Municipal Service Review & Sphere of Influence Study

Orange County Water District

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ACRONYMS

AF	Acre foot
AFY	Acre feet per year
BCV	Basin Cleaning Vehicle
BEA	Basin Equity Assessment
BPP	Basin Pumping Percentage
CDR	Center for Demographic Research
CFS	Cubic feet per second
CIP	Capital Improvement Plan (or Program)
CRA	Colorado River Aqueduct
CSUF	California State University, Fullerton
DWR	California Department of Water Resources
EPA	Environmental Protection Agency
GAP	Green Acres Project
GPD	Gallons per day
GWR	Groundwater Replenishment
LAFCO	Local Agency Formation Commission
LTFP	Long-Term Facilities Plan
MG	Million gallons
MGD	Million gallons per day
MSR	Municipal Service Review
MSL	Mean Sea Level
MWDOC	Municipal Water District of Orange County
NA	Not Applicable
NP	Not Provided
OCCOG	Orange County Council of Governments
OCP-2004	Orange County Projections – 2004
OCSD	Orange County Sanitation District

OCWD	Orange County Water District
RA	Replenishment Assessment
SAR	Santa Ana River
SAWPA	Santa Ana Watershed Project Authority
SCAG	Southern California Association of Governments
SF	Square foot
SWP	State Water Project
VOC	Volatile Organic Compounds

Section 1:

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

Overview

The purpose of this report is to review municipal services, infrastructure and governance functions and capacity of the Orange County Water District (OCWD). LAFCO is mandated by state law to conduct a comprehensive review of municipal service delivery and update the spheres of influence of agencies under its jurisdiction not less than every five years.

MSR Process & the Nine Determinations

Municipal service reviews, or "**MSRs,**" are studies that examine future growth and how local governments will plan for the municipal service, governance, and infrastructure needs arising from growth over the next 15 to 20 years. They resulted from new state law enacted by the California legislature in 2000, requiring all LAFCOs throughout the state to conduct regional studies as part of their periodic review of city and special district spheres of influence.

Government Code Section 56430 requires LAFCOs to conduct MSRs regionally or subregionally, make determinations on local agencies' spheres of influence, and formulate nine determinations about the agencies' present and future opportunities, constraints, and needs.

While state legislation mandates the completion of MSRs, the legislature did not establish a methodology by which LAFCOs must complete them. Orange County LAFCO launched its own MSR/SOI program in January 2004. The process has been refined with each completed MSR and Sphere update; however, the primary elements

of the program approach remain the same. Orange LAFCO's program focuses on three primary processes:

- ***The Municipal Service Review Report*** reviews the agency/focus area service delivery, infrastructure and governance functions and capacity based on projected growth to the area and identifies issues, needs and/or deficiencies related to the nine required determinations.

- ***The Stakeholder Input Process*** provides a forum for representatives from the stakeholder agencies, collectively referred to as the stakeholder working group (SWG), to comment on the MSR report and identify any other issues, gaps or opportunities for efficiencies not reflected in the report. The SWG for the OCWD MSR included the members of the Groundwater Producers Committee. A summary of Stakeholder comments and listing of SWG members are included in Section 3 of this report.

- ***The Sphere of Influence Update*** is the third phase of the process. The Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 defines a "sphere of influence" as a plan for the probable physical boundaries and service area of a local agency, as determined by the commission. Before an area can be annexed, it must be within the annexing agency's adopted sphere of influence. OCWD's SOI will be updated subsequent to this MSR.

OCWD MSR Summary

The study area addressed in this report includes the jurisdictional boundary of the Orange County Water District. The District's service territory essentially aligns with the Orange County portion of the Santa Ana River Watershed, an area commonly referred to as the Orange County *groundwater basin*. The basin underlies much of northern and central Orange County. In its role as the groundwater basin management agency, the OCWD provides direct service to 20 cities and special districts. Those agencies are identified under Section 2, Agency Profile portion of this report.

No significant issues for the District were noted during this municipal service review. Below are some conclusions regarding the nine required determinations based on analysis of the District's structure, functions and service provision.

- OCWD's service area population is projected to grow modestly over the next 20 years and does not appear to negatively impact the District's service capacity.

- The District's infrastructure is adequate to address future needs.
- The District has no identified financial constraints.
- The District engages in a number of collaborations and shared facilities arrangements particularly related to regional water resource management.
- OCWD faces increased demand for services in the future from two primary sources: infill development and potential annexation of additional territory to the District. Existing groundwater management practices appear to be sufficient to address projected growth due to either factor. No significant government structure options were noted. A range of potential government structure options for the District are discussed in the MSR under Section 8, Government Structure Options.

Next Steps

The Commission will consider the MSR report at a noticed public hearing. At the hearing the Commission will receive and file the MSR report and adopt the service review's nine determinations. The Commission is not required to take any other action regarding this report. A sphere of influence study will begin subsequent to the completion of this service review. Any annexations pending before the OCWD and LAFCO will be considered when making a sphere of influence update recommendation to the Commission.

Section 2:

AGENCY PROFILE

AGENCY PROFILE

Introduction

The Orange County Water District (OCWD) is an independent special district formed in 1933 by an act of the State Legislature to protect Orange County's water rights for the Santa Ana River and to manage the groundwater basin that underlies northern and central Orange County. OCWD holds rights to all Santa Ana River flows that reach Prado Dam. The District recharges the Orange County groundwater basin primarily with water from the Santa Ana River, supplemented by untreated imported water purchased from the Metropolitan Water District of Southern California (Metropolitan). In Orange County, the purchase of imported water from Metropolitan is handled by four Metropolitan member agencies: Municipal Water District of Orange County (MWDOC) and the cities of Santa Ana, Anaheim and Fullerton.

The groundwater basin is not adjudicated, but is cooperatively managed by OCWD and its groundwater producers. The District's daily/annual oversight and management of the basin follows the strategies, objectives and practices identified in its groundwater management plan. The District provides service to the following cities and water agencies:

Cities:		Water Agencies:
• Anaheim	• Buena Park	• East Orange County Water District
• Fountain Valley	• Fullerton	• Irvine Ranch Water District
• Garden Grove	• Huntington Beach	• Mesa Consolidated Water District
• La Palma	• Newport Beach	• Orange Park Acres Mutual Water District
• Orange	• Santa Ana	• Serrano Water District
• Seal Beach	• Tustin	• Golden State Water Company
• Westminster		• Yorba Linda Water District

A profile of the District follows, as well as a map of the District's boundaries and current sphere of influence (SOI). This is followed by a schematic depicting the water supply system in Orange County.

Orange County Water District

Agency Information		Service Area Information	
Address:	10500 Ellis Avenue Fountain Valley, CA 92708	**Service Area:**	343.8 sq miles
Contact:	Virginia Grebbien, General Manager	**2005 Population:**	2,302,131
Phone:	(714) 378-3200 (714) 378-3373 fax	**Projected Population*:**	
Website:	www.ocwd.com	**2010**	2,405,508
		2015	2,453,302
		2020	2,491,200
		2025	2,526,906
		2030	2,546,161

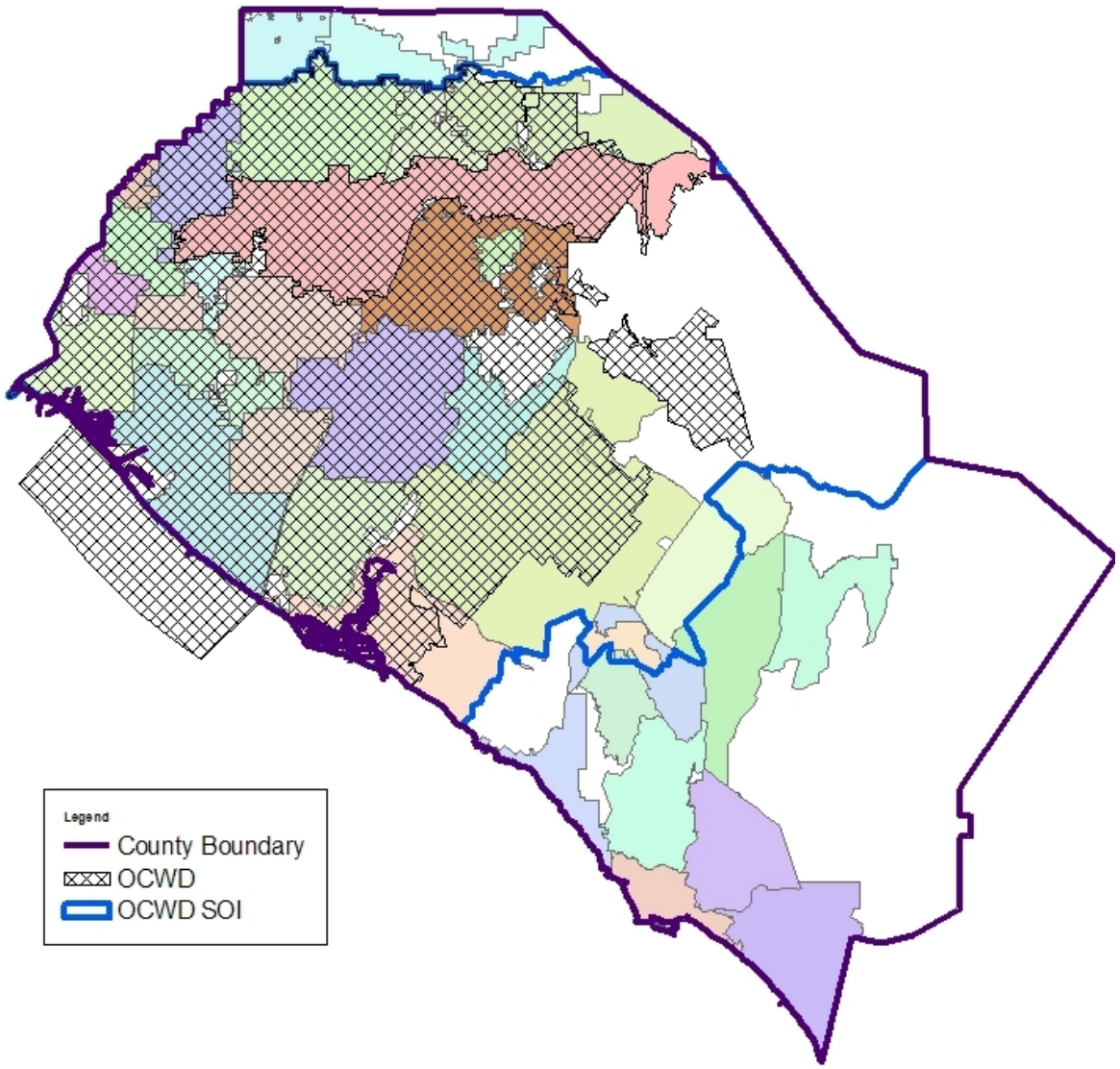
Financial Information (FY 2005-2006 budget) (in millions)							
Revenues:	$275.26	**Operating Budget:**	$76.69	**Capital Improvement Budget:**	$196.17	**Reserves at Year End:**	$55

