benefit analysis.

As stated in Section 4.14 and Alternative 3, VCMWD has stated that initially the District would secure preliminary funding assurances from landowners/developers or preliminary approvals to form funding vehicles (Improvement Districts, Assessment District) from impacted property owners to secure financing for the annexation of lands to SDCWA and MWD and to construct the necessary infrastructure. It should be noted that the District's Capital Improvement Spending Limit Ordinance limits the expenditure of District funds for capital improvements. However, this limitation does not apply to funds expended by property owners, developers, or others for capital projects that will be dedicated to the District or to funds from assessment or improvement districts formed in the manner provided by State law.

Implementation of this alternative has the potential to resolve the future water and wastewater service needs in the area. Additional detail and evaluation of this alternative, including advantages and disadvantages, are provided in Section 4.14.

Alternative 6: Functional Reorganization of Service Responsibility

Under this alternative there would be no changes to the SOIs and boundaries of the three Districts included within this MSR. Out-of-district and SOI contractual arrangements would be executed to allow needed service provisions by agencies having authority, infrastructure, and expertise to provide service to proposed developments. This alternative would relate to wastewater service and exclude imported water service because SDCWA policies do not allow for distribution of imported water outside of SDCWA boundaries.

This alternative would not resolve a majority of the existing or potential future boundary and service issues in the area, as detailed below:

- This alternative would not concretely resolve the potential future imported water service needs of the area because distribution of imported water is not allowed outside of SDCWA boundaries.
- As described in Alternative 1, this alternative would not resolve the issue that a non-contiguous island area of SLRMWD currently exists within the RMWD boundary.
- As described in Alternative 1, this alternative would not resolve the issues related to the existing Special Study Area.
- As described in Alternative 1, this alternative would not resolve or provide a solution to the infrastructure and governance issues currently characterizing the RMWD. In addition, due to

> the RMWD's current infrastructure deficiencies, lack of capacity, an ordinance that limits the expansion of wastewater services, inconsistent staffing and governance, and potential funding constraints, it appears that it would be difficult for RMWD to extend services beyond its existing service area.

However, similar to Alternative 1, under this alternative, SLRMWD would continue pursuit of the ability to provide water and wastewater services within its existing boundary by pursuing its proposal to become a member agency of SDCWA, proposing activation of latent powers from LAFCO, proposing annexation of development areas into SDCWA and MWD, and development of infrastructure. If the necessary approvals and other actions (outlined previously) were to occur and SLRMWD obtained the ability to provide water and wastewater services, the future water and wastewater service needs within the existing SLRMWD boundary would be resolved.

This alternative appears to be inconsistent with the role of LAFCO, which in part is to promote logical and orderly boundaries, SOIs, and service areas for local agencies. Similarly, SOI is defined in Government Code Section 56076 as follows: SOI means a plan for the probable physical boundaries and service area of a local agency as determined by the Commission. Therefore, this alternative regarding out of agency and SOI contracts for services appears to be inconsistent with the Government Code.

Additionally, this alternative appears to be inconsistent with Government Code Section 56133(c), which states the following:

> The (LAFCO) commission may authorize a city or district to provide new or extended services outside its jurisdictional boundaries and outside its SOI to respond to an existing or impending threat to the public health or safety of the residents of the affected territory if both of the following requirements are met: (1) The entity applying for the contract approval has provided the commission with documentation of a threat to the health and safety of the public or the affected residents. (2) The commission has notified any alternate service provider, including any water corporation as defined in Section 241 of the Public Utilities Code, or sewer system corporation as defined in Section 230.6 of the Public Utilities Code, that has filed a map and a statement of its service capabilities with the commission.

Because implementation of this alternative would extend services to newly developing areas where no impending threat to the public health or safety of the residents exists, this alternative appears to be inconsistent with the Government Code.

3.12 MSR DETERMINATIONS FOR THE SAN LUIS REY MWD

The Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 requires that the following nine determinations be included in MSRs. The following determinations have been prepared pursuant to the standards developed by San Diego LAFCO, as detailed in Appendix A, and based on the District information detailed previously.

Determination 1: Infrastructure Needs and Deficiencies

In authorizing the preparation of MSRs, the State Legislature has focused on one of LAFCO's core missions—encouraging the efficient provision of public services. Infrastructure needs or deficiencies, which refer to the adequacy of existing and planned public facilities in relation to how public services are, and will be, provided to citizens, impacts the efficient delivery of public services. Infrastructure can be evaluated in terms of capacity, condition, availability, quality, and correlations among operational, capital improvement, and finance plans. It is recognized that there may be unmet infrastructure needs due to budget constraints or other factors; however, identification of deficiencies may promote public understanding and support for needed improvements.

Determination 1.0: SLRMWD has no existing infrastructure and would have to participate in extensive infrastructure development in order to provide water and wastewater services. In addition, for the District to obtain the legal authority to provide water and wastewater services, the District would need to obtain approval of latent powers by LAFCO, become a member agency of SDCWA, and annex into SDCWA and MWD.

Determination 1.1: SLRMWD has developed a Water and Wastewater Master Plan, which has identified the infrastructure and capacity that would be needed to serve the proposed SOI area at build out of the planning areas.

Determination 1.2: The SLRMWD Master Plan states that a potential SLRMWD groundwater project could supply a substantial portion of the District's potable water needs. The Master Plan includes two infrastructure options for groundwater supply. These involve the following infrastructure that the District would need to develop: extraction wells throughout the Basin, water lines, a brine line, a brine pump station, and a desalter facility.

Determination 1.3: SLRMWD's geographical location provides for potential imported water supply sources from MWD aqueducts. The Master Plan includes several infrastructure options to provide imported water to its proposed service area. These include the need for the following facilities: turnouts from MWD's aqueducts, potable water pipeline, water reservoirs, and pressure reducing stations. The District's Master Plan states that these could be sized to meet peak demand.

Determination 1.4: The Master Plan includes three infrastructure options to provide wastewater services. The options include developing a water reclamation facility to serve the build out of the proposed SLRMWD service area, discharging wastewater to the City of Oceanside's WWTP, and development of a regional water reclamation facility to serve a larger geographical area. With any of these options, gravity mains, lift stations, and force mains throughout the proposed service area would be needed. In addition, depending upon which wastewater treatment option is selected, a water reclamation facility, percolation ponds, and recycled water system would be needed.

Determination 1.5: The option of disposing wastewater via RMWD facilities that discharge into the Oceanside WWTP is problematic for the following reasons: (1) the trunk sewer line in Pala Road is currently characterized as undersized; (2) this disposal method would require either construction of new wastewater transmission infrastructure or the upsizing of RMWD's existing facilities; (3) capacity of the WWTP would have to be increased to meet additional demand; and (4) an agreement among the three agencies (Oceanside, RMWD, SLRMWD) would need to be negotiated.

Determination 1.6: The northern pipeline project involving construction of a water line that would connect Yuima MWD with the SDCWA system is still in the planning stage and needs to obtain necessary approvals. However, according to the SLRMWD Master Plan, the ability of SLRMWD to secure water supplies is not dependent upon implementation of this joint pipeline project. If this pipeline is not developed, SLRMWD plans to construct its own infrastructure utilizing water resources from the same aqueduct.

Determination 1.7: The infrastructure that would be needed to provide recycled water service includes recycled water pipeline, a recycled water pump station, and two recycled water reservoirs.

Determination 2: Growth and Population

Efficient provision of public services is linked to an agency's ability to plan for future need. For example, a water purveyor must be prepared to supply water for existing *and* future levels of demand, and also be able to determine *where* future demand will occur. MSRs will give LAFCO, affected agencies, and the public the means to examine both the existing and future need for public services and will evaluate whether projections for future growth and population patterns are integrated into an agency's planning function.

Determination 2.0: Current SANDAG growth projections to 2030 show minimal growth within the SLRMWD area. However, there are currently four proposed projects within the existing SLRMWD boundary and three proposed projects that are outside but adjacent to SLRMWD boundaries. If all the developments were approved by the County and developed at the proposed densities, over 4,000 residential units would be developed within the existing SLRMWD boundary. Therefore, actual growth within District boundaries may be higher than projections.

Determination 3: Financing Constraints and Opportunities

LAFCO must weigh a community's public service needs against the resources available to fund the services. During the MSR, the financing constraints and opportunities, which have an impact on the delivery of services, will be identified and enable LAFCO, local agencies, and the public to assess whether agencies are capitalizing on financing opportunities. For example, a MSR could reveal that two or more water agencies that are each deficient in storage capacity and which individually lack financial resources to construct additional facilities, may benefit from creating a joint venture to finance and construct regional storage facilities. MSRs may also disclose innovations for contending with financing constraints, which may be of considerable value to numerous agencies.

Determination 3.0: The District's revenues have exceeded expenditures for the past two years and are expected to remain so in the current fiscal year. There are no existing financing constraints.

Determination 3.1: The District requires the applicants for new developments that create a demand for facilities to finance the construction and startup of the facilities that are specific to their projects.

Determination 3.2: The District has adopted a Land Secured Financing Policy, which provides for funding of regional and/or multi-project/core facilities through formation of Community Facilities

District(s) and/or Improvement Districts. These financing methods would need to be implemented in order to fund the infrastructure necessary to provide water and wastewater services.

Determination 3.3: The District has determined that the costs associated with the initial studies related to the activation of latent powers should be borne by those seeking service. Therefore, the District adopted a policy that provides financing through "front loaded" increments from landowners, which is designed to avoid placing the District in any financial risk.

Determination 3.4: The SLRMWD wishes to transition into an urban water and wastewater service provider. To accomplish that goal, millions of dollars will be required, which the District is planning to obtain through its Land Secured Financing Policy, formation of Community Facilities Districts and Improvement Districts, and "front loaded" increments from landowners. Furthermore, the District would need to obtain the professional expertise, necessary permits, infrastructure, rights and access to imported water, as well as legal authority to furnish those services.

Determination 4: Cost Avoidance Opportunities

LAFCO's role in encouraging efficiently provided public services depends, in part, on helping local agencies explore cost avoidance opportunities. The MSR will explore cost avoidance opportunities including, but not limited to: (1) eliminating duplicative services; (2) reducing high administration-to-operation cost ratios; (3) replacing outdated or deteriorating infrastructure and equipment; (4) reducing inventories of underutilized equipment, buildings, or facilities; (5) redrawing overlapping or inefficient service boundaries; (6) replacing inefficient purchasing or budgeting practices; (7) implementing economies of scale; and (8) increasing profitable outsourcing.

Determination 4.0: The potential agreement between SLRMWD and Yuima MWD to jointly own and operate water resource facilities is a cost avoidance opportunity.

Determination 4.1: The District's requirement that the applicants for new developments construct facilities to serve the new areas is a cost avoidance opportunity.

Determination 5: Opportunities for Rate Restructuring

When applicable, the MSR will review agency rates, which are charged for public services, to examine opportunities for rate restructuring without impairing the quality of service. Agency rates will be scrutinized for: (1) rate setting methodologies; (2) conditions that could impact future rates; and (3) variances among rates, fees, taxes, charges, etc., within an agency and region. MSRs will identify strategies for rate restructuring, which would further the LAFCO mission of ensuring efficiency in providing public services.

Determination 5.0: Due to the unique and special water management issues that exist within SLRMWD, the District levies an annual water availability charge assessment. The rates are reviewed and adopted annually at a public meeting. These rates are subject to State legislation; therefore, minimal opportunity exists for restructuring.

Determination 5.1: The District does not currently have a retail rate structure. If the District were to begin to provide retail water and wastewater services, a retail rate structure would be implemented to cover the costs of providing these services. The Board of Directors has articulated that an appropriate structure would be one that apportions costs to the user categories that create the cost centers (e.g. residential, landscape irrigation, institutional, agricultural, commercial, and industrial).

Determination 6: Opportunities for Shared Facilities

Public service costs may be reduced and service efficiencies increased if service providers develop strategies for sharing resources. For example, service providers in San Diego County currently share communication centers, wastewater treatment facilities, and distribution lines. Sharing facilities and excess system capacity decreases duplicative efforts, may lower costs, and minimizes unnecessary resource consumption. The MSR will inventory facilities within the study area to determine whether facilities are currently being utilized to capacity and whether efficiencies can be achieved by accommodating the facility needs of adjacent agencies. Options for planning for future shared facilities and services will also be considered.

Determination 6.0: Because SLRMWD does not currently have any infrastructure, there does not appear to be any existing opportunities to share facilities with another agency. However, SLRMWD and Yuima MWD are in the process of developing an agreement to jointly utilize a new turnout on the MWD First Aqueduct and a portion of the proposed pipeline.

Determination 6.1: Due to the regulations of the Cortese-Knox Hertzberg Act, the possible growth and infrastructure needs that are outside of the three Districts evaluated within this MSR, and the potential opportunities for future shared facilities, Mootamai MWD, Yuima MWD, and Pauma MWD should be evaluated in an independent MSR.

Determination 6.2: Two potential locations exist for interagency connections for imported water supply between SLRMWD and RMWD. Each of the potential connections would supply enough hydraulic grade line to adequately serve the proposed SLRMWD distribution system through a pressure reducing station.

Determination 7: Government Structure Options, including Advantages and Disadvantages of Consolidation or Reorganization of Service Providers

The MSR provides a tool to comprehensively study existing and future public service conditions and to evaluate organizational options for accommodating growth, preventing urban sprawl, and ensuring that critical services are efficiently and cost-effectively provided. While the MSR does not require LAFCO to initiate changes of organization based on MSR findings, LAFCO, local agencies, and the public may subsequently use MSRs to pursue changes to services, local jurisdictions, or spheres of influence. LAFCO may examine efficiencies that could be gained through: (1) functional reorganizations within existing agencies; (2) amending or updating spheres of influence; (3) annexations or detachments from cities or special districts; (4) formation of new special districts; (5) special district dissolutions; (6) mergers of special districts with cities; (7) establishment of subsidiary districts; or (8) any additional reorganization options found in Government Code § 56000 et. seq.

Determination 7.0: The District's Board of Directors has a history of long-term stability. The Board of Directors takes an active role in administrative matters.

Determination 7.1: In order for the District to have authority to provide retail water and wastewater services, LAFCO would need to approve the activation of latent powers for these services, SDCWA would need to approve SLRMWD as a member agency, and the SLRMWD area would need to be annexed into SDCWA and MWD.

Determination 7.2: There are several advantages and disadvantages to the planning areas being served and governed by SLRMWD.

- Advantages include: (1) being served by District with a history of stable governance, (2) policies that provide financial stability, (3) a developed plan for infrastructure including a CIP, and (4) existing knowledge of local issues and concurrence with landowners.
- Disadvantages include: (1) needing to obtain authority to provide water and wastewater services by LAFCO approval of latent powers, (2) becoming a member agency of SDCWA, (3) annexing into SDCWA and MWD, and (4) having to hire a full range of experience staff.

Determination 7.3: Several government structure options have been evaluated within this MSR. These include the ability of each of the three agencies within this MSR to serve the area within the existing SLRMWD, the potential reorganization and dissolution of SLRMWD, not making any changes, and the viability of out-of-district contractual arrangements for the provision of services. As detailed within Section 3.0, several of the alternatives are viable depending upon various existing and future factors. All of the alternatives provide an evaluation of options for accommodating growth and ensuring that critical services are efficiently and cost-effectively provided. Likewise, all of the alternatives provide LAFCO, local agencies, and the public the information to pursue changes and expansions to services, local jurisdictions, and spheres of influence.

Determination 8: Evaluation of Management Efficiencies

Management efficiency refers to the effectiveness of an agency's internal organization to provide efficient, quality public services. Efficiently managed agencies consistently implement plans to improve service delivery, reduce waste, eliminate duplications of effort, contain costs, maintain qualified employees, build and maintain adequate contingency reserves, and encourage and maintain open dialogues with the public and other public and private agencies. The MSR will evaluate management efficiency by analyzing agency functions, operations, and practices, as well as the agency's ability to meet current and future service demands. Services will be evaluated in relation to available resources and consideration of service provision constraints.

Determination 8.0: The District does not have any direct employees. The District uses contract professionals on an as-needed basis. This allows for efficiency in providing the current services, such as legal, engineering, and environmental consulting, as the District does not pay for employee overhead expenses and only pays for direct services.

Determination 8.1: If the District began to provide water and wastewater services, the District would need to hire a full range of experienced staff, including management, engineering, operational, and administrative.

Determination 9: Local Accountability and Governance

In making a determination of local accountability and governance, LAFCO will consider the degree to which the agency fosters local accountability. *Local accountability and governance* refers to public agency decision making and operational and management processes that: (1) include an accessible and accountable elected or appointed decision making body and agency staff; (2) encourage and value public participation; (3) disclose budgets, programs, and plans; (4) solicit public input when considering rate changes and work and infrastructure plans; and (5) evaluate outcomes of plans, programs, and operations and disclose results to the public.

Determination 9.0: The District's processes provide for public participation, which includes an accessible and accountable decision-making body. Specifically, (1) Board meeting agendas are available pursuant to the Brown Act and also provided by direct mail or e-mail per request, (2) the District publishes an annual newsletter that is mailed via return receipt to all landowners, (3) Board members' phone numbers are provided to all District residents, and (4) Board meetings are held at a convenient and well appointed location.

3.13 SOI DETERMINATIONS FOR SAN LUIS REY MWD

As detailed in Section 1.0, Government Code Section 56425 requires written determinations with respect to the following four factors to update an agency's SOI. Based upon the information above, the following determinations are recommended to update the SLRMWD SOI.

Present and Planned Land Uses in the Area

Land within the existing SLRMWD SOI is largely undeveloped and mostly designated as agricultural and vacant. Four large areas of prime agricultural land are located within the District; specifically within the City Home, Fritz Holdings, Pala Rey Ranch, and Warner Property planning areas. As previously mentioned, LAFCO has a policy pertaining to agricultural lands. This policy must be addressed and discussed when plans to develop territory containing prime agricultural land are proposed. In addition, one large area adjacent to SR-76 is designated for Industrial/Commercial uses. There are a few small areas of spaced rural residential land uses scattered throughout the existing District SOI and generally located adjacent to SR-76.

Lands within the proposed SLRMWD SOI are generally the same as those within the existing SOI, with the exception of the Lake Rancho Viejo development, which is being developed with suburban density residential uses. Existing General Plan land uses are shown on Figure 3.3.

San Diego County is currently going through a General Plan Update. Within this Update, the 2020 land uses have not been adopted and are shown as proposed on Figure 3.4. The currently proposed land uses within the existing and proposed SLRMWD SOI are significantly different than the existing

land use designations. The major difference is that most of the lands currently as designated agricultural or vacant are proposed as spaced rural residential. Additionally, an area to the east of I-15 and north of SR-76 is proposed as single-family residential.

The SANDAG growth projections and existing planned developments, as detailed in Section 3.4, are consistent with the expected transition from a predominantly agricultural area to that of a suburban residential community.

Present and Probable Need for Public Facilities and Services in the Area

As stated previously, it is projected by SANDAG that the population of the SLRMWD area will grow approximately 2.75 percent annually and that most of the anticipated growth within the District will be in housing units. However, there are several planned developments that would significantly increase growth beyond SANDAG projections. If all developments were approved by the County and developed at proposed densities, over 4,000 residential units would be developed within the existing SLRMWD boundary.