Service Summary		
Water Demands:		
Total Current Water Demands within Service Area (FY 2005-06)	491,000 afy	
Current Annual Basin Production (FY 2005-06)	318,000 afy (9,200 afy for agricultural use)	
Estimated Water Demand in Year 2025	568,000 afy	
Estimated Basin Yield with Groundwater Replenishment System in Operation	400,000 afy	
Service Area Water Supply:	***AFY***	
OCWD: Groundwater Basin Recharge (FY 2005-06):	194,000	Santa Ana River and stormflows
	60,000	Natural incidental recharge
	50,000	Metropolitan replenishment water
	12,000	Seawater Barrier injection
	2,000	Arlington Desalter
	318,000	Total
Other Supplies (FY 2005-06):	14,000	Add'l Basin pumping for water quality projects
	18,000	Other local supplies
	141,000	Metropolitan treated water purchases by producers
	173,000	Total Other Supplies
Total Estimated Water Supply (FY 2005-06)	**491,000 afy**	
Possible Add'l New Water Supplies/Groundwater Pumping by Year 2025 per Draft Long-Term Facilities Plan.	93,000	7 recharge projects
	22,000	New supply from Groundwater Replenishment System – Phase II
	11,200	Basin Mgmt – West Orange County
	29,800	Basin Mgmt – Seawater Intrusion Control
	156,000	Total New Supply from 25 projects

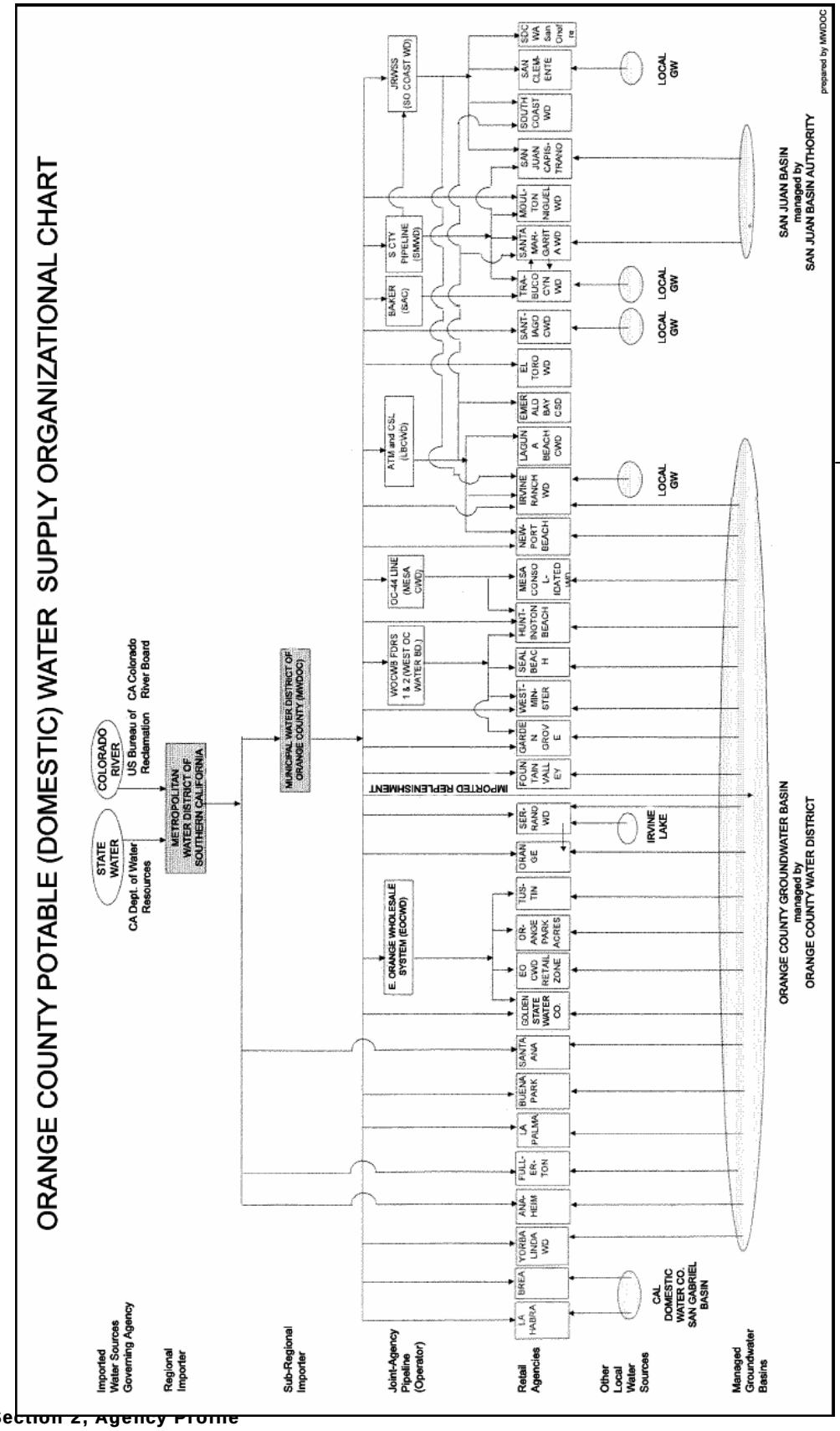
**Population estimates exclude unincorporated area*

The District's service area boundaries encompass 229,000 acres in the northern half of Orange County. The current OCWD SOI originally adopted in 1977 predominantly aligns with the Santa Ana River watershed within Orange County. A sphere of influence is a boundary LAFCO uses to predict future growth and service needs for a particular agency. An agency's SOI may be larger, smaller or the same as its corporate boundary. An OCWD sphere study will be conducted as a follow up to this report.

OCWD Service Area map and existing Sphere of Influence



Orange County Water Supply System



Section 3:

STAKEHOLDER WORKING GROUP

STAKEHOLDER WORKING GROUP

A. Stakeholder Input Process

The purpose and intent of service reviews is to gather data and information to document agencies' capacity to provide efficient and cost-effective municipal services to Orange County residents over the next 10 to 20 years. To meet the requirement Orange LAFCO chose to design a program that followed three guiding principles ensuring that service reviews would be:

1. Based on sound, defensible data and information
2. Future-focused
3. Open and inclusive process with stakeholder and public input

Completing the comprehensive future-focused service review report is only one step in the process. To remain true to the Commission's guiding principles, another important step in the process is to present the report to affected and interested parties for input and comment. The key stakeholders for a subject MSR are those representatives with substantial knowledge, expertise and involvement with the subject agency. The stakeholder process, typically a series of facilitated meetings, provides a forum for general discussion and feedback to LAFCO and the subject agency(s) on the content of and issues addressed in the service review report. Through those discussions, stakeholders are encouraged to:

- Identify new strategic approaches and joint opportunities for regional collaboration
- Discuss service, infrastructure and governance efficiencies, deficiencies and/or opportunities for improvement
- Introduce other pertinent information that may have been overlooked in the service review report

B. OCWD Stakeholder Group

OCWD fills a unique role and function as the County's primary groundwater basin management agency providing water to more than 20 cities and special districts serving over two million residents in Orange County. Those cities and districts are OCWD's *direct customers* who in-turn provide water directly to end users. It has been LAFCO's practice to consult with the MSR subject agency to identify key members of a potential stakeholder group. LAFCO staff and consultant conducted an interview with OCWD staff to review the MSR/SOI process and seek suggestions for a stakeholder working group. The OCWD strongly supported the idea of a stakeholder process and recommended that LAFCO consult its *Groundwater Producers Committee*, a representative group of direct customers served by OCWD, for input and feedback on the MSR report and agency performance issues. The table below lists the Groundwater Producers Committee members that participated in the August stakeholder input session.

OCWD Stakeholder Input Group

Don Calkins – Anaheim	Rick Shintaku-Anaheim
Keith Lyon – MWDOC	Bob McVicker – Mesa Consol WD
Lorrie Laustem– Fullerton	Patrick Scanlon – Golden State Water Co
Diana Leach – Mesa Consol WD	Thom Coughran – Santa Ana
Ray Burk – Santa Ana	Craig Miller – OCWD
Bob Kellison – Fountain Valley	John Kennedy – OCWD
Shivaji Deshmukh – OCWD	Tim DeTurk – Serrano WD
Ken Vecchiarelli – YLWD	Joe DeFrancesco – Orange
Zack Barrett – Garden Grove	Lonnie Curtis – Golden State Water Co
Matt Stone – MWDOC	George Murdoch – Newport Beach
Paul Cook – IRWD	Oliver Pacifico – Golden State Water Co
Rich Mathis – Garden Grove	Ron Wildermuth – OCWD
Fred Adjarian – Tustin	Alexis Clark – OCWD
Howard Johnson – Huntington Beach	Lo Tan – OCWD
Paul Jones - IRW	

C. Stakeholder Input

LAFCO staff and its independent facilitator conducted two stakeholder input sessions during regularly scheduled Groundwater Producers Committee meetings in August and September 2006. Stakeholders were provided a copy of the draft MSR report in

advance of the first meeting to prepare for the discussion. During the session, LAFCO staff presented an overview of the MSR and SOI update program and LAFCO's consultant led the group in a facilitated discussion of the following topics:

- Content of the MSR report
- OCWD's strengths and areas for improvement
- Any other needed services the District is not currently providing

In summary, the stakeholders commented that the Orange County Water District is doing a good job in many functions. In particular, the group commented on several issues identifying the OCWD's overall effectiveness managing the groundwater basin. Correspondingly, several comments identified a potential for improvement in communication with all levels of customers from the end user on up to the Board.

Strengths:

- ✓ Water quality management
- ✓ Hydro-geological understanding of the Basin
- ✓ Gathering and analyzing samples required by regulatory agencies
- ✓ Increased the yield of the groundwater basin
- ✓ Sea water barrier management
- ✓ Prado Dam and work with the Corp of Engineers to increase elevation
- ✓ Developing and implementing innovative programs to support groundwater basin management principles
- ✓ Public outreach and communication – particularly on Groundwater Replenishment (GWR) project
- ✓ Advocate for groundwater issues with Metropolitan (MET); coordinates well with MWDOC and the three cities
- ✓ Effective single point of coordination and information for the public on water quality and water levels
- ✓ Represents member interests with other agencies including agencies outside of Orange County
- ✓ Provides a good forum for stakeholder input
- ✓ Data collection
- ✓ Regulatory assistance
- ✓ Financial planning; is an excellent funding catalyst; successful at securing grants which reduces over all costs
- ✓ Annual engineers report
- ✓ Relationship with MWDOC; conjunctive use and emergencies

Along with identifying areas where OCWD is strong, the following is a summary of areas where the stakeholders desired improvement by the District:

Improvement Areas:

- More aggressive regarding processing abandoned wells – particularly working with County Health Department on this issue
- More investigation/ understanding threat of sea water intrusion
- Continue building on the already excellent working relationship with MWDOC relative to conjunctive use and emergencies outside of basin
- Include special districts when working with the cities
- Improved empathy and understanding of all customers
  - Serve customers with different needs equally
- Provide full communication relative to issues going to the Board
- Some feel that they "get lost" and there is a sense of "callousness" regarding their needs
- Recognize and deal with the different needs of the "direct customer" and the "residential customer"
- Directors are ultimately accountable to the residential customer
- Control spending, especially projects that don't produce water
- Ensure that BPP/RA numbers are distributed early enough for agencies to budget; five year projections
- Conduct a cost/benefit analysis of operations on a regular basis
- Provide a system that easily identifies issues of importance to producers and a means for tracking the issues
- Provide an on-going tracking system for projects (costs, implementation) so that producers can easily monitor progress and change
- Follow through on input received at discussion forums
  - Some feel their input is not given "full consideration"
  - Satisfactory "closure" is not always achieved
  - Disconnect between Producers and Board

The second stakeholder meeting was held in September and addressed final comments on the draft MSR report. The stakeholder discussion has been incorporated into this document for the purpose of creating a record for future use by the agency and its stakeholders. The stakeholder input will also be used as a resource by LAFCO as it considers a sphere of influence update subsequent to this MSR report. The complete version of the notes from the first stakeholder session is attached to this report as Appendix A. No notes were taken at the second stakeholder meeting; a copy of a comment letter received during that meeting is included in Appendix A of this report.

Section 4:

GROWTH & PROJECTED POPULATION

GROWTH & POPULATION

A. Regional Summary

The northern and central portion of Orange County is generally characterized by established, mature communities. Much of this portion of the county has reached or is approaching buildout, with the last major developments occurring in Brea, Anaheim Hills, East Orange and the two former military bases in Tustin and Irvine. Most of the growth is expected to occur within the current decade, with an average annual growth rate of 0.90% from 2005 to 2010 within the OCWD service area, tapering off to 0.15% by 2030. By comparison, countywide growth rates are 1.21% from 2005 to 2010 and 0.33% by 2030.

The modest population growth projected over the next twenty-five years will primarily be a result of natural increase or births; once the developments noted above are complete, future increases in the number of housing units will be primarily due to infill and redevelopment. While the majority of residential land use is single-family, within the more urbanized areas there is a noticeable trend in the county for redevelopment that incorporates mixed use and multi-family housing. This is not expected to significantly increase water demands as the typical single family residence uses more water per day than a multi-family residence. In areas where new single family homes are being constructed, lot sizes are smaller with less landscape area. The reduced outdoor area, coupled with indoor water efficient fixtures, results in new homes with a lower water demand than older, single family homes with large landscapes. Therefore, while growth within the OCWD boundaries will result in increased water demand and a greater need to develop and maximize the use of local resources; water demands are not expected to increase at historic rates.

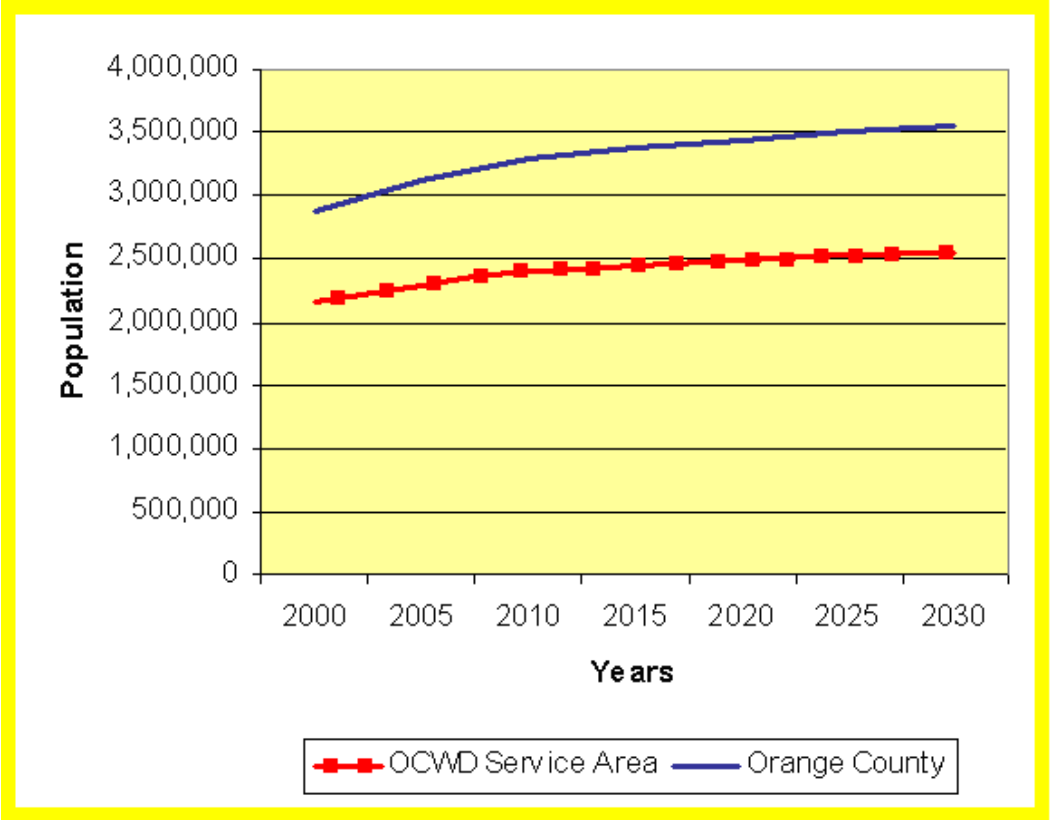
B. Existing & Projected Population

The population projections used in this analysis are based on data from the Southern California Association of Governments (SCAG) used for the *Regional Transportation*

Plan, the Center for Demographic Research (CDR) at California State University, Fullerton (CSUF) and the California Department of Finance.

The cities within Orange County with the highest projected increases in population are Irvine, Anaheim, Huntington Beach, Santa Ana and Orange – all within the OCWD service area. The cities with the largest anticipated increase in number of housing units are Irvine (15,723), Anaheim (6,269), Huntington Beach (5,082), and Newport Beach (5,023)[1]. These two growth projections do not directly correlate due to differences in the estimated number of persons per household; for example, Santa Ana and Orange have much higher rates (4.691 and 3.109, respectively) than Newport Beach (2.184).[2] The following Figure 4.1 shows the estimated population growth rates for the cities within the OCWD service area and countywide.