The need for water and wastewater infrastructure and services will increase incrementally along with growth. Pursuant to SANDAG projections, the County's proposed land uses, and the proposed developments, demands for services can be expected to increase significantly.

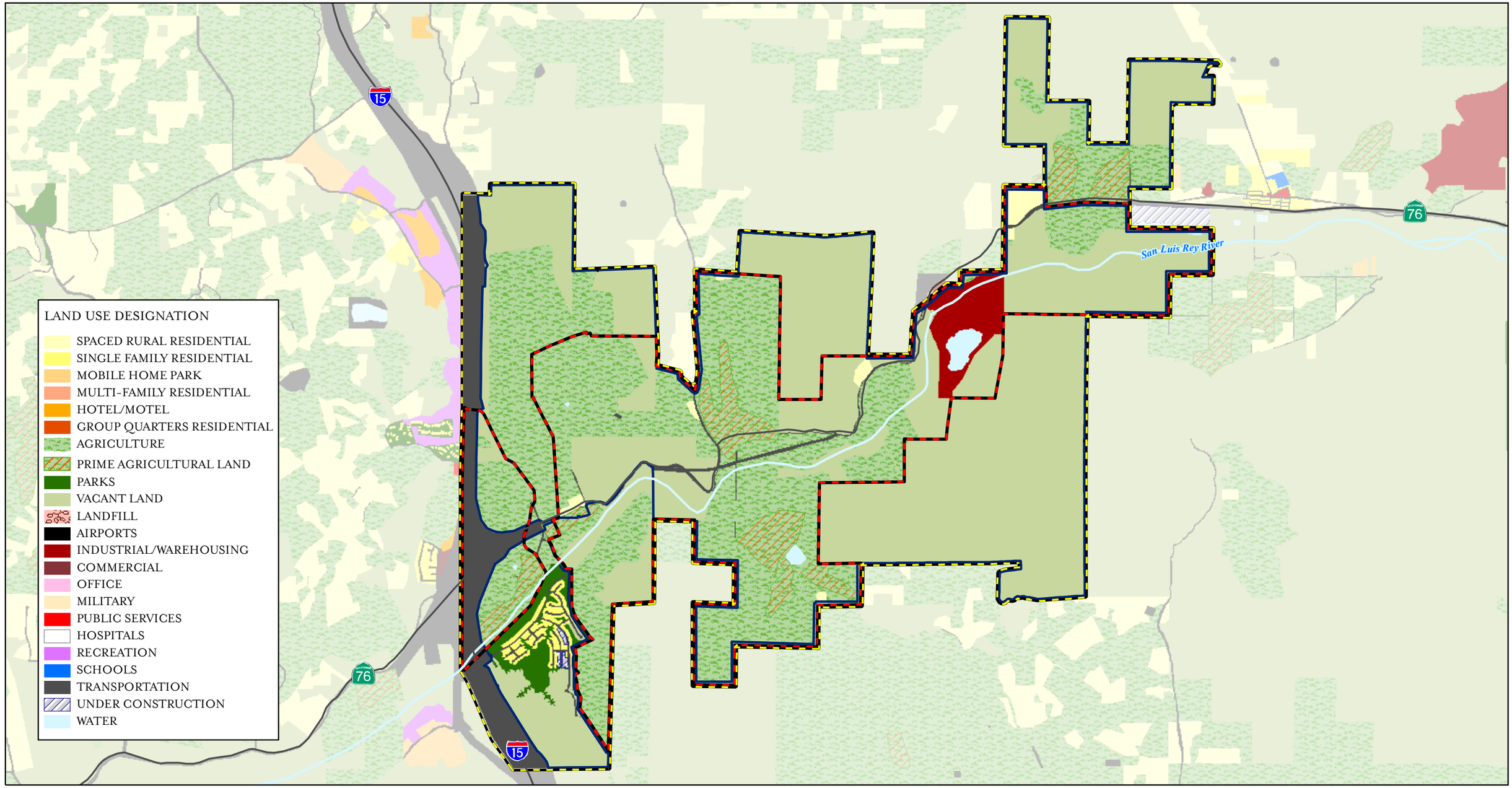
Present Capacity of Public Facilities and Adequacy of Public Services that the Agency Provides or is Authorized to Provide

Since formation in 1958, SLRMWD's purpose has been to protect the quality, quantity, and access to water supplies for the pumpers and water rights holders within its boundaries. The District has been providing adequate services, as evidenced by the lack of customer complaints (detailed in Section 3.1) and stable governance. The District does not have any existing public facilities or infrastructure.

The District is currently pursuing activation of its latent powers and membership in SDCWA in order to provide retail water and wastewater services to properties within its boundary. The District has also developed a Master Plan that identifies infrastructure needs and a CIP that details infrastructure development costs to provide services to the planning areas at build out. The District has stated that all of the planning areas could be efficiently served by the future facilities as identified in the Master Plan.

Existence of any Social or Economic Communities of Interest

Communities of social and economic interest include the proposed developments and anticipated growth that is expected to occur within and adjacent to SLRMWD's existing SOI. As previously stated, there are several planned developments within the existing SOI. These developments are social and economic communities of interest for SLRMWD.



LSA

LEGEND

- Existing San Luis Rey Sphere of Influence
- Proposed San Luis Rey Sphere of Influence
- Planning Areas

N

0 1,500 3,000

FEET

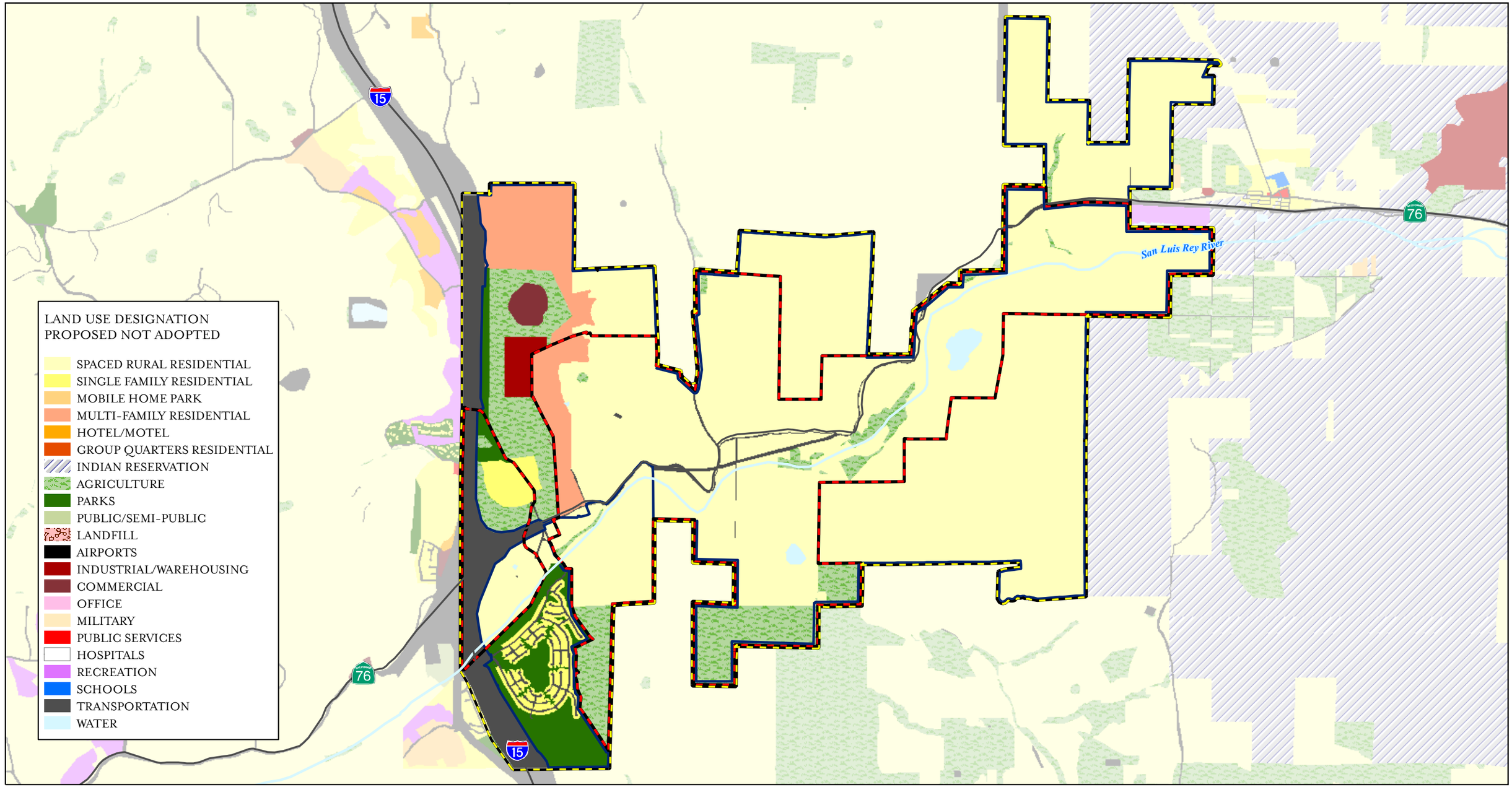
FIGURE 3.3

San Diego LAFCO MSR and SOI Update

San Luis Rey MWD Existing Land Use (2000)

SOURCE: County of San Diego (2006), IEC (2006), SanGIS (2005).

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LSA

LEGEND

Existing San Luis Rey Sphere of Influence

Proposed San Luis Rey Sphere of Influence

Planning Areas

N

0 1,500 3,000

FEET

FIGURE 3.4

San Diego LAFCO MSR and SOI Update

San Luis Rey MWD Proposed Land Use (2020)

SOURCE: County of San Diego (2006), IEC (2006), SanGIS (2005).

i:\slr0601\gis\slr_lu_2020.mxd (07/11/06)

3.A SAN LUIS REY MWD SUPPLEMENTAL DATA APPENDIX

Table 3.A1: SLRMWD Monthly Record of Board Meetings (2003-2005)

Regular Board Meetings		
January 15, 2003 (adjourned)	February 19, 2003	March 19, 2003 (adjourned)
April 16, 2003 (adjourned)	May 21, 2003	June 18, 2003 (adjourned)
July 16, 2003	August 20, 2003 (adjourned)	September 17, 2003
October 15, 2003 (adjourned)	November 19, 2003 (adjourned)	December 17, 2003 (adjourned)
January 21, 2004	February 18, 2004 (adjourned)	March 17, 2004 (adjourned)
April 21, 2004 (adjourned)	May 19, 2004	June 16, 2004
July 21, 2004	August 18, 2004	September 15, 2004 (adjourned)
October 20, 2004 (adjourned)	November 17, 2004	December 15, 2004
January 19, 2005 (adjourned)	February 16, 2005	March 16, 2005
April 20, 2005	May 18, 2005	June 15, 2005
July 20, 2005	August 17, 2005	September 21, 2005
October 19, 2005	November 16, 2006	December 21, 2005
January 18, 2005	February 15, 2006	
Special Board Meetings		
June 26, 2004	June 30, 2004	May 6, 2005
June 25, 2005		

Source: SLRMWD RFI Response, March 2006

Table 3.A2: SLRMWD History of Legal Services and Expenses (2001-2005)

Legal Services for 2001	
General	$26,190.00
Gregory Canyon Landfill Proceedings	$1,632.50
Basin Plan – AB 3030	$2,562.50
Species Protection	$962.50
Pala Gaming Facilities Environmental Proceedings	$125.00
Actual Costs	$21,027.13
Total for 2001	**$52,499.63**
Legal Services for 2002	
General	$23,747.50
Gregory Canyon Landfill Proceedings	$237.50
Species Protection	$312.50
Actual Costs	$1,151.60
Total for 2002	**$25,449.10**

Legal Services for 2003	
General	$11,950.00
Gregory Canyon Landfill Proceedings	$6,135.50
Species Protection	$6,350.00
SLR River Water Rights/Water Quality Monitoring	$375.00
Actual Costs	$5,091.78
Total for 2003	**$29,904.28**
Legal Services for 2004	
General	$35,832.50
Gregory Canyon Landfill Proceedings	$63,690.37
Basin Plan – AB 3030	$62.50
Species Protection	$340.00
Actual Costs	$2,037.63
Total for 2004	**$101,963.00**
Legal Services for 2005	
General	$23,400.00
Gregory Canyon Landfill Proceedings	$16,636.25
Species Protection	$1,052.50
Activation Process	$28,043.75
Actual Costs	$830.00
Total for 2005	**$69,962.64**

Source: SLRMWD RFI Response, March 2006
*All legal services have been provided by the Law Offices of Susan M. Trager

Table 3.A3: SLRMWD 5-Year History of Professional Services Procured With One Proposal

Service and Reason for Selection	Fee
James Goodrich, Geotechnical and Hydrological evaluation of the impact of the Gregory Canyon Landfill on SLRMWD resources. Mr. Goodrich has worked for the District several times over the last 25 years and is one of the few geologists intimately familiar with the San Luis Rey River Basin.	$5,000
Infrastructure Engineering Corporation was awarded (1) the supplemental analysis of the Master Plan of Water and Wastewater Facilities for the Warner property and (2) as-needed engineering services to facilitate engineering requirements for the MSR and Programmatic EIR. Because this firm prepared the SLR Master Plan, they were in a unique position to be able to respond quickly and efficiently to these additional work requirements.	$9,600 $20,000
EDAW, Inc. was awarded the Programmatic EIR. EDAW had performed an initial Constraints and Opportunities study for the SLR Master Plan and was not affiliated with any of the developments within the District.	$114,300
LSA Associates, Inc. was awarded the MSR project due to the dearth of firms with experience in this area and the need to avoid any conflicts with the development interests within the District. The firm was thoroughly vetted through Riverside and San Diego LAFCOs.	$67,500

Source: SLRMWD RFI Response, March 2006

Table 3.A4: SLRMWD Expected Average Monthly Bill for Water and Wastewater Services (Single Family Home)

	Year 1	Year 2	Year 3
Meter	$14.00	$15.00	$16.00
Water use	$26.25	$30.00	$31.50
Wastewater	$30.00	$31.00	$32.00
Total	**$70.25**	**$76.00**	**$79.50**

Source: SLRMWD RFI Response, March 2006.

Table 3.A5: SLRMWD Draft Three-Year Budget Revenues with Activation of Latent Powers

Source	Year 1	Year 2	Year 3
Water sales	$1,062,600	$1,350,000	$1,596,000
Wastewater sales	$792,000	$930,000	$1,075,200
Recycled water sales	$327,000	$351,500	$376,000
Total Revenues	**$2,181,600**	**$2,631,500**	**$3,047,200**
Revenue Assumptions to Determine Above			
Water rates	$14/month meter rate $1.75/HCF 15 HCF/month	$15/month meter rate $2.00/HCF 15 HCF/month	$16/month meter rate $2.10/HCF 16 HCF/month
Wastewater rates	$30/EDU/month	$31/EDU/month	$32/EDU/month
Recycled water rates 75% of potable rate	$654/AF	$703/AF	$752/AF

Source: SLRMWD RFI Response, March 2006.
HCF = Hundred Cubic Feet
AF= Acre Foot

Table 3.A6: SLRMWD Draft Three Year Budget Personnel Direct Costs

Employee	Year 1	Year 2	Year 3
General Manager (0.6)	$80,000	$82,400	$84,872
Water Operations Manager	$65,000	$66,950	$68,959
Wastewater Operations Manager	$68,000	$70,040	$72,141
Office Manager	$45,000	$46,350	$47,741
Wastewater Worker (2)	$84,000	$86,520	$89,116
Water Worker (2)	$80,000	$82,400	$84,872
Office Worker	$28,000	$28,840	$29,705
Total Annual Costs	**$450,000**	**$463,500**	**$477,405**

Source: SLRMWD RFI Response, March 2006.

Table 3.A7: SLRMWD Draft Three-Year Budget Operations Costs

	Year 1	Year 2	Year 3
Labor Costs			
Direct labor	$450,000	$463,500	$477,405
Overtime	$12,000	$13,000	$13,000
Retirement	$45,000	$46,350	$47,741
Benefits	$51,719	$54,671	$56,603
Subtotal labor	$558,719	$557,521	$594,749
Operations			
Water	$907,500	$1,078,125	$1,260,000
Power	$60,000	$66,000	$72,600
Telecom	$10,800	$11,124	$11,458
Insurance	$44,051	$48,456	$53,302
Materials and supplies	$45,000	$48,375	$52,003
Vehicles and equipment	$5,000	$5,250	$5,513
Outside services	$75,000	$81,000	$87,480
Capital expenditures	$15,000	$15,750	$16,538
Subtotal operations	$1,162,351	$1,354,080	$1,558,893
Capital Expenditures & Reserves			
Capital replacement contribution	$153,510	$233,300	$297,853
Reserve contribution	$307,020	$466,599	$595,706
Subtotal capital and reserves	$460,530	$699,899	$893,559
Total Expenses	$2,181,600	$2,631,500	$3,047,200
Total Revenues	$2,181,600	$2,631,500	$3,047,200

Source: SLRMWD RFI Response, March 2006

Table 3.A8: SLRMWD Operations Expense Assumptions for Budgeted Costs

Benefits
Medical Insurance: Employee only PPO rate of $400 per month
Dental Insurance: Employee only $30 per month
Vision Insurance: $20 per month
Life Insurance: ($0.20*(salary/1,000))*2
ADD Insurance: ($0.30*(salary/1,000))
LT Disability: $0.65(salary/100)
Retirement
District pays 10% of salary to a 401(k) or 457(b) account (i.e., defined contribution plan)
Insurance
Workers Compensation Insurance Field Workers: 0.0888*salary
Workers Compensation Insurance Office Workers: 0.0175*salary
Liability & Property = $15,000/year
Assumptions
Number of Dwelling Units in District = 2,200 year 1 (growth of 300 units per year); 2,500 year 2; 2,800 year 3
Water Use = 1,650 AF year 1; 1,875 AF year 2; 2,100 AF year 3
Wastewater Treated = 0.55 mgd in year 1; 0.625 mgd in year 2; 0.70 mgd in year 3
Recycled Water = 500 AF per year
Power = $5,000 per month with 10% increase per year (WWTP, Office, Lift Stations, Recycled Pump Stations)
Telecom = $900 per month (phones, Web site, broadband, cellular, AMR)

Source: SLRMWD RFI Response, March 2006.

4.0 VALLEY CENTER MUNICIPAL WATER DISTRICT

4.1 DISTRICT INTRODUCTION AND GOVERNANCE

The Valley Center Municipal Water District (VCMWD) was founded on July 12, 1954, pursuant to the California Municipal Water District Law of 1911. The District encompasses approximately 64,253 acres in northern San Diego County. The District is bounded on the west by I-15, on the south by the City of Escondido and unincorporated areas, and to the north by Yuima MWD, Pala Indian Reservation, and San Luis Rey MWD.

The VCMWD provides water and sewer services to its domestic, agricultural, and commercial customers. The District's boundary includes 64,253 acres of which approximately 59 percent receives water services. In the 2004-05 fiscal year, the District billed 9,122 customers for 36,090 acre feet of water. Historically, 80-85 percent of the water sold has been used to irrigate avocado and citrus groves as well as for other agricultural purposes. As a member of the SDCWA and the MWD, the VCMWD imports 100 percent of its water for resale to customers.