Figure 4.1: Estimated Population Growth



[1] The growth projections for certain cities are anticipated to change as the projections were prepared prior to recent major annexations and related development approvals for Irvine and Orange.
[2] California Department of Finance, Demographic Research Unit. City/County Population and Housing Estimates, 1/1/2006

In February 2004, the Orange County Council of Governments (OCCOG) adopted the Orange County Projections 2004 (OCP-2004) and the County Board of Supervisors adopted the projections in May 2004. The OCP-2004 numbers were incorporated into the Regional Transportation Plan by the Southern California Council of Governments (SCAG) in April 2004. Table 4.1, OCP-2004 Projections presents the projections for population, housing and employment within the OCWD service area and countywide.

Table 4.1: OCP-2004 Projections for Orange County, 2005 - 2030

		2005	2010	2015	2020	2025	2030	Overall Increase
Population	OCWD Svc Area	2,302,131	2,405,508	2,453,302	2,491,200	2,526,96	2,546,161	244,030
	Countywide	3,094,461	3,291,628	3,402,964	3,485,179	3,537,559	3,552,742	458,281
Households	OCWD Svc Area	697,576	724,858	731,081	740,395	749,517	753,669	56,093
	Countywide	978,423	1,034,027	1,043,473	1,063,976	1,081,421	1,098,474	120,051
Employment	OCWD Svc Area	1,276,101	1,383,357	1,420,858	1,454,381	1,482,437	1,497,223	221,122
	Countywide	1,554,271	1,749,985	1,816,387	1,858,579	1,896,752	1,921,800	367,529

Source: OCP-2004, SCAG

Note: OCWD Service Area figures exclude unincorporated area, including planned development in East Orange and the former MCAS El Toro

Table 4.2, *Existing and Projected Population-Cities,* presents growth data for the incorporated cities within the study area. The most significant projected increase is in the City of Irvine, with the addition of 60,000 residents by 2030. The five year period with the highest growth rate for the cities was from 2000 to 2005.

Table 4.2: Existing and Projected Population – Cities								
City	2000	2005	2010	2015	2020	2025	2030	Overall Increase
Anaheim	330,100	352,032	368,495	372,119	377,118	381,799	383,739	53,639
Buena Park	78,934	83,031	85,855	88,134	89,960	91,697	92,481	13,547
Costa Mesa	109,402	113,874	117,492	121,166	124,070	126,802	129,098	19,696
Cypress	46,521	48,992	50,284	51,462	52,421	53,327	53,752	7,231
Fountain Valley	55,321	59,250	61,758	63,257	64,458	65,586	66,107	10,786
Fullerton	126,635	135,034	140,513	143,482	145,933	148,268	149,711	23,076
Garden Grove	166,339	173,417	178,457	182,276	185,122	187,732	189,445	23,106
Huntington Beach	190,786	204,297	212,893	216,565	219,601	222,457	223,992	33,206
Irvine	143,965	169,600	192,186	195,740	198,689	201,491	203,965	60,000
La Palma	15,504	16,248	16,600	16,874	17,086	17,286	17,368	1,864
Los Alamitos	11,608	12,224	12,545	12,743	12,912	13,079	13,190	1,582
Newport Beach	76,170	83,585	89,527	91,147	92,365	93,488	94,167	17,997
Orange	129,637	139,859	146,899	149,208	151,032	152,760	153,522	23,885
Placentia	46,801	50,182	52,352	53,267	54,030	54,753	55,164	8,363
Santa Ana*	337,997	350,625	359,823	364,049	368,026	370,196	370,130	32,133
Seal Beach	24,309	25,628	26,335	26,709	27,015	27,311	27,471	3,162
Stanton	37,819	40,295	41,805	45,104	47,738	50,252	51,077	13,258
Tustin	68,032	76,164	82,470	84,774	86,580	88,270	88,788	20,756
Villa Park	6,036	6,359	6,530	6,646	6,746	6,839	6,892	856
Westminster	88,648	92,549	94,226	95,956	97,341	98,661	99,291	10,643
Yorba Linda	59,604	66,286	71,463	73,280	74,753	76,153	76,811	17,207
Total	2,150,168	2,299,531	2,408,508	2,453,958	2,492,996	2,528,207	2,546,161	395,993
Avg Annual Growth Rate		1.4%	0.9%	0.4%	0.3%	0.3%	0.1%	

Source: SCAG 2004 projections
** City of Santa Ana population figures from 2005 Urban Water Management Plan, Table 1.3-2*

As noted above, the projections were developed prior to the annexation and approval of several major new developments. The number of estimated dwelling units planned in these new development projects is as follows:

- Mountain Park, City of Anaheim = 2,500 units
- Santiago Hills II, City of Orange = 1,596 units
- East Orange Area I, City of Orange = 1,024 units
- Heritage Fields (Orange County Great Park), City of Irvine = 3,400 units

Using the California Department of Finance January 2006 estimates of persons per household for the three cities – Anaheim - 4.691, Orange – 3.109, and Irvine – 2.715 - these developments would yield an increase of approximately 26,000 persons.

As noted above, infill growth and redevelopment within the OCWD service area will become increasingly more important over the next twenty-five years in terms of impact on water demand. Groundwater producers will seek to maximize the use of this water source in managing their total water supply. This growth has been considered in the 2005 Urban Water Management Plans prepared by water agencies in the area, as well as water supply assessments that are prepared for individual projects. The District has considered this growth and future demand in the preparation of its Draft Long-Term Facilities Plan (LTFP). The District and the producers will need to work cooperatively to ensure that the groundwater basin is managed efficiently so that the Basin Pumping Percentage is not impacted to any significant degree.

The Orange County Water District has considered the projected growth as outlined above in the District's planning efforts. The anticipated growth is used as a basis for the draft Long-Term Facilities Plan in an effort to maximize the development of local water resources to meet future water demands.

The moderate projected population growth is not expected to be problematic for the agency's service capacity.

Section 5:

INFRASTRUCTURE NEEDS & DEFICIENCIES

INFRASTRUCTURE NEEDS & DEFICIENCIES

A. Overview

The Orange County Water District was formed to protect Orange County's rights to water in the Santa Ana River and manage the groundwater basin that underlies northern and central Orange County. To fulfill this purpose, the District holds water rights within the Santa Ana River, land behind Prado Dam, and recharge facilities in strategic locations as well as monitoring wells throughout the county. The District is partnering with the Orange County Sanitation District (OCSD) in the major Groundwater Replenishment (GWR) System that will provide purified wastewater for recharge use. OCWD is also operating the Green Acres Project to enhance the supply of recycled water for irrigation and industrial uses. The District has developed a draft Long-Term Facilities Plan that, if approved, will provide the framework for the addition of new facilities and improvements to existing facilities so that the District can continue to optimize basin resources.

B. Water Sources

OCWD's sources of recharge water include Santa Ana River baseflow and stormwater flow, Santiago Creek flows, imported supplies purchased from Metropolitan, and, in the future, purified water from the Groundwater Replenishment (GWR) System.

Santa Ana River Baseflow

Santa Ana River (SAR) flows are the primary source of replenishment for the groundwater basin. Flows below Prado Dam consist of both a perennial baseflow component and a seasonal stormflow component. The majority of baseflow, particularly in warmer months, is comprised of tertiary treated wastewater discharge

from treatment facilities upstream from Prado Dam. Future estimated increases in population in the upper SAR watershed will result in baseflow increases. OCWD is currently able to capture and percolate all of the SAR baseflow during non-storm events.

OCWD is allotted a minimum SAR baseflow of 42,000 afy by court decision. Per the SAR Watermaster, baseflows increased from 38,000 in 1970 to approximately 146,000 afy in 2002, primarily as a result of population growth and the corollary increase in treated wastewater discharge. After factoring in current and future water reclamation projects in the upper SAR watershed, the Santa Ana Watershed Project Authority (SAWPA) projects baseflows ranging from 200,000 afy to over 240,000 afy in Year 2025.

Santa Ana River Stormflow

OCWD captures and percolates approximately 50,000 afy of stormflows on average. In wet years, over 100,000 afy of stormflow can be captured. Until recently, water could be retained behind Prado Dam up to an elevation of 494 feet mean seal level (MSL) during flood season and 505 feet MSL during the non-flood season. The District just implemented an increase in the elevation to 498 feet MSL which will provide an additional 4,000 afy. OCWD seeks to have a maximum release rate from Prado Dam of 500 cfs or less so that the release rate corresponds to OCWD's recharge capacity. Stormwater has lower dissolved solids and nitrate concentrations than SAR baseflow so recharge with this source benefits groundwater quality.

Supplemental Imported Water

OCWD uses imported water to supplement SAR flows and allow for more recharge. Metropolitan provides groundwater replenishment water when excess water supplies are available. The District receives direct replenishment water in four locations:

- State Water Project (SWP) water is delivered in Claremont, and travels down San Antonio Wash to Chino Creek, through the Prado Basin, then down the SAR through Santa Ana Canyon to OCWD's recharge facilities.

- Colorado River Water is delivered directly into Anaheim Lake. Recent improvements at Metropolitan's Diemer Treatment Plant allow the District to receive a blend of SWP and Colorado River water at this location. This connection is used most often as it has the least amount of potential water loss as the water is recharged at the lake.

- Colorado River water is delivered into Irvine Lake. The supply travels down the pipeline or through the Santiago Pits through Santiago Creek.

- Colorado River water is emptied into the SAR in Yorba Linda above OCWD's spreading facilities.

OCWD has recharge capacity available to receive replenishment water during the summer/fall months; however it is more frequently available during the winter season. Unfortunately this is the time of year when the District's facilities are being used to capture and recharge SAR flows.

An in-lieu program is also available whereby participating producers can agree to turn off their wells and receive excess treated water from Metropolitan in-lieu of pumping groundwater. The program is cost-neutral for producers and preserves the District's recharge capacity for SAR flows.

In 2003, OCWD, the Municipal Water District of Orange County (MWDOC) and Metropolitan entered into a 25-year agreement for the Orange County Basin Groundwater Conjunctive Use Program. Under the program, Metropolitan, in cooperation with MWDOC and OCWD, will store as much as 66,000 af of imported water in Orange County's groundwater basin during wet periods. During dry years, droughts or emergencies, up to 22,000 af/yr can be withdrawn for use.

Groundwater Replenishment System

In 2003 the OCWD and Orange County Sanitation District (OCSD) initiated the Groundwater Replenishment (GWR) System, which will treat 70 million gallons per day of wastewater to an advanced tertiary level; 36,000 afy will be used for groundwater recharge in the Kraemer Basin and the remaining 36,000 afy will be used to extend the Talbert Gap seawater intrusion barrier. OCWD anticipates that this will increase allowable groundwater production without further depleting groundwater supplies. The GWR System is expected to begin operating in 2007.

The GWR System consists of three major components: 1) Advanced Water Treatment Facilities and pumping stations; 2) a pipeline connection from the treatment facility to the existing recharge basins; and 3) expansion of the Talbert Barrier.

Other Water Sources

The Green Acres Project (GAP) is a non-potable water supply project that delivers irrigation and industrial water. Most of the water is irrigation water for use on golf

courses, greenbelts, cemeteries and nurseries. The project was initiated in 1991 and produces approximately 7 mgd from clarified, secondary wastewater effluent from the OCSD. The GAP water reduces the use of potable water for non-potable uses.

In February 2006 OCWD initiated the North Basin Groundwater Protection Project in order to contain the movement of historic industrial contamination in the northern portion of the groundwater basin. The project follows a lawsuit filed by OCWD in 2004 against several Anaheim and Fullerton area industrial businesses that the District believes are responsible for contaminating the groundwater with volatile organic compounds (VOCs). The contamination has not impacted any drinking water wells. The project will be phased and ultimately consist of new water quality monitoring wells, new water extraction wells to remove contaminated groundwater and a purification plant to treat the groundwater. The District plans to recover the cost of the project and any additional remediation needed from the responsible parties through the current lawsuit. The District plans to continue the project until deep aquifers used for groundwater production are no longer threatened by the VOCs.

C. Balancing Supply and Demand

The Orange County groundwater basin has historically been overdrafted. To address this condition and protect the basin from seawater intrusion, OCWD sets an annual Basin Pumping Percentage (BPP) based on net water available for pumping divided by net total water demands from the previous year. To determine the water available, historic SAR flows are factored in along with imported supply purchases. Some water is set aside to reduce the accumulated overdraft which is determined each year depending on basin conditions; in FY 2004-2005, 25,000 af was used for this purpose. In FYs 2005-2006, 15,000 af was set aside. Projections for 2007-2008 include setting aside 15,000 af. The remaining water is considered water available for producer pumping. This amount is further reduced by anticipated pumping above the BPP for specific water quality projects for a net amount of water available for pumping. Total water demands from the previous calendar year are reduced by the amount of local supplies and reclamation. The BPP is established for each upcoming year and is directly related to hydrologic conditions and recent groundwater production. Producers that exceed the BPP are assessed an additional higher-cost Basin Equity Assessment charge to cover the cost of replenishing that groundwater. Through this methodology OCWD is able to manage the basin resources and provide financial incentive for producers to work cooperatively in reducing any overdraft.

D. Facilities

OCWD's current recharge facilities are summarized below in Table 5-1:

Table 5-1:
OCWD Recharge Facilities

LOCATION	RECHARGE RATES (AFY)
Deep Basins:	
Anaheim/Kraemer System	91,800
Warner System	16,200
Burris/Santiago System	60,600
Main Santa Ana River Groundwater Recharge	70,400
Off-River System Groundwater Recharge	11,000
TOTAL:	**250,000**

In January 2006, OCWD released the Draft Long-Term Facilities Plan (LTFP). The primary objective of the LTFP is to identify projects that will allow the District to effectively manage the basin while preserving water quality, and identify opportunities to cost-effectively increase the sustainable yield of the basin through Year 2025. A total of 50 proposed projects were evaluated based on a number of factors including cost, feasibility, and benefits of the project. The LTFP-listed projects are classified into five categories:

Recharge Facilities

Water Supply Facilities

Basin Management Facilities

Water Quality Facilities

Operational Improvement Opportunities

A number of projects were excluded due to technical constraints, cost considerations and lack of institutional support. A brief description of the five categories and summaries of the LTFP-listed projects are discussed below.

Recharge Facilities

OCWD currently manages 20 existing recharge basins. Over time, the basins become clogged with silt and must be cleaned to maintain optimal percolation. Recharged basins are currently cleaned with heavy equipment and specialized devices developed by the District called Basin Cleaning Vehicles (BCV). The District is also evaluating recontouring existing basins to improve percolation and allow for more rapid cleaning.

The addition of new recharge facilities such as new recharge basins and new subsurface recharge facilities may further increase the District's recharge capacity. Constructing a new recharge basin would require securing property access, creating the recharge facilities and installing conveyance systems. A few proposed new recharge facilities for the District were excluded due to unfeasible proposed sites, cost and technical constraints.

Recharge projects included in the LTFP include shallow water basin cleaning vehicles, deep water basin cleaning vehicles, multilateral recharge wells, enhanced recharge in Santiago Creek, new recharge basins (four sites in Anaheim, Fullerton and Placentia have been identified as viable and a priority), creation of subsurface recharge galleries, research on methodologies to enhance percolation, and a desilting improvement program.

Water Supply Facilities

Water supply facilities projects will provide sources of water to recharge the basin. The water supply facilities projects consist of the expansion of the GWR System, including direct industrial/irrigation use and mid-basin injection.

Basin Management Facilities

As part of its basin management responsibilities, the District pursues projects to extract and treat "colored" groundwater, implement new facilities and operational measures to modify pumping patterns or rates and improve effectiveness of the seawater intrusion barrier along the coast. The Basin Pumping Transfer Program shifts groundwater pumping from the more heavily stressed portion of the basin to other parts of the basin. This program would benefit the District since it would increase coastal groundwater

levels and reduce the potential for seawater intrusion with no net increase in overall basin pumping.

Water Quality Facilities

OCWD owns 2,150 acres behind Prado Dam. The District operates and maintains 465 acres of constructed wetlands within this area. The wetlands reduce nitrogen levels in SAR water; approximately 50% of SAR baseflow is diverted to the wetlands. OCWD has identified the expansion of its wetland treatment program as the fundamental means of enhancing water quality in the basin. Water quality facilities projects proposed for the District include the Chino Creek Wetlands, River Road Wetlands, Mill Creek Wetlands and Temescal Creek Wetlands.

Operational Improvements

Operational improvement projects include the use of new equipment to remove silt from recharge basins, recontouring of existing basins to allow more effective cleaning by BCVs, improving the silt-removal program and infrastructure facilities to allow more effective water capture, distribution, retention and percolation.

Laboratory and Testing

OCWD operates a number of monitoring wells throughout the basin. In addition, the District has a full in-house laboratory for water quality testing. The District performs its own water sampling and testing on each of the production wells within the basin.

E. Summary

OCWD has adopted a number of plans to ensure that recharge water sources are reliable and cost effective, including the 2004 Groundwater Management Plan and 2006 Draft Long-Term Facilities Plan. The District has planned for infrastructure needs to optimize the groundwater basin and the reliability of local water resources. OCWD has the financial resources and rate structure to support the programs and plans.

No infrastructure needs or deficiencies were noted that the District is unable to address.

Section 6:

FINANCING OPPORTUNITIES & CONSTRAINTS

FINANCING OPPORTUNITIES & CONSTRAINTS

A. Overview

The Orange County Water District is operating with a $275.3 million budget for FY 2005-2006, which includes $193.9 million in capital projects. Revenues are received through Replenishment Assessments (RA), Basin Equity Assessments (BEA), property taxes, investment income and other miscellaneous revenues as well as capital contributions received from federal, state and local agencies as a subsidy towards the District's capital projects.

The District has long-term debt associated with capital improvements, including the Groundwater Replenishment System. There are established policies for minimum reserve and operating fund levels to ensure that the District can continue to carry out its mission to effectively manage and protect the groundwater basin.

B. Financial Review

The following Table 6-1 summarizes the District's financial history for the two most recent years; Table 6-2 summarizes the District's FY 2005-2006 adopted budget.