A five-member Board of Directors, elected by geographic division, governs the District. Board members are elected to serve alternating four-year terms. Elections are conducted each even-numbered year. As shown in Table 4.A1 of the VCMWD Supplemental Data Appendix, the VCMWD has a history of stable membership of the Board of Directors. Directors receive $100 for a day of Board business and $50 for a meeting lasting less than four hours, up to a maximum of 10 meetings per month. In addition, Directors may elect, at their own cost, to purchase the same coverage (health, dental, life) provided employees of the District.

Board meetings are held on the 1st and 3rd Mondays of each month at 2:00 p.m. If there are no items requiring Board attention, the Board meeting is cancelled. All meetings are held at the District's administrative facility. A summary of the number of meetings for the past three fiscal years is provided in Table 4.A2 of the VCMWD Supplemental Data Appendix. Matters to be considered by the Board are described in the agendas for each meeting. Agendas are available to the public, pursuant to the Brown Act, a minimum of 72 hours before the regular meeting. However, agendas are typically available (mailed, posted, and on the Web site) the Thursday prior to a Monday's regular Board meeting, or approximately 96 hours in advance. The public is encouraged to attend Board meetings and adequate parking and seating is available. During deliberation of each agenda item, the public is invited to speak.

The District regularly encourages public participation. When appropriate, workshops are conducted to obtain the public's input. A direct mailing to customers of a proposed program may be forwarded to provide notification of a proposal, with the public invited to submit written comments or attend the hearing/meeting.

In addition, the District regularly provides service information and conducts outreach to its customers. This includes the publication of newsletters several times per year, annual water quality reports, and publication of several informational pamphlets that cover a variety of topics. District programs that

are available to customers are advertised through messages on water bills and described in the newsletters.

The Board governs the District through an appointed general manager. The Board's involvement in administrative, management, and personnel matters includes, but is not limited to, active participation in annual budgetary processes that authorize activities from capital projects to staffing levels, serving on special project or benefits committees with personnel, directing the employee relations officer, and authorizing labor contracts.

Board involvement in administrative, management, and personnel matters is at a policy level only, with no day-to-day involvement in these issues. All personnel issues, except for those affecting the General Manager, are the responsibility of the General Manager. The Board would only be involved in a personnel matter as the final appeal hearing board under the District's grievance and disciplinary proceedings. However, this has never occurred during the tenure of the current General Manager (16 years). The VCMWD has adopted resolutions, which regulate communications between the Board and the District's employees. These include:

- Resolution No. 1008, adopted on July 20, 1978, which implements Section 71362 of the Municipal Water District Law of 1911 establishing that the General Manager shall be responsible to the Board of Directors and shall keep the Board fully informed of District activities. The resolution further established that the day-to-day operation of the District and its employees is the responsibility of the General Manager and that members of the Board of Directors shall not contact District employees without giving notice to the General Manager. Upon request of a member of the Board of Directors, the General Manager will provide a convenient time and place for an interview between the Board member and the employee.
- Resolution 2003-06 established the "Code of Ethical Practices Governing the Directors and Employees" of the District, which further emphasized the respective roles and responsibilities between the Board of Directors, General Manager, and employees.

4.2 DISTRICT PERSONNEL AND CONTRACT SERVICES

There are currently 80 employees working for the District. Tables 4.A and 4.B provide details regarding the distribution and function of the employees.

Table 4.A: VCMWD Employees by Category (2006)

Executive (General Manager and department heads)	4
Managerial/supervisory	8
Administrative/clerical	15
Engineering (professional/sub-professional)	13
Technicians	40
Total	**80**

Source: VCMWD RFI, March 2006.

Table 4.B: VCMWD Employees by Department (2006)

General administration	4
Engineering	18
Finance	9
Water and wastewater operations/facilities	49
Total	**80**

Source: VCMWD RFI, March 2006.

The District appears to have a stable workforce, having had only 10 retirements, 11 resignations, and 2 terminations over the past five years. Detail regarding these staffing changes has been included in the VCMWD Supplemental Data Appendix, Table 4.A3.

In addition to the employees listed above, the VCMWD utilizes outside labor and technical assistance to provide specific administrative and operational functions. As shown in the detail below, much of this labor is specialized in nature, needed on an occasional basis, or provided more cost effectively by utilizing outside services. The VCMWD regularly utilizes the following outside services:

- **General Legal Counsel.** The agency does not have enough legal work to justify the employment of an in-house legal staff.
- **Auditor.** Auditing is conducted on an annual basis, and as such there is no justification for employing an in-house auditing firm. Also, by utilizing an outside auditing firm, the District realizes a high degree of independence on the part of the auditor.
- **Engineering and Environmental Services.** Though the District has an Engineering Department and two registered civil engineers, it often employs outside consultants to provide engineering and environmental services (design, project management, inspection, surveying, mapping, environmental analysis, drafting, etc.) to meet workloads that exceed the capacity of the in-house staff. In this manner, the District can expand and contract its engineering capacity without taking on the obligations and required accommodations for in-house engineering staff.
- **Laboratory Services.** The District uses outside State-certified laboratories for the numerous water quality and wastewater testing requirements, which has proven to be more cost effective than establishing and staffing an in-house laboratory.

To ensure adequate performance of outside services, the District imposes liquidated damages if the contractor fails to complete a project within the specified time schedule after accounting for any recognized rain delay days and change-order related delays.

The District has had several contracts within the last five years that have been procured on a sole source basis. These contracts include the following services: attorney, software, computer, auditor, retirement, document management, and investment advisors. It should be noted that the attorney fees within the last five years are not a result of claims settlements and that the fees listed in Table 4.A5 of the VCMWD Supplemental Data Appendix are fees in gross and do not indicate any funds that were reimbursed by private development interests. The details regarding the VCMWD's service contracts and attorney fees within the last five years are included in Table 4.A4 and 4.A5 in the VCMWD Supplemental Data Appendix.

4.3 FISCAL

Budget, Financial Policies, and Reserves

VCMWD adopts an annual budget and conducts independent audits every year. The annual budget process begins when budget requests are developed by the District's Department Heads and approved by the General Manager. The proposed budget is then presented to the Board of Directors for review and ultimate approval prior to each fiscal year. The District's budget policies require that any single modification of the approved budget in excess of $35,000 is to receive approval by the Board. This includes increases in the overall operating budget, capital budget, salary budget, and number of personnel positions.

For the year ending June 30, 2005, operating expenses exceeded operating revenues by $4,078,617. However, the District's non-operating revenues of $2,525,670 exceeded non-operating expenses, which were $115,008. Overall, for the year ending June 30, 2005, expenditures exceeded revenues by $1,667,955. In comparison, for the previous year ending June 30, 2004, overall revenues exceeded expenditures by $2,466,355. The fiscal year 2005-06 budget projects expenditures to exceed revenues by $2,033,210. The operating losses for the fiscal years ending in 2005 and 2006 are a result of the property tax shift to the State and lower than anticipated water sales. The operating losses are made up by shifting funds from the District's rate stabilization reserve and capital improvement reserve, as appropriate, to sustain the District's operations, maintenance, and CIP program. Table 4.C below provides a summary of recent and projected net incomes and losses.

Table 4.C: Summary of VCMWD Total Revenues and Total Expenditures

	Year Ending June 2004	Year Ending June 2005	2005-06 Budget
Expenditures	$35,067,038	$32,527,396	$41,888,223
Revenues	$37,533,393	$30,859,441	$39,855,013
Net Income (Loss)	$2,466,355	($1,667,955)	($2,033,210)

Source: Comprehensive Annual Financial Report FY Ended June 30, 2005; Annual Budget FY 2005-06.

During the fiscal year ending June 30, 2005, the District billed 9,122 customers for 36,090 acre feet of water. The cost to purchase this water from the SDCWA was $17.2 million, or 55 percent of District water operating expenses, and the costs for energy to pump water through the distribution system was 19 percent of the District's water operating expenses. Therefore, 74 percent of the District's water operating budget is inflexible, and only 26 percent of the District's costs are directly controlled by the District. The locally controlled costs are mostly fixed costs and are not affected by the volume of water sold. The District is budgeting to purchase 47,350 acre feet of water in 2005-06 and to sell 44,500 acre feet, which is the same as that budgeted in 2004-05. However, because a large portion of the sales are to agriculture, demands are greatly affected by the amount of precipitation, making sales projections difficult.

The District's revenue is obtained from service rates, connection fees, investment income, and a share of the 1 percent property tax. It is the intent of the District that the costs of providing water and sewer service be financed primarily through user charges. The District has adopted several financial/revenue policies. These include the following:

- Each water and sewer system ultimately shall be financially self-sufficient.
- Administrative costs incurred by the District shall be allocated to each system in accordance with general practices and reimbursed to the general fund.
- All fees and charges for wholesale water and water related services shall be passed through to District customers by action of the Board of Directors.
- When rate increases are needed to cover District costs, other than wholesale pass through costs, consideration should be given to meeting at least 50 percent of the District's fixed operating expenditures with the monthly meter service charge and property taxes. For the 2005-06 budget, because property taxes shifted to the State, 48 percent of fixed costs are covered by these fixed charges.

There are no formal constraints on the District's ability to generate revenue, other than those provided by State law. However, since 80-85 percent of the District's water sales have historically been to agricultural users, the District is sensitive to pressures on North County agriculture and the concerns of its residents. A significant increase in water rates could result in a decline in agriculture and a corresponding decrease in water sales, resulting in less revenue.

The District has adopted Strategic Plan-Performance Measurement Standards, which are related to the District's finances. These include:

- Operating Reserves. Operating reserves shall be equal to six months' operating and maintenance expenses (excluding wholesale water and power purchases).
- Local Commodity Rate for Local Operating and Maintenance Costs. The District will hold the local share of total commodity costs as low as possible, but at no time will the local rate be more than 13 percent of the total water commodity cost for municipal and industrial customers and 16 percent for certified agricultural customers.
- Return on Investments. While seeking to preserve capital and maintain a level of liquidity necessary to meet cash flow requirements, the District's rate of return, on an annualized basis, shall be greater than the average rate of return on one-year U.S. Treasury Bonds.

Any District funds that are held for future use are invested. Interest earnings on cash held by the general fund for other funds are allocated to the respective funds annually. The District has adopted a policy to regulate the investment of these held funds. The policy states that the investment portfolio of the District shall be designed to attain a market-average rate of return while seeking to ensure the preservation of capital and maintain a level of liquidity necessary to meet the cash flow requirements of the District. However, the rate of return shall become a consideration only after the basic requirements of preservation of capital and adequate liquidity have been met.

The District has established four categories of reserves, as detailed below:

- Rate stabilization reserves have been established to provide stability for water rates, fixed wholesale charges, and pumping rates. On April 4, 2005, the Board authorized the clarification and utilization of this fund to indicate that this reserve is available "to fill any deficit resulting from the water sales volume falling below projected budget figures." The projected balances of these reserves on June 30, 2006, are shown in Table 4.D.

Table 4.D: Projected Balances of the VCMWD Rate Stabilization Reserve

	Water Rate Stabilization	Pumping Rate Stabilization
Projected Balance, June 30, 2005	$1,158,902	$2,098,375
Used to balance 2005-06 budget	0	(868,300)
Balance	$1,158,902	$1,230,075
Maximum reserve allowable by District Administrative Code	$2,708,705	$1,859,000

Source: VCMWD Annual Budget Fiscal Year 2005-06.

- An operating reserve budget of $4,785,321 for fiscal year 2005-06 (approximately six months' operation and maintenance budget excluding wholesale water and power purchase) has been established for emergencies and natural disasters such as fires, earthquakes, flooding, etc. No appropriations are made from this reserve in the fiscal year 2005-06 budget.
- A restricted reserve budget of $237,905 for fiscal year 2005-06 consists of agricultural rebates received from MWD and held for rebate to customers on termination of the agricultural water rate and to cover costs associated when agricultural water sales volume exceeds the established agricultural wholesale allotment.
- Capital projects reserves are funded annually by a combination of excess operating and non-operating revenues and also consist of funds received for or allocated to future capital improvements, including those outlined in the District's Water Master Plan.

Table 4.E: VCMWD Balance of Capital Improvement Reserves

Projected Balance of Capital Improvement and Master Plan System Improvement Reserves, June 30, 2005	$9,937,280
Used For Future Capital Improvements to Balance 2005-06 CIP budget	($2,048,317)
Balance	$7,888,963

Source: VCMWD Annual Budget Fiscal Year 2005-06

Capital Improvement Planning and Financing

To plan for necessary expansions and upgrades to the existing water system, the District completed a Water Master Plan in April 2002. The Plan outlined the need for $64 million in water system improvements, including $36 million for infrastructure replacement, over a 10-year period. This includes: pump replacements and upgrades, pipeline replacements and extensions, reservoir enlargements, and implementing alternative power sources. In the 2004-05 fiscal year, the District completed a long-term capital financing plan to determine the most efficient and economical method of funding the recommended capital improvements.

New or expanded infrastructure that is needed to accommodate new development is paid for by developer contributions, capacity fees, standby fees, capital improvement reserves, and from interest

earned on existing capital improvement reserves. Capacity fees are collected by the District when new meter services are purchased.

In regard to existing infrastructure, the District determines depreciation by utilizing the straight-line method at rates that have been recommended by the State Controller's Office, which are based upon the estimated useful lives of the assets. However, this depreciation schedule does not solely determine the facilities that are identified and budgeted annually for replacement. Replacement facilities are identified by a combination of factors, including age, condition (frequency of repairs), and the critical nature of the facility (for example, main transmission pipeline versus local distribution line). Also, existing facilities are replaced when County of San Diego road improvements require facilities to be relocated or private development projects provide the opportunity to replace an existing facility.

Replacement or upgrading of facilities are financed from standby fees, capital improvement reserves, and interest earned on the reserves. The District has not attempted to annually fund the capital reserve with an amount equivalent to the value of the facilities being "retired". However, in the recent past, annual funds that have been transferred to the capital reserves and reinvested in infrastructure have usually been approximately the same as the annual depreciation total.

To date, this method of identifying facilities for replacement and the pay-as-you-go method of financing has met the needs of the District without creating significant rate increases. However, the District has stated that future large replacement projects, such as those outlined in the District's 2002 Water Master Plan, could require debt financing, with all or a portion of the debt service requirements met with the revenue that is currently funding the capital reserves. Due to this, the District has prepared a Long-Term Financing Plan to finance all or a portion of the projects contained in the District's Master Plan. The District may begin using long-term debt to finance infrastructure replacement beginning as early as 2007.

It is also important to note that the District has a Capital Improvement Spending Limit (Ordinance 171), which was, enacted in 1989 by a vote of the District's residents. This Ordinance established a limitation on the expenditure of District funds for capital improvements. This limitation is adjusted annually on January 1 for the consumer price index. The limitation, effective January 1, 2006, is $1,882,640 per project except for water storage projects, which have a limitation of $2,823,968. Expenditures in excess of these limitations must be ratified by a District-wide election. This limitation does not apply to funds expended by property owners, developers, or others for capital projects that will be dedicated to the District or to funds from assessment or improvement districts formed in the manner provided by State law.

4.4 RATES AND FEES FOR SERVICES

Water Service Rates and Fees

The District sets its rates annually through a public hearing process. The District's rates are comprised of the rate for water, the monthly service charge for meters, the SDCWA monthly infrastructure access charge, and pump zone charges, as detailed below. Tables 4.F, 4.G, 4.H, and 4.I provide details of the District's current water rates.

Table 4.F: VCMWD Water Rates

Customer Classification	Rate Per Acre-Foot
Municipal and Industrial	$759.25
Agricultural – Certified	$554.25
Agricultural/Domestic – Certified	
First 19,449.351 gallons	$759.25
All Over 19,449.351 gallons	$554.25
Construction Water	
Potable	$759.25
Nonpotable (75% of potable)	$569.46

Source: VCMWD Article 160, Section 160.3.

Table 4.G: Monthly Service Charge for Standard Meters

Meter Size	0.75”	1”	1.5”	2”	3”
Service Charge	$19.50	$27.00	$40.50	$54.00	$81.00

Source: VCMWD Article 160, Section 160.3.

Table 4.H: SDCWA Monthly Infrastructure Access Charge

Meter Size	Monthly Charge
0.75"	$1.48
1"	$2.38
1.5"	$4.44
2"	$7.72
3"	$14.22
4"	$24.32
6"	$44.40
8"	$76.96

Source: VCMWD Article 160, Section 160.3.

Pump Charge. The District’s pump charge for water service varies, depending on the elevation of the reservoir that serves the customer’s meters. VCMWD’s service area consists of many rolling hills, steep canyons, and valleys. This varying topography presents challenges to delivering water. The SDCWA’s aqueduct system is located within or close to the VCMWD service area. However, the SDCWA system delivers water at a gravity gradient or pressure that requires the District to lift water at least once to more than 80 percent of its customers. There are 10 pump zones in all, lifting 30,000 to 40,000 acre-feet of water annually from the lowest elevation of 970 feet asl to over 2,330 feet asl. Table 4.I lists the pump charges for each zone.

Table 4.I: VCMWD Pump Zone Charges

Zone Number	Charges Per Acre-Foot
1	$34.20
2	$68.38
3	$75.86
4	$113.29
5	$166.17
6	$185.36
7	$196.57
8	$222.79
9	$230.76
10	$305.64

Source: VCMWD Article 160, Section 160.3.

Water Availability Charges. The District assesses all property in the District an annual water availability charge of $10 per acre with a $10 per parcel minimum. Sixty percent of this revenue is utilized to meet MWD readiness-to-serve charge obligations, and 40 percent is utilized for debt service and ongoing capital improvements. Parcels that are permanent open space and parcels that are not presently using and have no intention to use water purchased from the District may elect to defer these charges.

The District's share of the water rate is $80.46 per acre-foot, beginning January 1, 2006, plus $13.40 for partial replacement of revenue loss associated with the property tax shift. This is an increase of 4.1 percent from the previous year's rate. Rate increases that have been implemented by the District over the last three years have averaged 6.5 percent per year. These increases have been driven primarily by the wholesale water supply increases from MWD and SDCWA, which have ranged from 12.10 percent to 27.92 percent. Rates have also been adjusted to offset inflationary increases impacting the District's operations, which have averaged 3.6 percent annually for the last three years. Additionally, in the last two fiscal years the District has increased rates to offset the ERAF tax shift of a portion of the District's 1 percent property tax revenue. Table 4.A6 in the VCMWD supplemental Appendix provides details regarding the source of the rate increases.

As noted above, the District's rates for water services are affected by changes in water supply costs that are not under control of the District. In January 2006, the District incurred increased water supply costs because: (1) the MWD water delivery charge increased 2.3 percent, from $443 to $453 per acre-foot; (2) the SDCWA's customer service charge increased 5.8 percent; and (3) the emergency storage charge increased 24.7 percent. In addition, SDCWA includes a melded rate supply cost for additional water supplies that are received from the Imperial Irrigation District. The rate, which started in calendar year 2005, was $18 per acre-foot and increased to $32 in calendar year 2006. As indicated, several of these costs are fixed components of the MWD and SDCWA rate structure.