Table 6-1: OCWD Financial History		
Finances	**FY 03-04** Actual	**FY 04-05** Actual
Revenue:		
Replenishment Assessments	52,570,711	54,825,606
Basin Equity Assessments	4,672,071	4,467,124
Reclaimed Water Revenue	0	2,129,691
Property Taxes	13,959,477	7,722,035
Other Income (net of expenses)	1,221,573	733,200
Investment Revenue	610,241	575,094
Rental Income (net of expenses)	421,142	531,063
TOTAL REVENUE:	**73,455,215**	**70,983,813**
Expenses:		
Water Purchases	27,584,436	25,847,020
Water Production	15,770,201	16,467,678
Depreciation / Amortization	6,162,286	10,457,881
General / Administrative	7,602,696	8,415,008
Replacement / Refurbishment	500,497	367,610
Interest Expense	9,244,253	11,440,497
TOTAL EXPENSES:	**66,864,369**	**72,995,694**
Capital Contributions	57,909,738	80,236,648
Net Assets – beginning of year	10,238,232	74,738,816
NET ASSETS, END OF YEAR:	**74,738,816**	**152,963,583**

Table 6-2:
OCWD FY 2005-2006 Budget

Finances	FY 05-06 Budget
Revenue:	
Replenishment Assessments	56,847,000
Replenishment Assessments (State Surcharge)	7,400,000
Basin Equity Assessments	1,000,000
In-lieu Revenue	1,710,000
Property Taxes	6,296,000
Facility Revenue from Other Agencies (Green Acres Project)	2,198,000
Project Reimbursement Revenue	104,213,000
Investment Revenue	3,862,000
Notes Receivable Reimbursement	1,569,000
Rents, Royalties and Others	2,440,000
Draw from Construction Fund	87,724,000
TOTAL REVENUE:	**275,259,000**
Appropriations:	
General Fund	25,847,020
New Equipment	16,467,678
Water Purchases	10,457,881
Debt Service	8,415,008
Capital Improvement Projects – Debt Funded	367,610
Capital Improvement Projects – PAYGO	11,440,497
Groundwater Replenishment System	180,425,000
Replacement / Refurbishment Expenditures	2,262,000
Transfer to R&R Fund Balance	1,384,000
Transfer to General Reserve Balance	1,009,000
TOTAL APPROPRIATIONS:	**275,259,000**

Revenues

All water pumped out of the groundwater basin within OCWD's boundaries is assessed the Replenishment Assessment (RA) on a $/af basis. The District's budgeted RA

revenue for FY 2005-2006 is based on 318,000 af of total anticipated basin production; producers are billed semi-annually in July and January. The Basin Equity Assessment (BEA) is based on Metropolitan's Tier II rates and is assessed annually in November for all production above the Basin Production Percentage (BPP).

In FY 2005-2006 OCWD instituted a surcharge on the RA as a result of the State's ERAF III transfer and a reduction in property tax revenue of $7.4 million per year in FY 2004-2005 and 2005-2006. All property tax revenue is used for annual debt service expense, so revenue to cover debt service requirements would have to come from other sources. At the end of FY 2004-2005, the District's cash reserves were at minimum levels. The District felt it was imperative to maintain adequate revenue levels to continue programs such as seawater intrusion protection, and therefore the surcharge is anticipated to be in place for two years.

Investment revenue is received from the cash reserves held by the District. The majority of cash reserves are held in short-term securities, with a budgeted annual yield of 2.5% (based on average yield when the FY 2005-2006 budget was prepared). The significant increase in budgeted interest revenues for FY 2005-2006 reflects that the District will be holding significant funds dedicated for the GWR System project in the short-term prior to the expenses being incurred. Of the budgeted investment revenue, $0.65 million is generated by and for the R&R program, $2.5 million for the CIP program, and $0.71 million for the General Fund.

Miscellaneous revenues are comprised of numerous items, including water sales from the Green Acres Project (GAP), the In-Lieu program, the Metropolitan subsidy for GAP supplies, annexation fees, repayment of loans to the District, rents, subsidies, and other minor revenues.

Expenses

The District's General Fund budget includes twenty cost centers and includes the operation of the following facilities:

- GWR System Phase 1 Water Purification Facility (which replaced Water Factory 21)
- Green Acres Project
- Talbert Seawater barrier injection facilities
- Water quality monitoring well maintenance and sampling

- Laboratory
- Anaheim recharge operations
- Prado Wetlands
- Alamitos seawater barrier injection facilities

The Water Purchase budget is based on the District's basin management approach, which was developed in collaboration with the groundwater producers and adopted in December 2002. The FY 2005-2006 budget includes funding for the purchase of 65,000 af of replenishment water from Metropolitan, with 15,000 af to be used to restore groundwater from past overpumping. All monies budgeted to fund water purchases may only be used for that purpose; any funds not expended in the annual water budget are carried forward in the designated water purchase fund.

As of June 2005, the District had $514 million in outstanding debt, with annual debt service of $22.2 million. This included $14.6 million for fixed rate debt, $7.07 million for variable rate debt, and $0.5 million for debt administration. The District holds credit ratings of AA+ from Standard & Poor's and Fitch, as well as an aa2 rating from Moody's. These high credit ratings are a factor of OCWD's management and financial condition and provide significant benefit through lower interest rates.

The District's Replacement & Refurbishment (R&R) budget provides for routine annual replacements and refurbishment of the existing infrastructure. The District has over $300 million in capital assets. This budget ensures that funding is available to maintain the capacity and functionality of the infrastructure system and avoid costly major repairs in the future.

The Capital Projects budget spans a three-year period; it includes funding for eleven projects totaling $193.4 million in FY 2005-2006 with $180 million for the GWR System. The CIP projects are necessary to carry out the following: 1) support basin production by increasing recharge capacity and operational flexibility; 2) protect the coastal portion of the basin; and 3) provide water quality improvements. The District also has a Capital Equipment Items budget that is used for small equipment items such as laboratory equipment, vehicles, machines, tools, computers and software, pumps, equipment, etc. These items are expensed and funded using current revenues. The larger CIP projects are financed with long-term debt with some offset from federal, state and local subsidies.

Reserves

The OCWD Board has established policies regarding minimum reserve and operating fund levels, as shown below in Table 6-3:

Table 6-3:
Reserve and Operating Fund Levels

Reserve	Projected Year-End FY 2004-2005 ($/million)	Required Amount FY 2005-2006 ($/million)	Required Amount FY 2009-2010 ($/million)
Debt reserve required by bond covenants	5.5	5.5	9.0
Operating Reserve (15% of annual operating budget)	9.1	11.4	19.0
General Contingencies per District Act	3.0	3.0	3.0
Toxic Clean-up per Board Policy	4.0	4.0	4.0
R&R Fund per Board Policy	26.1	26.1	35.0
Operating Funds			
Water Budget	0.0	0.0	0.0
Operating Fund	0.0	5.0	5.0
Total Cash on Hand:	$47.7	$55.0	$75.0

These policies ensure that the financial integrity of the District will be maintained, the District's credit rating will not be jeopardized and the District will have adequate financial resources to carry out its approved plans and programs.

Notes Receivable

OCWD contracts with other local agencies to provide long-term low-interest financing for the construction of conjunctive use wells and other facilities projects. Notes receivable are recorded for the project costs. As of June 30, 2005 the District had $13.5 million in notes receivable. Average principal and interest payments through Year 2010 are $1.4 million.

Long Term Liabilities

The District has long-term debt associated with six issues of Certificates of Participation. The Certificates are obligations of the Public Facilities Corporation and are payable solely through payments received from OCWD pursuant to the Installment Purchase Agreement between the District and the Corporation. The agreement requires the District to "prescribe, assess and collect replenishment assessments and additional replenishment assessments which, together with other revenues, will be at least sufficient to yield each fiscal year net revenues equal to 125% of debt services." As of June 30, 2005, the outstanding balance on the Certificates was $491.8 million. Interest rates range from 2.0% (adjustable) to 5.375%. The average annual debt service requirement through Year 2010 for the Certificates is $21.2 million.

The District also has long-term debt associated with loans from the State of California for five projects: Green Acres Phase I, Santiago Creek, Irvine Desalter, Tustin Desalter, and Green Acres Phase II. The combined outstanding balance of the loans as of June 30, 2005 was $7,072,387. Interest rates range from 2.8% to 3.4375%, with the final maturity in Year 2017. Average annual debt service payments through Year 2010 are $1.03 million.

The Public Facilities Corporation also issued commercial paper with the proceeds used to provide capital funds for OCWD. The outstanding balance at June 30, 2005 was $2.8 million.

C. Financing Opportunities and Constraints

The Orange County Water District has leveraged the use of its capital assets and financial resources to ensure the long-term financial integrity of the District. This allows OCWD to continue to carry out its plans and programs for the effective management of the groundwater basin, including planning for major future capital improvements. The District has pursued and received outside funding through federal, state and local subsidies to reduce the amount of financing needed for capital projects. The District has achieved a high credit rating from the three top rating entities, which has resulted in lower interest rates for capital financing. The District uses a pay-as-you-go approach for smaller projects and equipment, and has established a reserve program that provides adequate funding for repair and replacement of existing infrastructure without the need for financing. Lastly, the District has successfully partnered with

The District has adequate revenues to meet its debt service obligations.

other agencies in constructing and financing projects that enhance the water resources within northern and central Orange County.

Section 7:

ECONOMIES OF SERVICE

ECONOMIES OF SERVICE

This section combines the required determinations of Rate Restructuring, Cost Avoidance Opportunities, Shared Facilities and Evaluation of Management Efficiencies.

A. Rate Restructuring

The Orange County Water District's rate structure is a function of the Basin Pumping Percentage (BPP) and a corollary Replenishment Assessment (RA) and Basin Equity Assessment (BEA). As discussed in *Section 5. Infrastructure Needs and Deficiencies*, the Basin Pumping Percentage is established annually per the methodology in the basin management plan developed and approved in 2002. Actual historical SAR flows are calculated and added to expected water purchases to determine future year BPP and allowable pumping amounts. The actual and projected BPP is as follows:

2004-2005 (actual) = 66%

2005-2006 = 64%

2006-2007 = 69%

2007-2008 = 75%

2008-2009 = 75%

2009-2010 = 75%

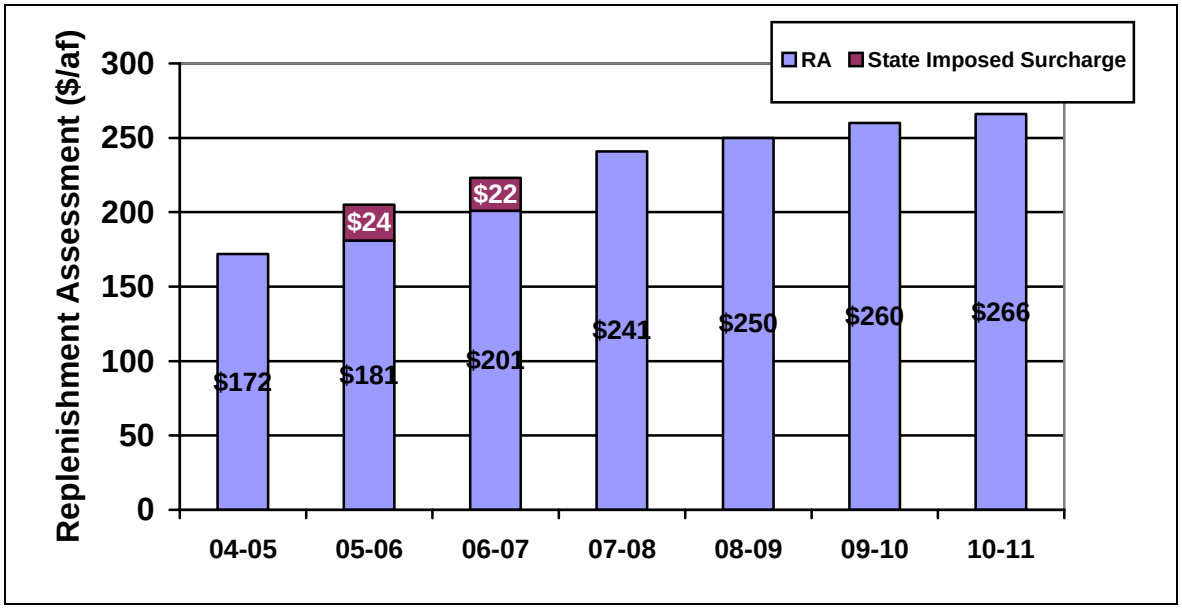
2010-2011 = 75%

The RA is set annually and is a function of net operating expenses divided by expected basin pumping. This approach ensures that revenue is adequate for the District to carry

out its approved programs and projects. The RA is collected on all groundwater produced within the District's boundaries. Agricultural producers, which account for approximately 9,500 af/yr of production, pay 50% of the RA rate. The Basin Equity Assessment (BEA) is charged to individual producers for all groundwater produced that exceeds the annual Basin Pumping Percentage.

The District routinely prepares future estimates of the RA rate based on changing assumptions. This is done to ensure that the District maintains an overall water cost to its producers that is below the cost of water purchased from MWDOC and Metropolitan. It also allows the District to avoid rate spikes in any given year. With the projected BPP shown above and the District's forecasted budgets, Figure 7.1 shows the estimated Replenishment Assessment rates for future years per the OCWD FY 2006-07 budget report:

Figure 7.1: Estimated Replenishment Assessment Rates



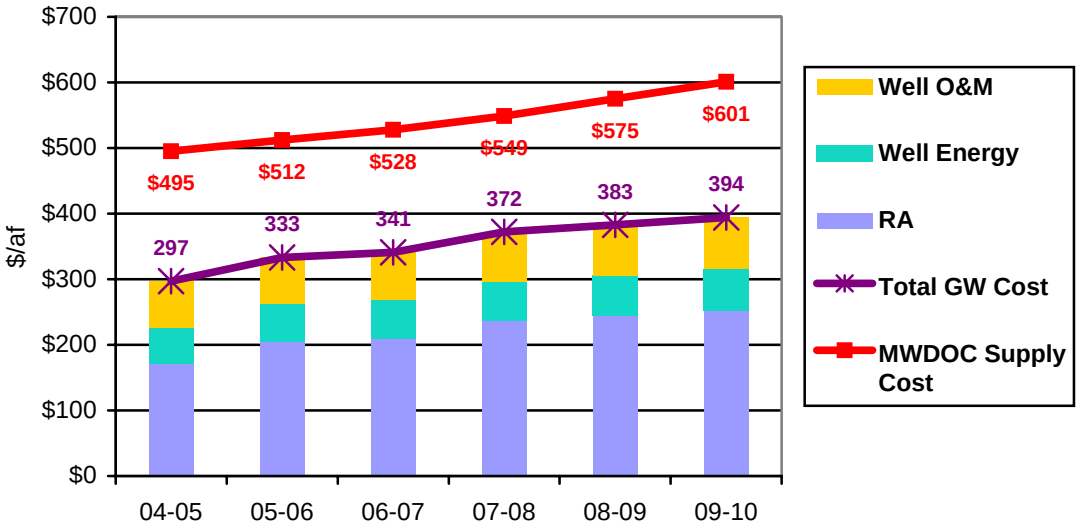
Metropolitan charges Tier I and Tier II rates for its water. Effective January 1, 2006 the Tier I rate was $331/af for untreated water and $453/af for treated water. Tier II rates were $427/af for untreated water and $549/af for treated water. Those rates do not include a separate MWD readiness-to-serve charge and a capacity charge, which add approximately $30/af to the cost of the water. Untreated replenishment water is available at $238/af. The Municipal Water District of Orange County (MWDOC),

which imports water from Metropolitan for those agencies that are not Metropolitan members, blends the Tier I and Tier II rates and charges one rate for imported water.

The supply cost comparison of groundwater versus imported water through FY 2009-2010 is shown below in Figure 7-2:

Figure 7-2:

GROUNDWATER VS MWDOC SUPPLY COST COMPARISON



The Basin Equity Assessment is charged for all water produced that exceeds the Basin Pumping Percentage. The BEA rate is based on Metropolitan's Tier II rate for treated water so there is a financial disincentive for a water purveyor to rely on this source of water supply.

The District charges an annual annexation fee for all areas annexing to the District. This ensures that there is equitable sharing in the costs already incurred to develop and maintain the District's capital assets. Historically, the practice of collecting revenue from areas annexed to the District dates back prior to the approval of Proposition 13. In pre-prop. 13 days, the District received a portion of property tax revenue from areas annexed to the District. However, that percentage share of property tax revenue went away in the aftermath of the proposition's approval. The District was faced with creating a replacement method to collect revenue from District annexations. OCWD's current *Annexation Fee* charged to water utilities or cities is equivalent to what the *pre-*

prop.13 property tax revenue would have been for the annexed area on an annual basis. The formula for the annexation fee follows:

$$X = A \times B \times \frac{C}{D} \times E$$

Where X = Annexation Charge
A = Current year's Basin Production Percentage
B = Current year's total water demand within annexed territory or 10% of ultimate annual total water demand within annexed territory, whichever is greater
C = Previous year's ad valorem income
D = Previous year's total groundwater production
E = Applicable percentage based on percentage of groundwater used within service area of annexing purveyor

Below is an example of how the annexation is fee is calculated:

Annual Annexation Charge (X) =	Basin Production % (A)	X	Higher of Current Water Demands or 10% of Ultimate Water Demands in Annexation Area (B)	X	Previous year AV Income (C)/Previous Year Pumping (D)	X	% in Annexation Resolution
(X) = 66%x17,639x$34.35x100 = $399,893.76 due to OCWD	(A) 66% (for water year 2004-05)	x	(B) = 17,639 AF	x	$ 8,486,121/247,028.7AF	x	100

The District's rates are structured such that they are highly responsive to changes in hydrologic and economic conditions. They are reviewed and adjusted annually using the District's adopted methodology; the rates are set through a public process, usually occurring in April with new rates effective July 1st.

B. Cost Avoidance, Shared Facilities and Management Efficiencies

The Orange County Water District is cognizant of the impact of increased costs on the Replenishment Assessment. The District continually works toward minimizing increases to the General Fund through limiting administrative personnel, reviewing operations, maximizing outside funding opportunities, and reviewing all vacant positions before they are filled.

In July 2003, the OCWD Board adopted the 2003-2006 Strategic Plan. The Plan includes five priority issues for the District:

- All District costs must be adequately defined, revenues must support them
- New water supplies (ie, GWR System) must be aggressively implemented
- Groundwater basin must be optimally managed
- District must balance expectations and staff resources
- Basin water quality must be protected and enhanced

Each of these issues includes a goal, strategies and key perfomance indicators to evaluate progress toward achieving the goals. This Plan provides a framework for District budgeting, program development, management and governance.

In addition to the strategic initiatives, the District recognizes that its core functions are critical to the performance of the District and its effectiveness in managing the groundwater basin. These core functions include recharge basin cleaning, operating injection wells, maintaining the District's computer systems and databases, and collecting and analyzing water samples.

The General Fund budget includes twenty cost centers. The information in the budget for each cost center includes an organizational chart, staff positions, mission, and a listing of key issues, new initatives and programs, core activities, non-core activities, and group goals. Activities that are on hold due to insufficient resources are identified, along with staff needs and future issues. This detailed evaluation by cost center enables the District to take a focused look at each segment and make prudent decisions regarding the budget, staffing and critical issues.

The District engages in a number of activities related to shared facilities, particularly with regards to regional water resource management within the Santa Ana River watershed. As discussed in *Section 5. Infrastructure Needs and Deficiencies*, the District participates in conjunctive use projects, such as the Green Acres Project, the GWR System project and the Alamitos Seawater barrier. In 2003 the District entered into a 25-year agreement to store nearly twenty billion gallons of water in the groundwater basin for use during dry years and emergencies. Under the program, Metropolitan, in cooperation with MWDOC and OCWD, will store up to 66,000 af of imported water in Orange County's groundwater basin during wet periods. During dry years, droughts or emergencies, up to 22,000 af/yr can be withdrawn for use. The project includes eight groundwater extraction wells provided to city and local water district participants to ensure that the stored water can be pumped in addition to the existing pumping demand. The operating cities and water districts will be able to use Metropolitan's new wells as backups for their existing systems and ownership of these wells will transfer to them when the agreement expires in 25 years. Participating cities include Buena Park, Garden Grove, Orange, Santa Ana, Southern California Water Company, Westminster, and Yorba Linda Water District.