As noted in Table 4.F, a discounted water rate (MWD Interim Agricultural Water Program [IAWP]) is provided for water used for the growing or raising of animals, in conformity with recognized practices of husbandry, for the purposes of commerce, trade, or industry, or agricultural, horticultural, or floricultural products, and produced (1) for human consumption or for the market, or (2) for the

feeding of fowl or livestock produced for human consumption or for the market, or (3) for the feeding of fowl or livestock for the purpose of obtaining their products for human consumption or for the market, such products to be grown or raised on a parcel of land having an area of not less than one acre utilized exclusively therefore. By accepting this discount, the agricultural customer agrees that mandatory reductions in water may occur in the future. In the event of a mandatory reduction in water usage, the certified agricultural customer will be required to reduce water usage up to 30 percent before any other class of customer is required to reduce usage. The discount is offered by MWD and SDCWA and is passed through to the District's qualified agricultural customers. Approximately 80 percent of the water sold by the District is at the agricultural rate. During 2004-05, the IAWP saved customers approximately $3,268,000 on the purchase of 28,665 acre-feet of water. The District is projecting approximately 38,117 acre-feet of water to be purchased in the fiscal year 2005-06 at the discounted agricultural rate for a savings of $4,345,300. In addition, the incremental melded rate cost added to the water supply charge by the SDCWA is not charged to agricultural customers, saving approximately $1,110,000. These savings are passed on to the District's certified agricultural customers.

The District's Board of Directors has the authority to restructure rates as appropriate. The District has identified the primary alternative to the current structure as the implementation of an inclining block rate, which would charge higher rates to larger water users, ostensibly aimed at fostering more conservation. However, such a rate structure could result in a hardship to customers who are currently paying among the highest rates in the State for agricultural water, plus the cost of pumping averaging just over $100 per acre-foot. The District has stated that the current structure is well accepted by the community and allows the District to consistently meet its operations, maintenance, and capital requirements. Therefore, the District is not currently anticipating any changes to the water rate structure.

Wastewater Rates and Fees

Properties receiving sewer services from the Lower Moosa Canyon Water Reclamation Facility are charged a monthly sewer service fee of $38.50. This rate was increased $1.50 on July 1, 2005. The rate increase was to provide additional needed operating cash and funds for the replacement reserve. The developed properties within the Woods Valley Sewer Service Area are levied a monthly sewer service charge of $98.60 per EDU. This service charge is collected by annual assessment on the property tax roll. The Skyline Ranch Country Club has been billed by VCMWD monthly for the actual costs for the Skyline Ranch Country Club Treatment Facility. However, as noted in Section 4.12, the Skyline Ranch Development assumed ownership and operational responsibility of the wastewater treatment facility on May 5, 2006.

Beginning in 1995, the District has collected a surcharge for septic tank effluent pump (STEP) maintenance. This charge should be increased $1 for inflation for a new rate of $32.00. This rate is based on the monthly costs per unit shown in Table 4.J.

Table 4.J: VCMWD Septic Tank Effluent Pump Fee Detail

Minor Operating and maintenance costs	$9.64
Major Life Cycle costs (Pump rebuild and replacement, sludge removal)	$26.44
Less sludge processing credit	($3.61)
Total	$32.47

Source: VCMWD Annual Budget Fiscal Year 2005-06.

4.5 COOPERATIVE AGREEMENTS

The District is involved in several cooperative arrangements that produce efficiencies and cost savings. From the local to statewide level, most water agencies are generally mutually committed to sharing information and resources related to the improvement of administrative, management, and operational functions. Specifically, water agencies typically partner to provide cost-effective risk management, recruiting, retention, consulting, personnel safety, and supervisory training opportunities. For example the District is a member of the Association of California Water Agencies Joint Powers Insurance Authority (ACWA - JPIA). The ACWA - JPIA is a risk-pooling self-insurance authority. The purpose of the ACWA - JPIA is to increase the collective purchasing power for liability, property, workers' compensation, employee assistance programs, and health benefits insurance.

In addition, through the VCMWD's membership in the SDCWA, the District supports and participates in the SDCWA's public information, public education, and water conservation programs, which would be much less cost effective if the programs were established and supported solely by the District. This membership also provides for shared financing, construction, operation, and maintenance of the SDCWA Aqueduct System, which supplies its 23 member agencies. The District is also a signatory to the Countywide Mutual Aid Agreement in which the SDCWA and its member agencies agree to assist each other with personnel, equipment, and materials in times of man-made or natural disasters.

4.6 DISTRICT RECOGNITIONS

The VCMWD has a history of receiving numerous awards and recognitions. The areas of recognition include financial, liability and loss control, and energy management. The District's recent recognitions are listed below.

Financial Recognitions

- "Certificate of Achievement for Excellence in Financial Reporting" by the Government Finance Officers Association for the following years:

  1992 1993 1994 1995 1997 1998 1999
  2000 2001 2002 2003 2004 2005

- "Award of Excellence In Operational Budgeting" by California Society of Municipal Finance Officers for the following years:

1998 1999 2000 2001 2002 2003 2004 2005 2006

- "Outstanding Financial Reporting" by California Society of Municipal Finance Officers for the following years:

  2001 2002 2003 2004 2005 Submitted for Review

Liability and Loss Control Recognitions

- President's Special Recognition Award for Low Ratio of Paid Claims, Liability Program, 1997-2000; from the Association of California Water Agencies Joint Powers Insurance Authority (ACWAJPIA)
- President's Special Recognition Award for Low Ratio of Paid Claims, Liability Program, 2000-2003; from the ACWAJPIA
- President's Special Recognition Award for Low Ratio of Paid Claims, Worker's Compensation Program, 2000-2004 from the ACWAJPIA
- California Highway Patrol Certificate of Achievement, Biennial Inspections, Three Consecutive Satisfactory Ratings, August 2005

Energy Management Recognitions

- "Energy Management Award-Medium Sized Utilities", 2005, American Water Works Association
- "Demand Management Response Award", 2004, from the San Diego Gas and Electric Company

4.7 CUSTOMER SERVICE

An indicator of whether service provision is adequate involves the number of customer complaints and methods that are used in resolving customer complaints. The District provides Customer Comment cards to facilitate communication and feedback with customers. Table 4.K provides the total number and percentage of customer complaints throughout the last 10 years. As shown, the District's percentage of complaints has increased over the past 10 years. However, the District's customer base has also grown by 2,690 customers over the same time period.

Table 4.K: History of VCMWD Customers and Complaints

	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996
Customers by Calendar Year										
Domestic	7,492	6,805	6,142	5,909	5,726	5,589	5,411	5,177	5,077	4,997
Agricultural	1,725	1,732	1,699	1,734	1,732	1,696	1,640	1,610	1,576	1,530
Total	9,217	8,537	7,841	7,643	7,458	7,275	7,051	6,787	6,653	6,527
Customer Complaints by Year										
Total	647	665	583	595	384	402	322	357	395	286
Percentage of Customers	7.0%	7.8%	7.4%	7.8%	5.1%	5.5%	4.6%	5.3%	5.9%	4.4%

Source: VCMWD RFI, March 2006.

The customer complaints reflected in Table 4.K fall into five basic categories, as reported to the California Department of Health Services, and are as follows:

- Taste/odor, turbidity, and suspended solids complaints are typically localized and are resolved with limited service or mainline flushing, utilizing approved storm water management techniques.
- Leaks are resolved by repairing the leaking meter gasket, service line, or mainline.
- Pressure complaints can be high pressure or low pressure.
    - "High Pressure" complaints are resolved by adjusting or repairing the District's pressure reducing equipment, or advising the customer to repair private pressure regulating equipment.
    - "Low Pressure or Peak Demand" complaints are addressed by adjusting or repairing District pressure regulating equipment, if appropriate, advising the customer to do likewise with private equipment, or adjusting water pumping and storage operations to increase pressures in localized areas of the distribution system.

4.8 POPULATION AND GROWTH

VCMWD estimates that as of January 2006, the population of the District was 25,040, which is based on the 2000 Census and water meter counts. According to SANDAG, the Valley Center Community Plan Area, which encompasses most but not the entire District, had a population increase of 13 percent from 2000 to 2004.

The District's Urban Water Management Plan provides projections to 2030 for population and housing. It is projected by SANDAG that most of the anticipated growth within the District will be in housing units. Table 4.L provides the growth data that is included within the District's Urban Water Management Plan. As shown, population is projected to grow at an average of 3.60 percent annually and single-family housing is projected to grow at an average of 5.21 percent through 2030.

Table 4.L: VCMWD Projected Growth between 2000 and 2030

	2000	2030	Average Annual Growth
Population	23,000	47,853	3.60%
Single-family housing	5,267	13,506	5.21%
Multi-family housing	143	160	0.40%
Mobile family housing	1,354	1,521	0.41%

Source: Draft Urban Water Management Plan, December 2005.

The VCMWD Draft Urban Water Management Plan notes that SANDAG predicts an increase in land utilized for Single Family housing (from 1,044 acres in 2000 to 2,047 acres in 2030, a 96 percent increase over the 30-year period). In addition, there were 23,289 acres of vacant developable land available in 2000. There will only be 1,559 acres available in 2030, a decrease of 93 percent. These predictions confirm the expected transition from a predominantly agricultural area to that of large single-family homes and mixed agricultural/residential usage.

SANDAG has prepared growth projections for unincorporated Community Plan Areas within the County. VCMWD generally encompasses large areas within the Valley Center and North County Metro Community Plan Areas. SANDAG has projected that population growth within these areas will average 4.2 percent annually, and housing growth will average 4.0 percent annually through 2030. Table 4.M below provides the SANDAG projections for these Community Plan Areas.

Table 4.M: SANDAG Growth Projections within RMWD

	2000	2010	2020	2030	2000 to 2030 % Change	Annual Growth Rate
Valley Center Community Plan Area						
Population	15,525	18,945	24,851	38,256	146%	4.9%
Housing Units	5,529	6,636	8,708	13,502	144%	4.8%
North County Metro Community Plan Area						
Population	38,097	47,533	62,438	77,937	105%	3.5%
Housing Units	14,327	17,404	22,496	28,132	96%	3.2%

Source: SANDAG Final 2030 Cities/County Forecast, December 2003.

The District is currently processing 74 individual development projects within the existing service area boundaries. These projects have the potential of bringing on line an additional 2,003 water service connections. A summary of the current status of these projects is provided in Table 4.N.

Table 4.N: Development Projects within VCMWD (as of March 2006)

In Plan Check	23
Under Construction	20
Pending Construction	7
On Hold	12
Warranty Period	4
Special Projects	8
Total	**74**

Source: VCMWD RFI, March 2006.

The District's projected future water demands and infrastructure needs that are included in the Water Master Plan and Urban Water Management Plans are based upon the land use plans adopted by the County and City of Escondido, as well as population, water demand, and water supply data supplied by the SDCWA and SANDAG. In 1992, the SDCWA and SANDAG entered into a Memorandum of Agreement (MOA) in which SDCWA agreed to use SANDAG's current regional growth forecast for water supply planning purposes. In addition, the MOA recognizes that water supply reliability must be a component of San Diego County's regional growth management strategy as required in Proposition C (passed by San Diego County voters in 1988). The MOA ensures a strong linkage between local General Plan land use forecasts and water demand projections for the San Diego region.

4.9 WATER SUPPLY

The District imports 100 percent of its water from SDCWA, which in turn purchases water from the MWD. The District is the SDCWA's second largest water customer. As shown in Table 4.O, the quantities of water purchased from VCMWD differ each year. The District's water demand is influenced largely by the amount of annual rainfall because approximately 86 percent of the District's water is currently being delivered to agricultural users.

Table 4.O: Historic Quantities of Water Purchased from SDCWA (1995-2004)

Fiscal Year Ending	Acre-Feet
1995	30,726
1996	38,822
1997	38,744
1998	29,300
1999	39,195
2000	48,550
2001	44,598
2002	49,524
2003	43,674
2004	52,182

Source: Draft Urban Water Management Plan, December 2005.

Table 4.P demonstrates VCMWD's projected water supplies. As shown, imported water will continue to be the District's principal water source. The SDCWA quantities shown indicate the projected amount of water that the VCMWD expects to purchase to meet water demands in the future. As shown, the projected supply is projected to decrease through 2025.

Table 4.P: VCMWD Projected Water Supply

Water Supply Sources	2005	2010	2015	2020	2025
Purchased from SDCWA	44,295	43,736	43,029	38,462	36,287
Groundwater	0	0	0	0	0
Surface Water	0	0	0	0	0
Water Transfers	0	0	0	0	0
Water Exchanges	0	0	0	0	0
Recycled Water	355	420	420	420	420
Total	**44,650**	**44,156**	**43,449**	**38,882**	**36,707**

Source: Draft Urban Water Management Plan, December 2005.

The District's 1994 Water Master Plan concluded that groundwater from alluvial sources was insignificant in quantity. The District has constructed two groundwater wells in the fractured bedrock surrounding the Lake Turner Reservoir (a 1,600-acre-feet open reservoir). These wells have exhibited dissolved solids concentrations of 100-750 milligrams per liter (mg/l). Should these wells be treated to potable water standards, up to 560 acre-feet of potable water could be produced annually. Although

the District is planning to further investigate the feasibility of additional groundwater extractions, well water is not anticipated to be a substantial part of the near-future water supply.

Surface water within the District is also not a viable source of supply. Approximately 100 acre-feet of incidental surface water runoff is collected annually in the Lake Turner Reservoir. Due to quality concerns and the lack of surface water treatment capability, Lake Turner water is currently being utilized as emergency supply only.

VCMWD does not currently participate individually in any water transfer or exchange programs. However, the District has recently entered into a water purchase agreement with Poseidon Resources to purchase up to 7,500 acre-feet annually of desalted seawater via an exchange partner. Delivery of water is anticipated in the 2010-2011 timeframe.

4.10 WATER SERVICE

The District covers an area of approximately 100 square miles, of which approximately 59 percent currently receives water service from VCMWD. As of June 2005, the District served approximately 9,172 active water meters (of a total 9,789 water meters installed). The District's customer base is constantly growing, so the data is dependent upon the date of the count. The District's Urban Water Management Plan provides past and projected water service connections by customer type, as shown in Table 4.Q. As shown, the number of connections is projected to continue to grow gradually through 2025.

Table 4.Q: VCMWD's Historical and Projected Water Service Connections by Customer Classification

Customer Classifications	Historical Connections				Projected Connections			
	1990	**1995**	**2000**	**2005**	**2010**	**2015**	**2020**	**2025**
Single-family	3,650	4,640	5,320	6,539	7,756	8,973	10,189	11,406
Multi-family	54	98	96	112	129	143	154	167
Commercial	184	149	106	129	153	176	199	222
Industrial	-	-	-	-	-	-	-	-
Institutional and governmental	11	18	23	28	33	37	42	47
Landscape/recreation	-	-	29	34	40	46	52	58
Agricultural	2,105	1,489	1,730	1,642	1,555	1,469	1,382	1,296
Total	**6,004**	**6,394**	**7,304**	**8,484**	**9,666**	**10,844**	**12,018**	**13,195**

Source: Draft Urban Water Management Plan, December 2005.

Water Demand

The District evaluates water demand by utilizing a demand factor of gallons per minute per acre (gpm/acre) per land use type. Table 4.R provides the District's water generation factors per land use. Although the District provides the generation factors by gallons per minute, the factors have been determined by and represent average demand on an annual basis. The generation factors were determined in the master planning process by utilizing information obtained from water meter records

and augmented with information developed for master planning studies of other San Diego area water agencies that have similar land uses to those within VCMWD. The District utilizes these generation factors when planning for future water service demands of new development.

Table 4.R: VCMWD's Water Demand Generation Factor by Land Use

Land Use	Approximate Density Per Acre	Gallons Per Minute Per Land Use
Rural residential		
With agriculture	Up to 0.5 du/ac	0.60
Without agriculture	Up to 0.5 du/ac	0.34
Single-family residential		
Low-density	1 du/ac	0.60
Medium-density	2 du/ac	0.90
High-density	3-10 du/ac	1.21
Multi-family residential	> 10 du/ac	2.50
Mobile home parks		0.95
Group quarters		1.00
Industrial		0.80
Commercial		0.90
Fire/police stations		1.20
Other public services		0.35
Education		0.28
Golf courses/parks		1.08
Agriculture		
Groves/orchards		1.48
Greenhouses, etc.		0.50
Row crops		0.90
Dairy		0.25
Vacant/non-water use		0.00

Source: VCMWD Water Master Plan, April 2002.

Historical and projected water use by customer type is provided in Table 4.S. The data in Table 4.S is consistent with the expected transition from a predominantly agricultural area to that of large single-family homes and mixed agricultural/residential usage. As shown, the number of residential accounts and amount of water used by residential customers will increase along with landscaped areas and the number of agricultural customers, and the amount of water used by agricultural lands will decrease incrementally.

Table 4.S: Historical and Projected Water Use by Demand Category

	2000		2005		2010		2015		2020		2025	
Water Use Sectors	**No. of Accounts**	**Deliveries (AF/yr)**	**No. of Accounts**	**Deliveries (AF/yr)**	**No. of Accounts**	**Deliveries (AF/yr)**	**No. of Accounts**	**Deliveries (AF/yr)**	**No. of Accounts**	**Deliveries (AF/yr)**	**No. of Accounts**	**Deliveries (AF/yr)**
Single-Family	5,320	7,028	6,539	7,289	7,756	7,731	8,973	8,869	10,189	8,952	11,411	9,102
Multifamily	96	411	112	429	129	450	143	519	154	472	165	500
Commercial	106	487	129	483	153	517	176	583	199	525	223	537
Industrial	—	0	—	0	—	0	—	0	—	0	—	0
Institutional and Governmental	23	48	28	47	33	51	37	58	42	52	47	53
Landscape	29	37	34	38	40	41	46	47	52	42	58	46
Agricultural	1,730	38,111	1,642	33,797	1,555	32,758	1,469	33,434	1,382	26,496	1,295	24,235
Other	—	2,427*	—	2,215*	—	2,187*	—	2,290*	—	1,923*	—	1,814*
Total	7,304	48,549	8,484	44,295	9,666	43,736	10,844	43,029	12,018	38,462	13,199	36,287

Source: Draft Urban Water Management Plan, December 2005.
*Unaccounted system losses

4.11 WATER SYSTEM INFRASTRUCTURE

The VCMWD water system includes 289 miles of pipeline ranging in size from 8 inches to 42 inches in diameter. As a result of the steeply varying topography within the District's service area, the District' water distribution system is hydraulically divided into 14 pressure zones. Within these pressure zones, the District currently operates a total of 42 storage facilities (ranging in size from 100,000 gallons to 55.9 million gallons), 26 pump stations, 22 pressure-reducing stations, and one hydropneumatic tank to provide adequate service. There is substantial number of interconnections and a high degree of interdependency between most of the zones. This degree of flexibility is useful in that it provides the ability to handle a variety of supply and demand situations. Table 4.T is a summary of the VCMWD water system. The VCMWD water infrastructure is shown in Figure 4.1 at the end of this Section.

Table 4.T: VCMWD Water System Infrastructure

Information	Capacity
Service Area	102 square miles
Miles of Water Main (8" & larger)	283
Number of Closed Reservoirs	42
Maximum Closed Reservoir Capacity	415 acre feet
Number of Open Reservoirs	1
Maximum Capacity of Open Reservoir	1,612 acre-feet
Number of Pump Stations	26
Number of Pumps	96
Number of Service Connections[1]	9,853
Number of Meters in Service[1]	9,217

Source: Draft Urban Water Management Plan, December 2005.
[1] Comprehensive Annual Financial Report

The amount of water storage that the District has to meet water demands in an emergency situation is dependent upon the day of the week that the emergency occurs. The District's water storage supply varies from day to day. Generally, the District's emergency supply is the greatest on Mondays. The District's existing total storage capacity is 122 million gallons. Table 4.U, provides estimates regarding the total stored water available and number of days service can be provided under normal operating conditions. Table 4.V provides the estimated water supply at peak demand conditions after shutting off agricultural use and reservoirs with a capacity of 5 million gallons and greater in order to stabilize demand. The calculations in Table 4.V provide that the time needed to shut off agricultural usage and reservoirs is 4 hours and that the peak demand for 4 hours is 13.6 million gallons. Therefore, at peak demand the available emergency storage is the normal storage capacity, less 13.6 million gallons.

Table 4.U: Emergency Water Supply Estimates for Domestic Water Use Under Normal Operating Conditions

Monday	Tuesday	Wednesday	Thursday	Friday
70 % capacity*	60 % capacity*	50 % capacity*	40 % capacity*	30 % capacity*
85 mg storage	73 mg storage	61 mg storage	48 mg storage	36 mg storage
38 days supply	33 days supply	27 days supply	21 days supply	16 days supply

*Leaves 10 percent in reservoirs for fire protection needs.
mg: million gallons
Source: VCMWD RFI, March 2006.

Table 4.V: Emergency Water Supply Estimates for Domestic Water Use at Peak Demand

Monday	Tuesday	Wednesday	Thursday	Friday
70 % capacity*	60 % capacity*	50 % capacity*	40 % capacity*	30 % capacity*
71.8 mg storage	59.6 mg storage	47.4 mg storage	35.2 mg storage	23 mg storage
32 days supply	27 days supply	21 days supply	16 days supply	10 days supply

*Leaves 10 percent in reservoirs for fire protection needs.
MG: Million Gallons
Source: VCMWD RFI, March 2006.

VCMWD has no facilities that it would classify as underutilized, nor any facilities that are shared. For the most part, the physical location and layout of VCMWD do not lend themselves to sharing facilities. However, VCMWD does have interagency agreements, primarily for emergency purposes, with neighboring agencies.

Water infrastructure needs are determined by the District through a master planning process. The District has adopted both a Water Master Plan and an Urban Water Management Plan. Both of these documents evaluate land uses, projected growth, and infrastructure expansions and deficiencies. The Urban Water Management Plan is required by the Urban Water Management Planning Act (California Water Code Division 6, Part 2.6, Sections 10610 through 10657). The Act requires every urban water supplier providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually to adopt and submit an Urban Water Management Plan every five years to the California Department of Water Resources (DWR).

The main focus of the District's Water Master Plan is the replacement of the District's infrastructure, which was installed in the 1950s, 60s and early 70s. Each year the District budgets between $1 and $2 million for pipeline replacement, prioritizing older or less reliable segments for replacement. Recently many of the pipeline replacement activities have been driven by the road improvement projects funded by the County of San Diego.

Currently the District is involved with 33 separate water and wastewater system capital improvement projects, having a total value in excess of $12.9 million anticipated to be completed over the next three to five years. These projects include: capacity enhancements, infrastructure upgrades, relocating and replacing facilities (pipelines, reservoirs, pump stations), and implementing a Geographical Information System (GIS).

VCMWD's water system has infrastructure deficiencies that involve areas, typically those in the higher elevations near the upper end of the pressure zone, that occasionally experience low pressure during peak usage, particularly after prolonged Santa Ana conditions. The topography of VCMWD exhibits disparity in elevations (300 ft asl to 2450 ft asl) which leads to variations in service pressure from a minimum of 20 psi to very high 250 psi. For system pressures over 200 psi, the District installs pressure regulators. For low pressures, District customers are advised that they may wish to consider installing private pumping systems, of which there are many in the system. At the time a new service is established or an existing service is transferred to a new owner, customers are advised of any extreme (high or low) pressure conditions impacting the subject property. The water pressure variations have not involved any permit or regulatory violations. VCMWD is addressing this deficiency through implementation of Water Master Plan improvements.

As shown in Table 4.W, VCMWD has experienced an average of 336 water service leaks from Fiscal Year 2000-01 through 2004-05. This includes meter leaks, service line leaks, backflow leaks, and mainline leaks. Of these leaks, less than 10 percent are mainline leaks. The District has stated that these leaks are associated with aging infrastructure and normal operational issues. None of the leaks resulted in any enforcement actions by environmental agencies.

Table 4.W: VCMWD's Water Line Breaks and Leaks within the Last Six Years

	FY 00-01	FY 01-02	FY 02-03	FY 03-04	FY 04-05	FY 05-06[2]
Total Leaks[1]	277	338	329	388	348	211
Backflow Leaks	0	0	35	32	61	22
Mainline Repairs	35	19	19	23	19	5
Customers Out of Water	996	657	617	1,103	1,077	624
Hours Out of Water	5,320	3,809	3,720	8,083	6,691	2,439.5

Source: VCMWD RFI, March 2006.

[1]Includes mainline, backflow, service line, and meter leaks.

[2]Year to date through February 2006

4.12 WASTEWATER FACILITIES AND SERVICES

VCMWD provides wastewater collection, transmission, treatment, and effluent disposal or water recycling to developed areas within the District's boundaries. These include approximately 2,615 sewer connections. The VCMWD utilizes a 250-gallon-per-day EDU generation factor for planning purposes. Currently the District is serving 2,747 wastewater service EDUs. This service is being provided through three wastewater treatment facilities that the District owns and operates. The three existing facilities, which are detailed below, are operating within design capacities and consistently meeting discharge standards. The VCMWD wastewater infrastructure is shown in Figure 4.1 at the end of this Section.

Lower Moosa Wastewater Reclamation Facility

The Lower Moosa Wastewater Reclamation Facility (Moosa) provides sewer treatment services for 2,264 customers in the I-15 corridor area, from the Lawrence Welk development on the southern end, east to Hidden Meadows, and north to Circle R Drive. The facility provides advanced aeration

secondary and post-chlorination. The system utilizes two lift stations, both equipped with emergency power and 8 hours of emergency storage. Currently, the method of disposal is indirect reclamation through percolation into a tributary of the San Luis Rey River basin. The estimated quantity discharged in 2005 was 395 acre-feet. The District has long-term plans for direct reclamation (provide recycled water) on nearby golf courses (currently irrigated with private well water) and future commercial development. As such, future developments in the vicinity of the plant will be required to provide on-site facilities suitable for the use of reclaimed water.

The Moosa facility has a current maximum treatment and disposal capacity of 0.50 mgd, or 2,500 EDUs, and can accommodate the existing average nominal daily flow rate of approximately 0.30 mgd, or 2,353 EDUs. Moosa also has contractual commitments to serve an additional 485 EDUs (or 121,000 gallons per day), and another 1,038 EDUs (or 259,500 gallons per day) have placed deposits or accepted liens for future service.

The projected build out wastewater service demand from the Moosa service area is 1.0 mgd or 5,000 EDUs per day. The District has stated that the Moosa facility will likely require treatment upgrades and capacity expansion in the next five years to meet the projected treatment demands. These improvements will be financed by a combination of capacity charge revenues currently in place and/or with the use of assessment district financing by specific developments in the Moosa service area.

Skyline Ranch Country Club Reclamation Facility

The Skyline Ranch Country Club Reclamation Facility (Skyline) serves the Skyline Ranch Country Club development, which includes 222 wastewater connections. The treatment facility is an advanced treatment membrane bioreactor system and has a design capacity of 0.025 mgd. The current flows range from 0.016 mgd to 0.023 mgd and average 0.020 mgd, or 223 EDUs. The Skyline system utilizes one sewer lift station and has an emergency storage pond that can store over 24 hours of emergency flow. The treated wastewater is disposed through spray irrigation. Skyline Ranch serves a single ownership development and is built out. Therefore, the facility is not expected to be expanded.

It should be noted that the property owners within the Skyline Ranch Development petitioned and received permission from the RWQCB to assume ownership and operational responsibility for the wastewater treatment facility. This transfer took place on May 5, 2006.

Woods Valley Ranch Reclamation Facility

The existing Woods Valley Ranch Reclamation Facility, which serves the Woods Valley Ranch residential development, is an interim facility with a maximum capacity of 50,000 gallons daily. The interim facility began operation approximately one year ago and has a existing average flow of 42,750 gpd or 171 EDUs. The tertiary treated effluent empties onto the Woods Valley Ranch Golf Course, which is part of the Woods Valley Ranch development. All flow to the treatment facility is by gravity, and treated effluent is pumped back to a series of storage ponds on the golf course. The treatment facility has 24-hour emergency storage capacity, with additional failsafe emergency storage on a nearby golf course pond.

The developer of Woods Valley Ranch is in the process of constructing a permanent facility, which is expected to be completed in September or October of 2006. The facility will have an advanced treatment membrane bioreactor system and a maximum capacity of 75,000 gpd and is designed to serve the full 280 EDU projected demand from build out of the development. The permanent facility will have the same effluent disposal and storage methods that are being utilized with the interim facility. Once the permanent facility is operational, the interim facility will be removed.

The new facility is not expected to require any upgrades or replacements within the next five years. Any future upgrades or replacements to the Woods Valley Ranch facility will be financed by the plant's replacement reserve, which is funded through wastewater service charges.

Future Wastewater Treatment and Reclamation Facilities

Future sewer service areas of the District are generally associated with large development projects. Infrastructure requirements for new developments will be determined by the needs of the specific developments and the potential for limited service to surrounding properties. At this time there are several approved and planned future developments for construction of wastewater treatment and reclamation facilities, including the following:

- **Live Oak Ranch Development:** This 150-unit residential development is currently in the initial planning stages. It is expected that the development will utilize a tertiary facility to treat 100 percent of the project's wastewater treatment demand. The projected maximum effluent flow of 0.038 mgd is planned to irrigate an active citrus grove that is currently part of the project site. Seasonal storage will be on site.
- **Orchard Run Development:** The 300-unit Orchard Run residential development is expected to generate 0.075 mgd of wastewater, which will be accommodated by an expansion of the existing Woods Valley Ranch Water Reclamation Facility, with reclamation through landscape irrigation back on the Orchard Run Development.
- **South Village Water Reclamation Facility:** This project has been under study for a number of years. The project proposes to expand the Woods Valley Ranch Water Reclamation Facility to serve properties in the South Village area. This expansion, which could range from 45,000 to 100,000 gpd depending on the level of participation, would be in addition to the Orchard Run development.
- **Lilac Ranch Development:** This is a planned 330-unit residential development that is currently inactive. The wastewater generated from this development would be collected and treated by an on-site facility that would provide tertiary treatment. The treated water would be disposed of on agricultural and landscaped areas on site.
- **North Village Water Reclamation Facility:** This project is currently inactive. This planned tertiary treatment facility would serve up to 1,000 residential and commercial customers located within the San Diego County General Plan 2020 North Village planning area.

The District's wastewater facilities do not have any existing infrastructure deficiencies. Within the past five years the VCMWD had a total of five reportable sewage spills, as shown in Table 4.X. None of these spills resulted in either claims against the agency or enforcement actions by environmental agencies.

Table 4.X: VCMWD's Reportable Sewage Spills within the Last Five Years

FY 2001-02	FY 2002-03	FY 2003-04	FY 2004-05	FY 2005-06
0	3	1	1	0*

Source: VCMWD RFI, March 2006.
*Preliminary data that does not reflect the full fiscal year.

Wastewater Generation

Through the urban water management planning process and use of the 250 gallon per day EDU generation factor, the VCMWD has projected future wastewater service demands. Table 4.Y details the projected amounts of wastewater expected to be generated, collected, and treated between 2005 and 2025. Table 4.Z provides the District's expected methods of effluent disposal.

Table 4.Y: VCMWD's Projected Wastewater Generation and Treatment Data (MGD)

	2005	2010	2015	2020	2025
Wastewater generated in service area	1.683	2.033	2.283	2.483	2.683
Wastewater collected and treated in service area[1]	0.41	1.04	1.42	2.07	2.07
Quantity that meets recycled water standards	0.05	0.46	0.71	1	1

Source: Draft Urban Water Management Plan, December 2005.
[1]The majority of wastewater is currently treated by individual septic systems.

Table 4.Z: VCMWD's Projected Amounts and Methods of Effluent Disposal (Acre-Feet Per Year)

Method of Disposal	Treatment Level	2005	2010	2015	2020	2025
Groundwater Reuse (Moosa facility)	Advance Secondary	395	650	800	1,200	1,200
Golf Course, agricultural, and landscaped irrigation	Tertiary	60	520	790	1,120	1.120
Total	**-**	**455**	**1,170**	**1,590**	**2,320**	**2,320**

Source: Draft Urban Water Management Plan, December 2005.

Biosolids Generation and Disposal

The three existing wastewater treatment and reclamation facilities currently produce approximately 402 tons of biosolids annually. VCMWD is projecting the generation of biosolids to be approximately 975 tons annually at build out within the service areas of the three existing facilities. The future data is based upon straight line projections determined by the District's current production rate. The District's existing and projected biosolids generation is provided in Table 4.AA.

Table 4.AA: VCMWD Existing and Projected Biosolids Generation

Plant	Current Capacity (mgd)	Biosolids (tons/day)	Ultimate Capacity (mgd)	Ultimate Biosolids (tons/day)
Moosa, Skyline	0.450	1.00	1.00	2.22
Woods Valley	0.050	0.10	0.225	0.45
Total	-	**1.10**	-	**2.67**
Current Annual Production: 1.10 tons/day x 365 days = 402 tons/year				
Ultimate Projected Annual Production: 2.67 tons/day x 365 days = 975 tons/year				

Source: VCMWD Personnel, May 2006.

The District contracts with an outside company to haul the biosolids to a processing facility where it is used to manufacture soil amendments for nonfood producing plants. The District is planning to continue to dispose of the biosolids in this method in the future.

4.13 RECYCLED WATER

In May of 1990, VCMWD adopted Ordinance No. 201, the Mandatory Reclaimed Water Use Ordinance. This ordinance, which was updated in February 1998, requires that wherever there is the potential for current or future reclaimed water use, new developments will be required to install the facilities necessary to facilitate reclaimed water use.

As mentioned above, all of the existing wastewater treatment facilities, except for Moosa, utilize reclaimed water. For some time now, VCMWD has anticipated delivering recycled water from the Moosa plant to the nearby Lawrence Welk and Castle Creek Golf Courses. However, as the two golf courses currently use well water for irrigation, recycled water proceeds for the District would be limited to the cost of delivery. Currently, there is no specific timeline for developing reclaimed water facilities at Moosa.

The District is committed to expanding the use of recycled water over the next 20 years and beyond. The District has stated that it will seek additional customers for reclaimed water, which would reduce imported water demands and generate higher returns to help offset the cost of production and distribution of reclaimed water. Pursuant to District Ordinance, all new developments are required to construct on-site wastewater treatment and disposal facilities that will be inland discharge operations, with 100 percent of effluent being disposed of via some form of direct or indirect recycling. Table 4.BB provides the District's projected use of recycled water.

Table 4.BB: VCMWD's Projected Use of Recycled Water (Acre Feet Per Year)

Recycled Water Customer	2005	2010	2015	2020	2025
Agricultural[1]	0	225	345	585	585
Landscape[2]	60	295	445	535	535
Groundwater Recharge[3]	395	650	800	1,200	1,200
Total Projected Use of Recycled Water	**455**	**1,170**	**1,590**	**2,320**	**2,320**

Source: Draft Urban Water Management Plan, December 2005.
[1]Includes Live Oak Ranch Development and North Village Water Reclamation Facility
[2]Includes Woods Valley Ranch Golf Course, Lilac Ranch Development, and Orchard Run Development
[3]Includes Moosa facility

4.14 SERVICE/PLANNING AREA DISCUSSION

As shown on Figure 4.1, VCMWD's boundary and SOI are coterminous with the exception of two areas in the southeast portion of the District, which are primarily surrounded by District lands. The western area that is within the SOI but not within the District is part of the San Pasqual Band of Mission Indian Reservation, and the tribe has chosen not to be a part of the District. The eastern area is private lands where District services are not currently needed and landowners have also chosen not to be part of the District.

There are several areas outside of the District's boundary that are currently served by the VCMWD through a service agreement. These areas are detailed below:

- VCMWD provides supplemental and emergency water to the San Pasqual Band of Mission Indians. This area is within the District's SOI in the southeastern portion, which is generally surrounded by District areas. This area is adjacent to Woods Valley Road and Canal Road.
- VCMWD serves an area in the Rincon Del Diablo MWD service area under an interagency agreement. This area receives water through VCMWD pipelines and is located adjacent to the southern District boundary, to the north of North Avenue, and on both sides of Laurashawn Lane.
- VCMWD also bills and collects sewer charges for the City of Escondido for a subdivision that receives water from VCMWD and sewer services from the City. This area is located within the District and outside of the City. These arrangements include nominal surcharges to compensate and reimburse for additional costs and/or lost revenues. VCMWD has stated that this arrangement eliminates the need for costly duplicate infrastructure and provides better service to this area.

In 2003, the VCMWD participated in the Municipal Service Review and Sphere Update Study conducted for the City of Escondido. As a result of that review, a Special Study Area designation was placed on territory located in the I-15 and Old Highway 395 corridor, as shown on Figure 4.1. Some of the subject parcels are located in VCMWD, while others are in either RMWD (north of Lawrence Welk Drive) or Vallecitos Water District (south of Lawrence Welk Drive). Boundaries between these Districts are currently delineated by Old Highway 395. Based on the information gathered, it appears that the development of I-15 has created a physical barrier, which is a physical constraint to providing services to parcels that are currently within these Districts but on the other side of I-15. VCMWD has stated that it would be able to provide services to parcels east of I-15 and that due to the constraint of I-15 parcels appear to be more easily served by VCMWD than the existing Districts. Similarly, the parcels currently within VCMWD that are west of I-15 and adjacent to RMWD would more easily be served by RMWD. Therefore, it would appear appropriate to include Special Study Areas east of I-15 into the VCMWD SOI and include Special Study Areas that are west of I-15 and north of Lawrence Welk Drive into the RMWD SOI and areas west of I-15 and south of Lawrence Welk Drive into the Vallecitos Water District SOI.

Likewise, several parcels within the Special Study Area that are located west of I-15 between Old Highway 395 and 1-15 are within VCMWD and are being served by an 8-inch water pipeline running through the Rainbow Bridge (on Lilac Road) that spans I-15. This land is adjacent to RMWD and may be better served directly by RMWD, or through an exchange agreement with RMWD. Either way, having RMWD serve this area would allow the pipeline to be removed from the Rainbow Bridge.

In addition to the Special Study Area, there are several areas that are outside the existing VCMWD's boundary that the District has identified as having the ability to be efficiently served by VCMWD's facilities. These areas include:

- Existing rural residential areas on the east side of the existing District boundary, which are currently supplied by private wells and have been experiencing problems with the wells. This condition has led to a recent District annexation of 14 acres of land and could result in additional annexation applications and/or requests for water service from VCMWD.
- Indian Reservation lands located on the eastside of the District within the SOI, which receive emergency supplemental service from the District.
- Lands south of the San Luis Rey River and contiguous to the District's northern boundary.

Discussion of the Extension of VCMWD Services to the Lands within the Existing San Luis Rey MWD and Planning Areas, Including Advantages and Disadvantages

Part of the MSR and SOI Update process is to evaluate the existing and future service provision capabilities of agencies and to determine the most efficient arrangement of service boundaries. Therefore, this MSR and SOI Update evaluates the potential for VCMWD to extend water and wastewater services to the areas that are currently within the boundaries of SLRMWD and the proposed development areas as detailed in Section 3.4. The proposed development areas are identified as the "Planning Areas" in this discussion and on the figures in this MSR.

VCMWD's northwestern most portion of its boundary and SOI are coterminous with the southernmost portion of SLRMWD's proposed SOI and the planned development areas as detailed in Section 3.0. Based on discussions with VCMWD during this MSR process, VCMWD staff has reviewed the SLRMWD Master Plan (as detailed in Section 3.0) that discusses developing infrastructure and providing water, wastewater, and recycled water services to the SLRMWD proposed SOI area. VCMWD has stated that the SLRMWD Master Plan document appears to be based on sound planning and engineering design parameters. As such, VCMWD would likely use much of the Master Plan as the basis for moving forward with the various specific projects. VCMWD has stated that as actual projects are implemented, there could be minor changes in location and configurations based upon specific site conditions and final land use and demand factors.

Because VCMWD does not currently provide wastewater services in the northern portion of the existing VCMWD District area, the development of the wastewater and recycled water infrastructure and provision of these services would be generally the same as is detailed in the SLRMWD Master Plan. Regarding water service, VCMWD stated that a possible major variation to the plan would be the possibility of serving lands south of the SLRMWD by upsizing and extending existing VCMWD facilities northward, rather than having pipelines crossing the San Luis Rey River from north to south. VCMWD's determination of that specific issue, among others, would be based upon a future detailed cost/benefit analysis.

For water supply sources, VCMWD would also implement the SLRMWD Master Plan and anticipates that the majority of water needed to serve the planned development areas currently within SLRMWD's proposed SOI would come from new aqueduct connections delineated in the SLRMWD Master Plan, with one connection on the first SDCWA aqueduct and one on the second MWD

aqueduct. However, there is a possibility that some of the property in the proposed SLRMWD SOI on the south side of the river near the northern boundary of VCMWD could be served by upsizing and extending existing water transmission facilities. This would be determined by VCMWD through a future cost/benefit analysis.

VCMWD has stated that initially the District would secure preliminary funding assurances from landowners/developers, or preliminary approvals to form funding vehicles (Improvement Districts, Assessment District) from impacted property owners to secure financing to construct the necessary infrastructure. It should be noted that the District's Capital Improvement Spending Limit Ordinance limits the expenditure of District funds for capital improvements. The limitation, effective January 1, 2006, is $1,882,640 per project except for water storage projects, which have a limitation of $2,823,968. Expenditures in excess of these limitations must be ratified by a District-wide election. This limitation does not apply to funds expended by property owners, developers, or others for capital projects that will be dedicated to the District or to funds from assessment or improvement districts formed in the manner provided by State law. Because VCMWD has envisioned the extension of infrastructure to be funded by developers or assessment districts, the spending limitation ordinance should not effect funding to extend services. In addition, VCMWD participation in the construction of the necessary infrastructure to extend water, wastewater, and recycled water services would be limited to overseeing the planning, design, and construction of those facilities. VCMWD would not contribute any of its general fund resources to fund infrastructure within the existing SLRMWD territory or proposed development areas as detailed in Section 3.4.

Extension of VCMWD water and wastewater services to the planning areas would require a number of jurisdictional changes, including SOI and boundary expansions and concurrent annexation of the planning areas to MWD and the SDCWA. Annexation of lands into MWD and SDCWA would require the payment of annexation fees to both agencies. The annexation fees are currently $2,929 per acre for SDCWA and $3,460 per acres for MWD, which equals $6,389 per acre and would total over $19 million if VCMWD were to annex the entire existing SLRMWD area. VCMWD has stated that the annexation fees for areas served by VCMWD would be born by the properties annexing.

In summary and in addition to the boundary changes described, the provision of service to the planning areas by VCMWD would require numerous activities by VCMWD. These include:

- Participation in construction of extensive water, wastewater, and recycled water infrastructure to serve the planning areas, as no infrastructure currently exists. The infrastructure would be similar to what is outlined in the SLRMWD Master Plan.
- Potential capacity increases of existing VCMWD facilities.
- In association with the infrastructure development, the District would need engineering reports; numerous permits from regional agencies, including a Conditional Use Permit and NPDES permits for construction and operation of a wastewater treatment facility; and appropriate CEQA documentation.
- Generation and implementation of funding sources.
- Updates of the District's planning documents, such as the CIP, Master Plans, and Urban Water Management Plan.
- Incremental staffing increases to provide adequate services and maintenance.

- Restructuring of the Board of Directors to provide representation of the new areas. If annexed into VCMWD, voters within the existing SLRMWD boundaries would most likely be incorporated through a District election division re-apportionment process.

Advantages

There are several advantages of the planning areas being served by VCMWD, as listed below.

- The District already provides both water and wastewater services. Due to this, the District has experienced staff to provide knowledge and expertise in the extension and provision of services. Additionally, the District has existing relationships with outside vendors providing engineering, environmental, and laboratory services.
- The District is already a member of SDCWA and MWD.
- Based on information gathered for this MSR the District has a history of stable membership of the Board of Directors and a stable workforce.
- The District does not have existing significant infrastructure deficiencies within its infrastructure.
- The District has adopted financial/revenue/reserve policies, which provide financial stability to the District.

Disadvantages

There are several disadvantages of the planning areas being served by VCMWD, as listed below.

- Because VCMWD does not have any facilities that are underutilized or have significant excess capacity, a full range of water, wastewater, and recycled water infrastructure would need to be developed.
- Based on SANDAG projections and the County's Draft 2020 land use designations within both VCMWD and the planning areas, it appears that significant growth will occur. It may be difficult for VCMWD to accommodate the projected growth both within its existing District and within the planning areas concurrently.

4.15 MSR DETERMINATIONS FOR THE VALLEY CENTER MWD

The Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 requires that the following nine determinations be included in MSRs. The following determinations have been prepared pursuant to the standards developed by San Diego LAFCO, as detailed in Appendix A, and based on the District information detailed previously.

Determination 1: Infrastructure Needs and Deficiencies

In authorizing the preparation of MSRs, the State Legislature has focused on one of LAFCO's core missions—encouraging the efficient provision of public services. Infrastructure needs or deficiencies, which refer to the adequacy of existing and planned public facilities in relation to how public services

are, and will be, provided to citizens, impacts the efficient delivery of public services. Infrastructure can be evaluated in terms of capacity, condition, availability, quality, and correlations among operational, capital improvement, and finance plans. It is recognized that there may be unmet infrastructure needs due to budget constraints or other factors; however, identification of deficiencies may promote public understanding and support for needed improvements.

Determination 1.0: Water infrastructure needs are determined by the District through a master planning process. The District has adopted both a Water Master Plan and an Urban Water Management Plan. Both of these documents evaluate land uses, projected growth, and infrastructure expansions and deficiencies.

Determination 1.1: The main focus of the District's Water Master Plan and CIP is the replacement of infrastructure that was installed in the 1950s and 1960s and prioritizing older or less reliable segments for replacement.

Determination 1.2: VCMWD's water system has infrastructure deficiencies that involve areas that occasionally experience low pressure during peak usage. The water pressure variations have not involved any permit or regulatory violations. VCMWD is addressing this deficiency through implementation of Water Master Plan improvements.

Determination 1.3: VCMWD has experienced an average of 336 annual water leaks from fiscal year 2000-01 through 2004-05. This includes meter leaks, service line leaks, backflow leaks, and mainline leaks. Of these leaks, less than 10 percent are mainline leaks. The District has stated that these leaks are associated with aging infrastructure and normal operational issues. None of the leaks resulted in any enforcement actions by environmental agencies.

Determination 1.4: The District's wastewater facilities do not have any existing infrastructure deficiencies. However, the Lower Moosa Wastewater Reclamation Facility will likely require treatment upgrades and capacity expansion in the next five years to meet the projected treatment demands. Additionally, over the past five years, there were five sewage spills reported; none of these required enforcement actions.

Determination 1.5: The existing storage capacity appears adequate for various outage or emergency situations. However, as the District's service demand grows, additional storage will be required to maintain the same level of functionality during an event.

Determination 1.6: For VCMWD to provide water, wastewater, and recycled water services to the proposed development areas currently within SLRMWD, the District would need to participate in the development of extensive infrastructure, as no infrastructure currently exists. The infrastructure would be similar to what is outlined in the SLRMWD Master Plan. In addition, several jurisdictional changes would need to be processed by LAFCO, including detachment from SLRMWD and annexation to VCMWD, SDCWA, and MWD as well as amending the SOIs for those three agencies.

Determination 2: Growth and Population

Efficient provision of public services is linked to an agency's ability to plan for future need. For example, a water purveyor must be prepared to supply water for existing *and* future levels of demand,

and also be able to determine *where* future demand will occur. MSRs will give LAFCO, affected agencies, and the public the means to examine both the existing and future need for public services and will evaluate whether projections for future growth and population patterns are integrated into an agency's planning function.

Determination 2.0: VCMWD's Urban Water Management Plan projects population within the District to grow at an average of 3.60 percent annually, and single-family housing is projected to grow at an average of 5.21 percent through 2030.

Determination 2.1: The VCMWD area is expected to transition from a predominantly agricultural area to that of large single-family homes and mixed agricultural/residential usage. SANDAG predicts that land utilized for single-family housing will increase 96 percent increase from 2000 to 2030. Likewise, vacant developable land is projected to decrease by 93 percent over the same time period.

Determination 2.2: VCMWD's projected future water demands and infrastructure needs, detailed within the Water Master Plan and Urban Water Management Plan, are based upon the County's and the City of Escondido's existing land use plans, as well as population, water demand, and water supply data supplied by the SDCWA and SANDAG.

Determination 3: Financing Constraints and Opportunities

LAFCO must weigh a community's public service needs against the resources available to fund the services. During the municipal service review, the financing constraints and opportunities, which have an impact on the delivery of services, will be identified and enable LAFCO, local agencies, and the public to assess whether agencies are capitalizing on financing opportunities. For example, a MSR could reveal that two or more water agencies that are each deficient in storage capacity and which individually lack financial resources to construct additional facilities, may benefit from creating a joint venture to finance and construct regional storage facilities. Service reviews may also disclose innovations for contending with financing constraints, which may be of considerable value to numerous agencies.

Determination 3.0: The District has established four categories of reserves to provide funding for future capital projects, funding gaps related to reduced water sales, and emergency situations.

Determination 3.1: Infrastructure needs are paid for by developer contributions, capacity fees, standby fees, Capital Improvement Reserves, and from interest earned on reserves.

Determination 3.2: The District has prepared a Long-Term Financing Plan to finance all or a portion of the future projects contained in the District's Master Plan. The District may begin using long-term debt to finance infrastructure replacement beginning as early as 2007.

Determination 3.3: A general financing constraint includes the District's Capital Improvement Spending Limit, which was enacted in 1989 by a vote of the District's residents. This Ordinance established a limitation on the expenditure of District funds for capital improvements. Expenditures in excess of these limitations must be ratified by a District-wide election.

Determination 3.4: For VCMWD to provide services to the proposed development areas as outlined in Section 3.4., VCMWD would need to implement funding sources to develop infrastructure and fund the costs of annexation of the additional lands to SDCWA and MWD ($6,389 per acre, which totals over $19 million if the District were to annex the entire existing SLRMWD area). VCMWD has stated that infrastructure needed to serve the proposed development areas would be funded by developers or by assessment districts, and that annexation fees would be paid by the properties that are annexing.

Determination 4: Cost Avoidance Opportunities

LAFCO's role in encouraging efficiently provided public services depends, in part, on helping local agencies explore cost avoidance opportunities. The MSR will explore cost avoidance opportunities including, but not limited to: (1) eliminating duplicative services; (2) reducing high administration-to-operation cost ratios; (3) replacing outdated or deteriorating infrastructure and equipment; (4) reducing inventories of underutilized equipment, buildings, or facilities; (5) redrawing overlapping or inefficient service boundaries; (6) replacing inefficient purchasing or budgeting practices; (7) implementing economies of scale; and (8) increasing profitable outsourcing.

Determination 4.0: The District is involved in several cooperative arrangements that produce efficiencies and cost savings. These include: (1) membership in a risk-pooling self-insurance authority (ACWA – JPIA); (2) SDCWA's public information, education, and water conservation programs; (3) SDCWA's shared financing for the aqueduct system; and a (4) countywide mutual aid agreement.

Determination 4.1: VCMWD intends to expand the use of recycled water and has stated that it will seek additional recycled water customers. This would reduce imported water demands and generate higher returns to help offset the cost of production and distribution of reclaimed water.

Determination 5: Opportunities for Rate Restructuring

When applicable, the MSR will review agency rates, which are charged for public services, to examine opportunities for rate restructuring without impairing the quality of service. Agency rates will be scrutinized for: (1) rate setting methodologies; (2) conditions that could impact future rates; and (3) variances among rates, fees, taxes, charges, etc., within an agency and region. Service reviews will identify strategies for rate restructuring, which would further the LAFCO mission of ensuring efficiency in providing public services.

Determination 5.0: The District sets its rates annually through a public hearing process. The Districts rates are comprised of the rate for water, the monthly service charge for meters, the SCWA monthly infrastructure access charge, and pump zone charges. A large majority of the costs that create the District's rates are pass-through costs of water and energy purchases; therefore, they are not under control of the District.

Determination 5.1: The District has established Rate Stabilization Reserves to provide stability for water rates, fixed wholesale charges, and pumping rates.

Determination 5.2: The District's Board of Directors has the authority to restructure rates as appropriate. The District has identified the primary alternative to the current structure as an inclining block rate, which would charge higher rates to larger water users. However, the District has stated that this could result in a hardship to agricultural customers, who are 80-85 percent of its sales. The District has stated that the current structure is well-accepted by the community and allows the District to consistently meet its operations, maintenance, and capital requirements. Therefore, the District is not currently anticipating any changes to the water rate structure.

Determination 6: Opportunities for Shared Facilities

Public service costs may be reduced and service efficiencies increased if service providers develop strategies for sharing resources. For example, service providers in San Diego County currently share communication centers, wastewater treatment facilities, and distribution lines. Sharing facilities and excess system capacity decreases duplicative efforts, may lower costs, and minimizes unnecessary resource consumption. The MSR will inventory facilities within the study area to determine whether facilities are currently being utilized to capacity and whether efficiencies can be achieved by accommodating the facility needs of adjacent agencies. Options for planning for future shared facilities and services will also be considered.

Determination 6.0: VCMWD does not currently participate in any water transfer or exchange programs. However, the District has recently entered into a water purchase agreement with Poseidon Resources to purchase up to 7,500 acre feet annually of desalted seawater via an exchange partner(s). This project would utilize a shared desalination facility.

Determination 6.1: VCMWD has no existing facilities that it would classify as underutilized, nor any existing facilities that are shared. For the most part, the physical location and layout of VCMWD does not lend itself to sharing facilities. However, VCMWD does have interagency agreements, primarily for emergency purposes, with neighboring agencies.

Determination 6.2: The District is a participant in financing infrastructure needs related to the regional water facilities that provide imported water.

Determination 7: Government Structure Options, including Advantages and Disadvantages of Consolidation or Reorganization of Service Providers

The MSR provides a tool to comprehensively study existing and future public service conditions and to evaluate organizational options for accommodating growth, preventing urban sprawl, and ensuring that critical services are efficiently and cost-effectively provided. While the MSR does not require LAFCO to initiate changes of organization based on MSR findings, LAFCO, local agencies, and the public may subsequently use MSRs to pursue changes to services, local jurisdictions, or spheres of influence. LAFCO may examine efficiencies that could be gained through: (1) functional reorganizations within existing agencies; (2) amending or updating spheres of influence; (3) annexations or detachments from cities or special districts; (4) formation of new special districts; (5) special district dissolutions; (6) mergers of special districts with cities; (7) establishment of subsidiary districts; or (8) any additional reorganization options found in Government Code § 56000 et. seq.

Determination 7.0: The District is governed by an elected Board of Directors. Based on the current provision of services and stable history of District governance, it can be assumed that the existing government structure would be able to continue to provide efficient and adequate services to the District area.

Determination 7.1: Due to the physical service constraints caused by I-15, it would appear appropriate to include Special Study Areas east of I-15 into the VCMWD SOI and include Special Study Areas that are west of I-15 and north of Lawrence Welk Drive into the RMWD SOI and areas west of I-15 and south of Lawrence Welk Drive into the Vallecitos Water District SOI.

Determination 7.2: Several parcels within the Special Study Area that are located west of I-15, between Old Highway 395 and 1-15, are within VCMWD and are being served by an 8-inch water pipeline running through the Rainbow Bridge, which spans I-15. Having Rainbow MWD serve this area would allow the pipeline to be removed from the Rainbow Bridge.

Determination 7.3: Extension of VCMWD water and wastewater services to the planning areas would require a number of jurisdictional changes, including SOI and boundary expansions and concurrent annexation of the planning areas to MWD and the SDCWA. In addition, the VCMWD Board of Directors may need to be restructured to provide representation to the new areas.

Determination 7.4: There are several advantages and disadvantages to the planning areas being served and governed by VCMWD.

- Advantages include: being served by an experienced, stable District with no existing significant infrastructure issues.
- Disadvantages include: (1) Due to the significant growth that is projected to occur it may be difficult for the District to accommodate the projected growth both within existing boundaries and within the planning areas; and (2) issues may arise from restructuring of the Board of Directors to provide representation of the new areas.

Determination 7.5: Because VCMWD: (1) currently provides both water and wastewater services; (2) has the expertise in operating water and wastewater facilities; (3) has a solid financial base; (3) has a record of stability in management and governance; and (4) has a successful history of repairing, upgrading, and maintaining infrastructure, the District appears to have the government structure to assume responsibility for service provision throughout both RMWD and SLRMWD. However, VCMWD may have to restructure the Board of Directors to provide representation of the new areas within the existing SLRMWD area. Additionally, VCMWD would need to begin providing the services that are currently being provided by SLRMWD to the residents within SLRMWD, participate in extensive infrastructure development in order to provide both water and wastewater services, and coordinate with the landowners or developers to implement funding sources to provide for the necessary infrastructure and the costs related to annexation of the areas to SDCWA and MWD ($6,389 per acre, which totals over $19 million if the District were to annex the entire existing SLRMWD area).

Determination 8: Evaluation of Management Efficiencies

Management efficiency refers to the effectiveness of an agency's internal organization to provide efficient, quality public services. Efficiently managed agencies consistently implement plans to improve service delivery, reduce waste, eliminate duplications of effort, contain costs, maintain qualified employees, build and maintain adequate contingency reserves, and encourage and maintain open dialogues with the public and other public and private agencies. The MSR will evaluate management efficiency by analyzing agency functions, operations, and practices, as well as the agency's ability to meet current and future service demands. Services will be evaluated in relation to available resources and consideration of service provision constraints.

Determination 8.0: The District utilizes outside labor to provide several specific functions. This structure provides management efficiencies because this labor is generally specialized in nature, needed on an occasional basis, or provided more cost effectively by outside sources.

Determination 8.1: The VCMWD has a history of receiving numerous awards and recognitions. The areas of recognition include financial, liability and loss control, and energy management. This is indicative of an efficiently managed organization.

Determination 8.2: Several factors, which provide for VCMWD's overall management efficiency include: stability on the Board of Directors; policies regarding the policy development role of the Board and policy implementation role of staff; stability and long tenure of staff, including management; and succession planning for key staff positions.

Determination 9: Local Accountability and Governance

In making a determination of local accountability and governance, LAFCO will consider the degree to which the agency fosters local accountability. *Local accountability and governance* refers to public agency decision making and operational and management processes that: (1) include an accessible and accountable elected or appointed decision making body and agency staff; (2) encourage and value public participation; (3) disclose budgets, programs, and plans; (4) solicit public input when considering rate changes and work and infrastructure plans; and (5) evaluate outcomes of plans, programs, and operations and disclose results to the public.

Determination 9.0: The District's operational and management processes provides for public participation, which includes an accessible and accountable decision making body. Specifically, board meeting agendas are available pursuant to the Brown Act; workshops and direct mailings are conducted to obtain the public's input; newsletters, water quality reports, and informational pamphlets are published; and District notices to residents are provided on water bills. The District also provides Customer Comment cards to facilitate communication and feedback with customers.

4.16 SOI DETERMINATIONS FOR VALLEY CENTER MWD

As detailed in Section 1.0, Government Code Section 56425 requires written determinations with respect to the following four factors to update an agency's SOI. Based upon the information above, the following determinations are recommended to update the existing VCMWD SOI.

Present and Planned Land Uses in the Area

VCMD encompasses approximately 64,253 acres of unincorporated lands in northern San Diego County. Land within the existing VCMWD SOI is largely undeveloped and designated as agriculture, spaced rural residential, or vacant land. Smaller areas are designated as single-family residential, mobile home park, and parks. While agricultural lands currently make up a large portion of land within the VCMWD, only a few small scattered areas are designated as prime agricultural land, as shown in Figure 4.2.

San Diego County is currently going through a General Plan Update. Within this Update, the 2020 land uses have not been adopted and are shown as proposed on Figure 4.3. The currently proposed land uses within VCMWD are significantly different than the existing land use designations. The major difference is that large areas of lands currently designated as agricultural or vacant are proposed as spaced rural residential. There are also some additional areas proposed to be single-family residential located within the south central portion of the District.

Similarly, SANDAG predicts an increase in land utilized for single-family housing (from 1,044 acres in 2000 to 2,047 acres in 2030, a 96 percent increase over the 30-year period). In 2000, there were 23,289 acres of vacant developable land available, and there will only be 1,559 acres available in 2030, a decrease of 93 percent. These predictions confirm the expected transition from a predominantly agricultural area to that of large single-family homes and mixed agricultural/residential usage.

Present and Probable Need for Public Facilities and Services in the Area

It is projected by SANDAG that most of the anticipated growth within the District will be in housing units. The population is projected to grow at an average of 3.60 percent annually, and single-family housing is projected to grow at an average of 5.21 percent through 2030. The District is currently processing 74 individual development projects within the existing service area boundaries. These projects have the potential of bringing on line an additional 2,003 water service connections. The need for water and wastewater infrastructure and services will increase incrementally along with growth. Pursuant to SANDAG projections and the County's proposed land uses, demands for services can be expected to increase significantly through 2030.

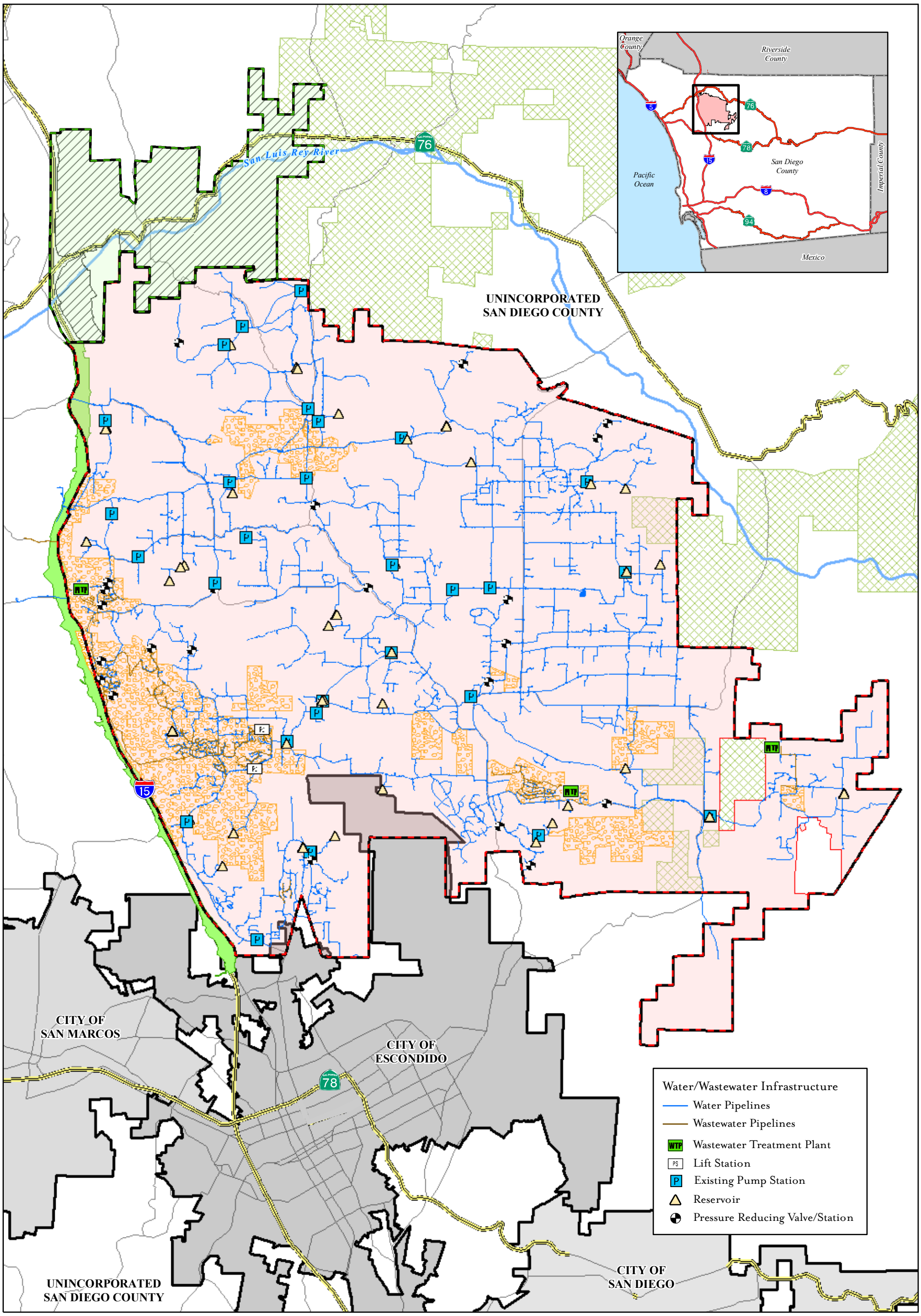
Present Capacity of Public Facilities and Adequacy of Public Services that the Agency Provides or is Authorized to Provide

Overall, the present capacities of the District's facilities and the services that the District is providing are adequate. The District has increased capacities and infrastructure along with growth to ensure adequate service provision. The District's facilities do not have any significant existing infrastructure deficiencies. The District has not received any permit or regulatory violations.

Existence of any Social or Economic Communities of Interest

Communities of social and economic interest include proposed development and anticipated growth that is expected to occur within VCMWD's SOI. As previously stated, the District is currently processing 74 individual development projects within the existing SOI, and single-family housing is projected to grow at an average of 5.21 percent annually through 2030. These developments are social and economic communities of interest for VCMWD.

In addition, the area currently within SLRMWD and the planning areas would be considered a social and economic community of interest if included within the VCMWD SOI.



LSA

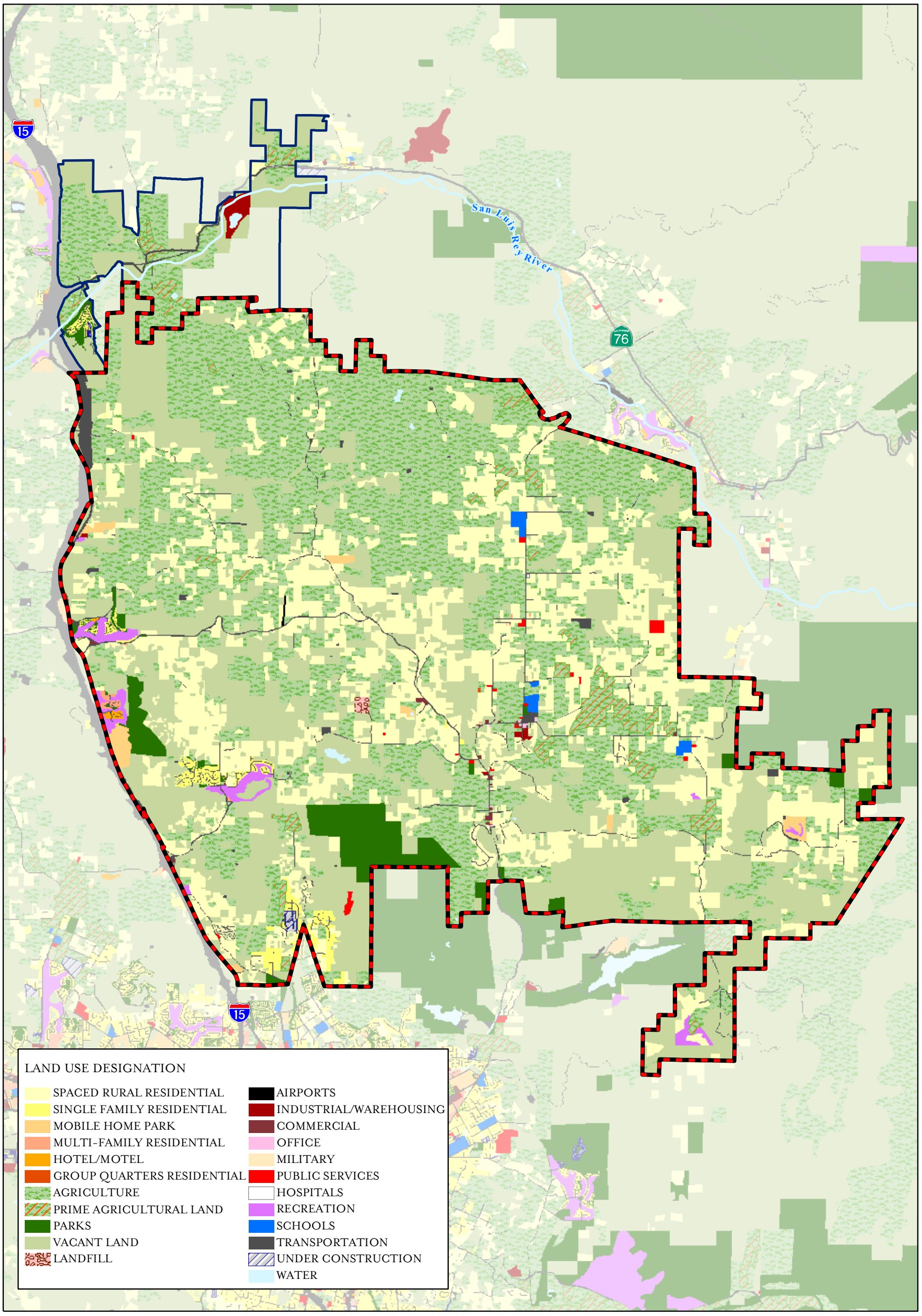
FIGURE 4.1

San Diego LAFCO MSR and SOI Update

Valley Center MWD Water and Wastewater Infrastructure

SOURCE: SANGIS (2004), Valley Center MWD (2006).

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LSA

FIGURE 4.2

Legend

Valley Center Sphere of Influence

Planning Areas

N

0 4,000 8,000

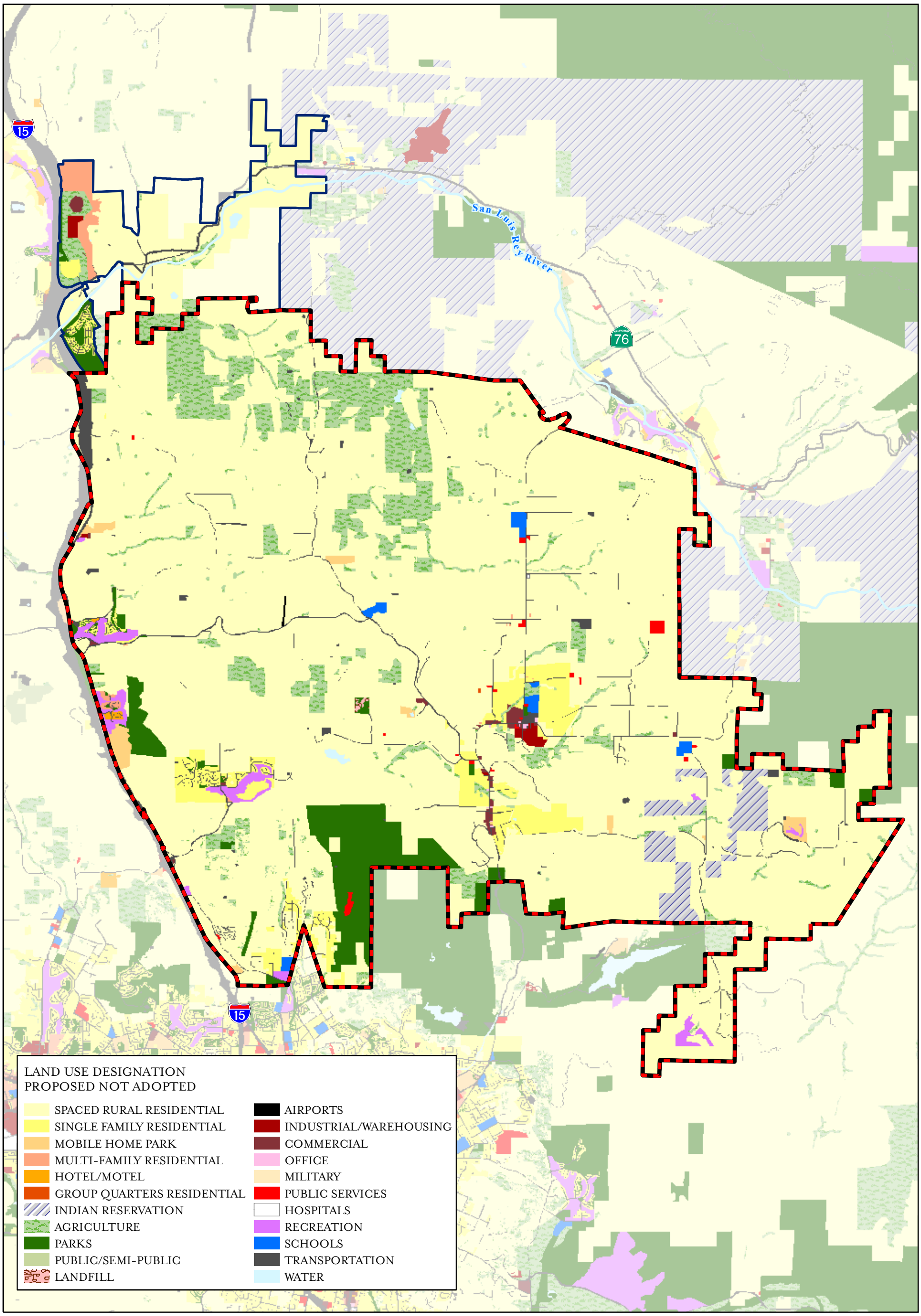
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SOURCE: SANDAG GIS (2001).

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San Diego LAFCO MSR and SOI Update

Valley Center MWD Existing Land Use (2000)



LSA

FIGURE 4.3

Legend

Valley Center Sphere of Influence

Planning Areas

N

0 4,000 8,000

FEET

SOURCE: SANDAG GIS (2001).

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San Diego LAFCO MSR and SOI Update

Valley Center MWD Proposed Land Use (2020)

4.A VALLEY CENTER MWD SUPPLEMENTAL DATA APPENDIX

Table 4.A1: VCMWD 10-Year History of Elections to the Board of Directors

November 1988	Incumbent: Charles L. Snavely opposed by William Morris Result: Charles Snavely(1) reelected
	Incumbent: James McKay opposed by Robert Polito Result: Robert Polito elected
November 1990	Incumbent: George Armstrong opposed by Kevin Mahan and F.R. Porterfield Result: George Armstrong reelected
	Incumbent: Gary Broomell opposed by Lynne Leichtfuss Result: Gary Broomell reelected
	Incumbent: Charles Bridges unopposed Result: Charles Bridges appointed by Board of Supervisors to a 4-year term
November 1992	Incumbent: Paul Feld opposed by Margaret Harms Result: Paul Feld reelected
	Incumbent: Robert Polito unopposed Result: Robert Polito appointed by Board of Supervisors to a 4-year term
November 1994	Incumbents: George Armstrong, Gary Broomell and Charles Bridges unopposed Result: George Armstrong, Gary Broomell and Charles Bridges appointed by Board of Supervisors to 4-year terms
November 1996	Incumbents: Robert Polito and Paul Feld unopposed Result: Robert Polito and Paul Feld appointed by Board of Supervisors to 4-year terms
November 1998	Incumbent: George Armstrong opposed by William Dyson Result: George Armstrong re-elected
	Incumbent: Gary A. Broomell opposed by Gabriella Nanci Result: Gary Broomell reelected
	Incumbent: Merle J. Aleshire opposed by Chester Nowicki Result: Merle J. Aleshire reelected
November 2000	Incumbents: Robert Polito and Charles Stone unopposed Result: Robert Polito and Charles Stone appointed by the Board of Supervisors to serve 4-year terms
November 2002	Incumbent: Randy Haskell opposed by Michael Finton Result: Randy Haskell reelected
	Incumbent: Gary Broomell opposed by Robert Silverman Result: Gary Broomell reelected
	Incumbent: Merle J. Aleshire unopposed Result: Merle Aleshire appointed by the Board of Supervisors to 4-year term
November 2004	Incumbent: Robert Polito unopposed Result: Robert Polito appointed by the Board of Supervisors to a 4-year term

	Incumbent: Charles Stone opposed by Doug Ohara Result: Charles Stone reelected

(1) Resigned January 1992. Paul Feld appointed to fill vacancy
(2) Resigned October 1997. Merle Aleshire appointed to fill vacancy
(3) Resigned February 2000. Charles Stone appointed to fill vacancy
(4) Resigned October 2001. Randy Haskell appointed to fill vacancy
Source: VCMWD RFI, March 2006.

Table 4.A2: Monthly Record of VCMWD Board of Directors Meetings for the Past 3 Years

	2002-03	2003-04	2004-05
January	1	2	1
February	2	1	1
March	2	2	2
April	2	2	2
May	1	2	2
June	2	2	2
July	2	3	1
August	1	1	1
September	2	2	2
October	2	2	2
November	2	2	2
December	2	1	2

Source: VCMWD RFI, March 2006.

Table 4.A3: VCMWD Five-Year History of Retirements, Resignations, and Terminations

	Retirement	Resignation	Termination
2001			
Executive	0	0	0
Managerial/Supervisor	0	0	0
Administrative	0	0	0
Engineering	0	0	0
Technicians	1	1	0
2002			
Executive	1	0	0
Managerial/Supervisor	1	0	0
Administrative	0	0	0
Engineering	0	0	0
Technicians	2	1	0
2003			
Executive	0	0	0
Managerial/Supervisor	0	1	0
Administrative	0	0	0

	Retirement	Resignation	Termination
Engineering	0	0	0
Technicians	0	1	0
2004			
Executive	0	0	0
Managerial/Supervisor	0	0	0
Administrative	0	0	0
Engineering	1	2	0
Technicians	0	3	1 (probationary)
2005			
Executive	2	0	0
Managerial/Supervisor	0	0	0
Administrative	0	0	0
Engineering	0	1	0
Technicians	2	1	1 (probationary)
Total	**10**	**11**	**2**

Source: VCMWD RFI, March 2006.

Table 4.A4: VCMWD Five Year History of Sole Source Contracts

	2001-01	2001-02	2002-03	2003-04	2004-05	Totals
Best, Best & Krieger Attorneys	96,657	103,430	75,891	94,949	108,012	478,944
Birdrock Systems, Inc. Computer Security Software	-	-	-	21,560	5,620	27,180
Datastream Computer Support	23,547	8,062	20,536	22,830	28,439	103,413
Gilchrist, Steen & Stanfield Auditors	19,700	21,200	20,350	-	-	61,250
Hecht, Solberg Robinson Retirement Plan	10,396	4,797	874	284	112	16,462
Hummingbird USA, Inc. Document Management	-	-	-	213,651	30,781	244,432
Leaf & Cole, LLP Auditors	-	-	-	19,400	17,750	37,150
Palley-Needleman Retirement Investment Advisor	7,712	-	-	-	-	7,712
Tripwire, Inc. Network Security Software	-	-	-	-	14,901	14,901
Western National Trust Investment Advisors	-	-	-	17,225	20,378	37,603

Source: VCMWD RFI, March 2006.

Table 4.A5: VCMWD Legal Expenses for the Last Five Fiscal Years

	2000-01	2001-02	2002-03	2003-04	2004-05	Total
Best, Best & Krieger	96,657	103,434	75,891	94,949	108,012	478,944
Hect, Solberg Robinson	10,396	4,797	874	284	112	16,463
Total	107,053	108,231	76,766	95,233	108,124	495,406

Source: VCMWD RFI, March 2006.

Table 4.A6: VCMWD Recent History of Water Rate Increases (Rates Per Acre Foot)

Municipal and Industrial Water Service								
	Jan 2003		**Jan 2004**		**Jan 2005**		**Jan 2006**	
MWD Charges	$454.46		$461.61	(a)	$489.57	(a)	$500.72	(a)
Increase over prior year			1.57%		6.06%		2.28%	
SDCWA Charges	$96.22		$115.22	(a)	$129.20	(a)	$165.27	(a)
Increase over prior year			19.74%		12.14%		27.92%	
Subtotal	**$550.69**		**$576.82**		**$618.77**		**$665.99**	
Increase over prior year			4.75%		7.27%		7.63%	
VCMWD	$71.61		$74.57	(b)	$77.28	(b)	$79.85	(b)
Increase over prior year			4.14%		3.62%		3.33%	
ERAF	$0.00		$0.00		$10.02	(c)	$13.42	(c)
							33.91%	
Total Rate	**$622.30**		**$651.40**		**$706.06**		**$759.25**	
Increase over prior year			4.68%		8.39%		7.53%	
Certified Agricultural Water Service								
	Jan 2003		**Jan 2004**		**Jan 2005**		**Jan 2006**	
MWD Charges	$317.47		$332.45	(a)	$360.46	(a)	$371.65	(a)
Increase over prior year			4.72%		8.43%		3.11%	
SDCWA Charges	$80.02		$83.33	(a)	$81.15	(a)	$89.34	(a)
Increase over prior year			4.14%		-2.61%		10.09%	
Subtotal	**$397.49**		**$415.78**		**$441.61**		**$461.00**	
Increase over prior year			4.60%		6.21%		4.39%	
VCMWD	$71.61		$74.57	(b)	$77.28	(b)	$79.85	(b)
Increase over prior year			4.14%		3.62%		3.33%	
ERAF	$0.00		$0.00		$10.02	(c)	$13.42	(c)
							33.91%	
Total Rate	**$469.10**		**$490.35**		**$528.91**		**$554.26**	
Increase over prior year			4.53%		7.86%		4.79%	

(a) Pass through wholesale cost increases.

(b) Increase to offset local cost increases.

(c) New rate added to cover the effects of the Educational Revenue Augmentation Fund (ERAF) tax shift.
Source: VCMWD RFI, March 2006.

5.0 ORGANIZATIONS AND PERSONS CONTACTED

LAFCO, San Diego County, San Diego County Water Authority

Michael Ott, Executive Officer, San Diego LAFCO
Ingrid Hansen, Chief, Governmental Services, San Diego LAFCO
Dieu Ngu, GIS, San Diego LAFCO
Ross Martin, GIS, San Diego County
David Lindsay, County GIS Manager, County of San Diego
Dana Friehauf, San Diego County Water Authority

Rainbow MWD

Brian C. Lee, District Engineer, Rainbow MWD
Chris Trees, Rainbow MWD
John Pastore, Rainbow MWD Consultant, Dudek & Associates, Inc.

San Luis Rey MWD

Jack Hoagland, San Luis Rey Consultant, Management & Organization Consulting Services
Terry Fenner, Project Manager, San Luis Rey Consultant, EDAW
Scott F. Humphrey, P.E., Senior Project Manager, San Luis Rey Consultant, Infrastructure Engineering Corporation
Richard Miller, MetroPlan LLC

Valley Center MWD

Gary Arant, District Manager, Valley Center MWD
Patricia Garcia, GIS/Maps & Records Division, Valley Center MWD

6.0 REFERENCES

General

SANDAG Final 2030 Cities/Counties Growth Forecast, December 2003.

Rainbow MWD

Rainbow MWD RFI Response, April and June 2006.
Rainbow MWD Financial Statement FY Ending June 30, 2005.
Rainbow MWD Fiscal Year 2005-06 Budget.
Rainbow MWD Ordinance No. 05-08.
Rainbow MWD Ordinance No. 04-04.
Rainbow MWD Ordinance No. 03-04.
Rainbow MWD Draft Water Master Plan, Including Addendum, May 2006.
Rainbow MWD Draft Wastewater Master Plan, Including Addendum, May 2006.
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Rainbow MWD 2000 Wastewater Master Plan, September 2000.
Rainbow MWD ACWA Joint Powers Insurance Claim Summary. Run Date 8/17/05

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San Luis Rey MWD RFI Response, March 2006.
San Luis Rey Annual Budget FY 2005-06.
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San Luis Rey Master Plan for Water and Wastewater Services, October 2005.
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Valley Center MWD Article 160, Section 160.3.
Valley Center MWD Draft Urban Water Management Plan, December 2005.
Valley Center MWD Water Master Plan, April 2002.

APPENDIX A

SAN DIEGO LAFCO MSR GUIDELINES

Municipal Service Review Guidelines

I. PURPOSE

To provide guidance to the San Diego Local Agency Formation Commission (LAFCO) in preparing and conducting municipal service reviews.

II. BACKGROUND

The Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 requires LAFCO to review municipal services. The requirement for service reviews is in response to the identified need for a more coordinated and efficient public service structure, which will support California's anticipated growth. The service review provides LAFCO with a tool to comprehensively study existing and future public service conditions and to evaluate organizational options for accommodating growth, preventing urban sprawl, and ensuring that critical services are efficiently and cost-effectively provided.

III. GOALS and OBJECTIVES

Effective January 1, 2001, Government Code Section 56430 requires LAFCO to conduct municipal service reviews and prepare a written statement of determination with respect to each of the following:

A. Infrastructure needs or deficiencies;
B. Growth and population projections for the affected area;
C. Financing constraints and opportunities;
D. Cost avoidance opportunities;
E. Opportunities for rate restructuring;
F. Opportunities for shared facilities;
G. Government structure options, including advantages and disadvantages of consolidation or reorganization of service providers;
H. Evaluation of management efficiencies; and
I. Local accountability and governance.

The municipal service review process does not require LAFCO to initiate changes of organization based on service review findings; it only requires that LAFCO make determinations regarding the provision of public services per the provisions of Government Code Section 56430. However, LAFCO, local agencies, and the public may subsequently use the determinations to pursue changes to services, local jurisdictions, or spheres of influence.

IV. WHEN PREPARED

LAFCO will determine when municipal service reviews are necessary. Generally, reviews will be prepared in conjunction with sphere of influence studies or updates; however, service reviews may also be conducted independent of the sphere of influence process. Minor amendments to a

sphere of influence, as determined by LAFCO, will not require a municipal service review.

V. SERVICES ADDRESSED

Municipal service reviews will address those public services within an agency's boundary and sphere of influence, which are associated with growth and development. Target services include—but are not limited to—water, sewer, drainage, libraries, roads, parks, police, and fire protection. General government services such as courts, social services, human resources, treasury, tax collection, and administrative services will generally not be included. LAFCO will determine which services will be included in each service review.

VI. AGENCIES INCLUDED

Local agencies that are subject to LAFCO review, or are required to have a sphere of influence, are subject to municipal service reviews.

VII. BOUNDARIES

LAFCO will determine the final geographic boundary and agency(ies) that will be the subject of a service review. LAFCO will consider information received from affected agencies and public scoping meetings when determining boundaries. Generally, service reviews will be conducted for sub-regional areas within the County of San Diego; however, a service review may be done for a single agency, multiple agencies, subregional areas, or on a countywide basis. Agencies, which have 70% or more of their territory within the boundary of a targeted service review, and agencies within the boundary that have service provision issues—as identified by LAFCO—will be included in the service review.

VIII. ENVIRONMENTAL DETERMINATION

Local Agencies that submit municipal service review proposals to LAFCO will be considered lead agencies for purposes of environmental review and should approve whatever environmental determination is appropriate under the California Environmental Quality Act (i.e., exemption, negative declaration, environmental impact report).

IX. PREPARATION

A. LAFCO will determine the priority, schedule, procedure and content for service reviews. Portions of the Municipal Service Review Guidelines prepared by the State of California's Office of Planning and Research (OPR) may be incorporated into individual reviews.

B. At the start of each fiscal year, LAFCO will develop a priority work plan of service reviews to be addressed during the fiscal year. LAFCO may alter the annual service review work program at any time in response to

changing circumstances, new information, or direction from the Commission.

C. LAFCO will mail a survey/questionnaire to the affected agency(s) identified in the service review work plan.

D. LAFCO may hold public scoping meetings, as necessary, for selected service reviews to gather additional input on the following issues:

1. Additional agencies to be included within a service review;
2. Geographic area of a service review;
3. Concerns of affected agencies;
4. Areas of concern to be addressed in a service review.

Public notice will be given for scoping meetings. All affected agencies, interested agencies, and persons or entities requesting notice will receive a mailed notice.

E. Municipal service reviews will fall into two general categories:

1. **Routine reviews** are anticipated to be uncomplicated and straightforward with few concerns about the adequacy of public services. Routine service reviews may be conducted for single agencies or for multiple agencies that provide similar services. The boundary of a routine service review may cover a sub-region, region, or the County of San Diego.

2. **Intensive reviews** are anticipated to require detailed analysis of complex and controversial issues. Categorizing a service review as *intensive* may be the result of analysis of pending LAFCO proposals, or of service provision concerns otherwise identified by LAFCO, other agencies, or the public,

F. If a service review is determined to be intensive or involve significant controversy, LAFCO staff may establish a service review committee to provide technical and/or policy advice to LAFCO staff. The service review committee may consist of the existing LAFCO Special District and City Advisory Committees or it may be composed of other members as determined by LAFCO.

G. LAFCO staff will prepare a final municipal service review report that includes the determinations required by State Law. The report may identify future studies or actions, which LAFCO or other agencies may take to implement the recommendations of the report. The Commission will consider the municipal service review report and determinations at a noticed public hearing. The report will be available for a public review period prior to the hearing.

H. San Diego LAFCO has established a fee for conducting municipal service reviews. If necessary, LAFCO may recover reasonable costs for preparation of a service review study, which are beyond the adopted fee.

Municipal Service Review Determinations
Factors of Analysis

The Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 requires LAFCOs to conduct reviews of municipal services and make nine written determinations. The following factors to be considered provide examples of how San Diego LAFCO will fulfill the determination requirement.

Determination 1: Infrastructure needs or deficiencies

In authorizing the preparation of municipal service reviews, the State Legislature has focused on one of LAFCO's core missions—encouraging the efficient provision of public services. Infrastructure needs or deficiencies, which refers to the adequacy of existing and planned public facilities in relation to how public services are—and will be—provided to citizens, impacts the efficient delivery of public services. Infrastructure can be evaluated in terms of capacity, condition, availability, quality, and correlations among operational, capital improvement, and finance plans. It is recognized that there may be unmet infrastructure needs due to budget constraints or other factors; however, identification of deficiencies may promote public understanding and support for needed improvements.

Determination 2: Growth and population projections for the affected area

Efficient provision of public services is linked to an agency's ability to plan for future need. For example, a water purveyor must be prepared to supply water for existing ***and*** future levels of demand, and also be able to determine ***where*** future demand will occur. Municipal service reviews will give LAFCO, affected agencies and the public the means to examine both the existing and future need for public services and will evaluate whether projections for future growth and population patterns are integrated into an agency's planning function.

Determination 3: Financing constraints and opportunities

LAFCOs must weigh a community's public service needs against the resources available to fund the services. During the municipal service review, the financing constraints and opportunities, which have an impact on the delivery of services, will be identified and enable LAFCO, local agencies, and the public to assess whether agencies are capitalizing on financing opportunities. For example, a service review could reveal that two or more water agencies that are each deficient in storage capacity and, which individually lack financial resources to construct additional facilities, may benefit from creating a joint venture to finance and construct regional storage facilities. Service reviews may also disclose innovations for contending with financing constraints, which may be of considerable value to numerous agencies.

Determination 4: Cost avoidance opportunities

LAFCO's role in encouraging efficiently provided public services depends, in part, on helping local agencies explore cost avoidance opportunities. The municipal service review will explore cost avoidance opportunities including, but not limited to: (1) eliminating duplicative services; (2) reducing high administration to operation cost ratios; (3) replacing outdated or deteriorating infrastructure and equipment; (4) reducing inventories of underutilized equipment, building, or facilities; (5) redrawing overlapping or inefficient service boundaries; (6) replacing inefficient purchasing or budgeting practices; (7) implementing economies of scale; and (8) increasing profitable outsourcing.

Determination 5: Opportunities for rate restructuring

When applicable, the municipal service review will review agency rates, which are charged for public services, to examine opportunities for rate restructuring without impairing the quality of service. Agency rates will be scrutinized for: (1) rate setting methodologies; (2) conditions that could impact future rates; and (3) variances among rates, fees, taxes, charges, etc., within an agency and region. Service reviews will identify strategies for rate restructuring, which would further the LAFCO mission of ensuring efficiency in providing public services.

Determination 6: Opportunities for shared facilities

Public service costs may be reduced and service efficiencies increased, if service providers develop strategies for sharing resources. For example, service providers in San Diego County currently share communication centers, wastewater treatment facilities and distribution lines. Sharing facilities and excess system capacity decreases duplicative efforts, may lower costs, and minimizes unnecessary resource consumption. The service review will inventory facilities within the study area to determine if facilities are currently being utilized to capacity and whether efficiencies can be achieved by accommodating the facility needs of adjacent agencies. Options for planning for future shared facilities and services will also be considered.

Determination 7: Government structure options, including advantages and disadvantages of consolidation or reorganization of service providers

The Municipal Service Review provides a tool to comprehensively study existing and future public service conditions and to evaluate organizational options for accommodating growth, preventing urban sprawl and ensuring that critical services are efficiently and cost-effectively provided. While the service review does not require LAFCO to initiate changes of organization based on service review finding, LAFCO, local agencies, and the public may subsequently use service reviews to pursue changes to services, local jurisdictions or spheres of influence. LAFCOs may examine efficiencies that could be gained through: (1) functional reorganizations within existing agencies; (2) amending or updating spheres-of-influence; (3) annexations or detachments from cities or special districts; (4) formation of new special districts; (5) special district dissolutions; (6) mergers of special districts with cities; (7) establishment of subsidiary districts; or (8) any additional reorganization options found in Govt. Code § 56000 et. Seq.

Determination 8: Evaluation of management efficiencies

Management efficiency refers to the effectiveness of an agency's internal organization to provide efficient, quality public services. Efficiently managed agencies consistently implement plans to improve service delivery, reduce waste, eliminate duplications of effort, contain costs, maintain qualified employees, build and maintain adequate contingency reserves, and encourage and maintain open dialogues with the public and other public and private agencies. The service review will evaluate management efficiency by analyzing agency functions, operations, and practices—as well as the agency's ability to meet current and future service demands. Services will be evaluated in relation to available resources and consideration of service provision constraints.

Determination 9: Local accountability and governance

In making a determination of local accountability and governance, LAFCO will consider the degree to which the agency fosters local accountability. *Local accountability and governance* refers to public agency decision making and operational and management processes that: (1) include an accessible and accountable elected or appointed decision making body and agency staff; (2) encourage and value public participation; (3) disclose budgets, programs, and plans; (4) solicit public input when considering rate changes and work and infrastructure plans; and (5) evaluate outcomes of plans, programs, and operations and disclose results to the public.

APPENDIX B

SAN DIEGO LAFCO POLICY L-101: PRESERVATION OF OPEN SPACE AND AGRICULTURAL LANDS

LEGISLATIVE POLICY L-101

Subject

PRESERVATION OF OPEN SPACE AND AGRICULTURAL LANDS

Purpose

To further the policies and priorities of the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 regarding the preservation of open space and prime agricultural lands.

Background

The State Legislature has instructed Local Agency Formation Commissions to establish policies that address the preservation of open space (Govt. Codes § 56300 and 56377). LAFCOs are required to consider how spheres of influence or changes of local governmental organization could affect open space and prime agricultural lands. Commissions are directed to guide development away from prime agricultural lands – unless that action would not promote the planned, orderly and efficient development of an area – and to encourage development of existing vacant or non-prime agricultural lands within a jurisdiction before approving any proposal that would allow development of open-space lands outside of an agency's boundary (Govt. Code § 56377). Proposals must be further reviewed for their effect on maintaining the physical and economic integrity of agricultural lands (Govt. Code § 56668).

Policy

It is the policy of the San Diego Local Agency Formation Commission to:

1. Discourage proposals that would convert prime agricultural or open space lands to other uses unless such an action would not promote the planned, orderly, efficient development of an area ***or*** the affected jurisdiction has identified all prime agricultural lands within its sphere of influence and adopted measures that would effectively preserve prime agricultural lands for agricultural use;

2. Require prezoning of territory (city only) to identify areas subject to agricultural/preservation and planned development;

3. Follow San Diego LAFCO's adopted procedures to define agricultural and open space lands and to determine when a proposal may adversely affect such lands.

Adopted:	November 6, 1978
Amended:	June 4, 1990
Amended:	May 4, 1998
Technically Updated:	January 1, 2001

Cross-reference:

SAN DIEGO LAFCO PROCEDURES:
-Open Space and Agricultural Preservation