In addition to water storage, the agreement also outlines Metropolitan's role in funding seawater intrusion barrier improvements for OCWD and constructing a bypass pipeline around Metropolitan's Diemer Filtration Plant in Yorba Linda to redirect lower-salinity supplies from the State Water Project directly into OCWD's groundwater spreading basins in Anaheim.

OCWD and MWDOC have developed a strong working relationship that enhances water supply management, improves reliability, and provides long-term benefit to the producers and ratepayers. The two agencies coordinate on planning assumptions, communications and legislative work, particpate in joint planning for projects, and share administrative facilities.

No significant issues with regard to rate restructuring, cost avoidance, shared facilities or management efficiencies were determined.

Section 8:

GOVERNMENT STRUCTURE OPTIONS

GOVERNMENT STRUCTURE OPTIONS

A. Introduction

One of the determinations required to be addressed in a municipal service review is preparation of a list of **all** possible government structure options including advantages and disadvantages of potential reorganizations.[3] The purpose of evaluating government structure options is to identify those options that encourage the current and future orderly formation of local government agencies, create logical boundaries and promote the efficient delivery of services. The MSR report is an informational document that will be used by the LAFCO staff and Commission, agencies/organizations, communities, stakeholder working group and the public to discuss future governance options for the Orange County Water District.

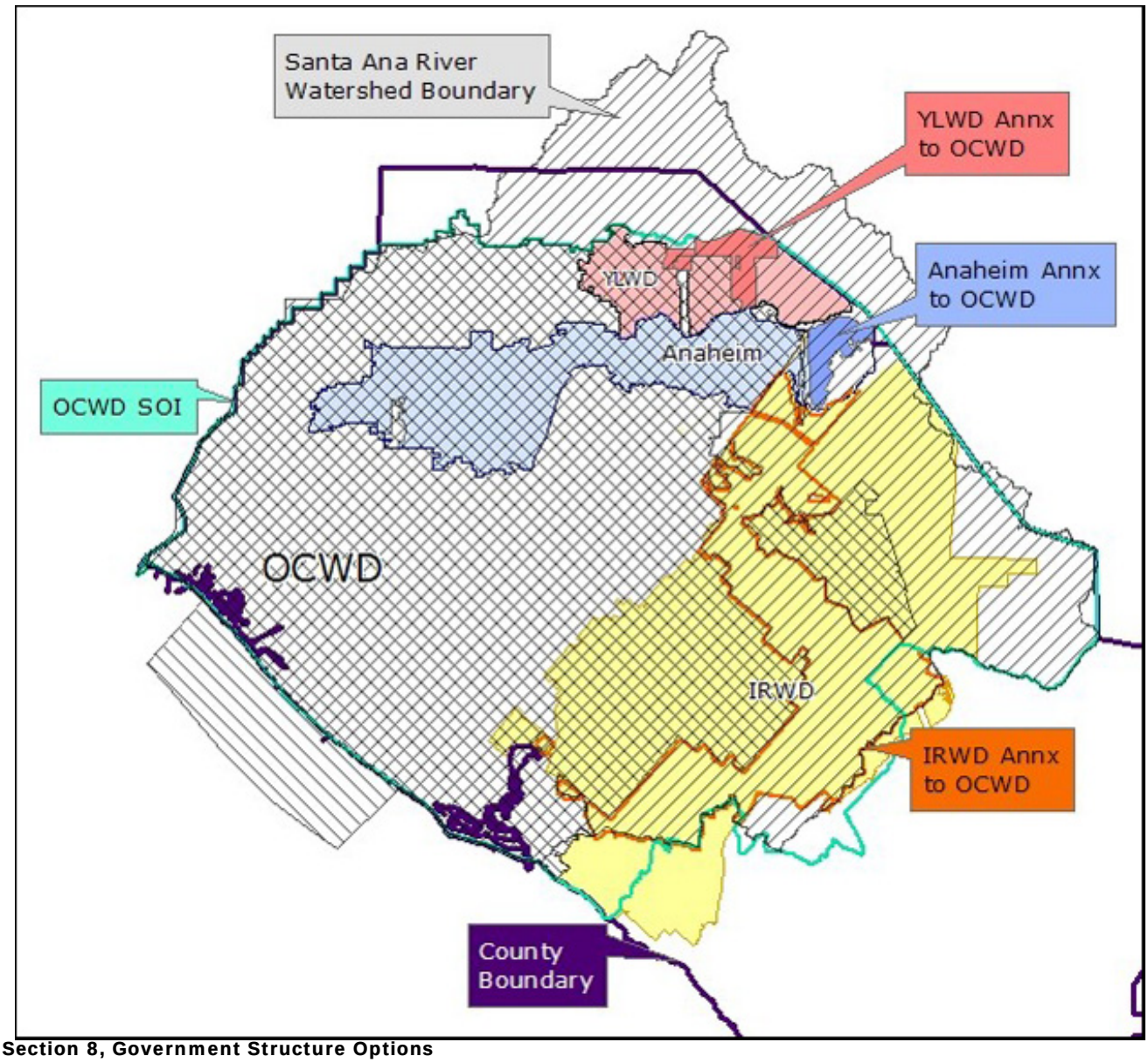
Advantages that might accrue from the reorganization of agencies include simplification of boundaries, improved service delivery, and reduction in costs or fees due to economies of scale. Disadvantages from a change in governmental boundaries can include no actual or limited costs savings, little improvement in service efficiency, loss of local autonomy, and political opposition. Pursuing reorganization without the support of residents or the governing board typically increases the time and effort involved.

LAFCO is not required to implement any of the governmental structure options noted in this report. However, LAFCO must update or reaffirm the sphere of influence of the OCWD, which will be heard by the LAFCO Commission subsequent to its consideration of the MSR report. Furthermore, there are three proposed annexations that may be considered by LAFCO following the SOI update. First, the City of

[3] For the purposes of this service review report, a reorganization is defined as two or more changes of organization (i.e., consolidation, merger, dissolution, annexation and/or detachment) which are processed as a single proposal before LAFCO.

Anaheim is seeking annexation of approximately 2,355 acres in the eastern portion of Anaheim, second, the Irvine Ranch Water District is pursuing annexation of 38,852 acres and third, the Yorba Linda Water District (YLWD) is pursuing annexation of approximately 2,732 acres. The areas proposed for annexation are depicted on the following Figure 8.1. This MSR and subsequent SOI study will be an integral source of information for considering those separate proposals. Therefore, the potential annexations are addressed in the government structure options discussed below.

Figure 8.1:
OCWD Service Area & Sphere Boundaries
with Proposed Annexations



The OCWD Sphere of Influence extends beyond its current boundaries to include nearly all of the lands within the watershed overlying the Orange County groundwater basin. The following discussion includes six options:

- Maintain the status quo
- Annexation of Lands within Anaheim
- Annexation of Lands within IRWD
- Annexation of Lands within YLWD
- Reduce the sphere of influence to exclude areas that are outside the Metropolitan Water District service area
- Merge OCWD and MWDOC

No other agency was identified that could provide all of the services which the District provides with the same objectives and degree of coordination among groundwater producers in the northern and central portions of the county. Because the Santa Ana River flows and groundwater basin are a shared resource for a large portion of Orange County, the District provides an important service in optimizing those resources for the water purveyors.

Annexation of all lands within the District's SOI is not a viable option. Although this would eliminate the need to consider individual annexation requests as they occur, it would be counter to the District's existing policy regarding annexations (see *Appendix B*). OCWD responds to specific annexation requests that comply with the District's annexation policy, including the following: 1) the proposed annexation area is within the Orange County portion of the Santa Ana River Watershed; 2) the proposed annexation area is within the service area of the Metropolitan Water District, and therefore eligible to receive imported water to supplement local supply; and 3) the agency agrees to pay OCWD's annual annexation fee. Because there are annual annexation fee requirements, a Replenishment Assessment and the Basin Equity Assessment for production that exceeds the approved Basin Pumping Percentage, annexation where there is not a formal agency agreement in place for payment of the fees could significantly increase the burden on existing ratepayers.

OCWD has had a fairly active record of annexations during its 65-year history. In 1933 when the District was formed it was comprised of 162,676 acres. Since that time the District has added 66,324 acres through 46 separate annexations to encompass

approximately 229,000 acres within the existing District boundary. OCWD's current annexation policy adopted in February 1986 (see Appendix B for the complete annexation policy) states:

> *It shall be the policy of the Orange County Water District to accommodate the long-term producers within the District's groundwater management programs and provide uniformity of cost of and access to groundwater throughout the District by consenting to requests for annexation of areas within the Orange County portion of the Santa Ana River watershed, provided that the annexing territory is within the boundaries of The Metropolitan Water District of Southern California.*

The annexation policy further establishes that:

- An annexing agency is subject to an annual annexation fee
- Is responsible for the costs associated with completing the annexation process
- District staff draft a pre-annexation agreement with the entity addressing the annexation policy criteria

However, some past annexation requests have been the subject of concern to OCWD members. A prior request by the Irvine Ranch Water District for OCWD to annex approximately 27,000 acres of its territory raised concerns from some of the OCWD water producers that such an annexation may adversely impact the cost and quality of the water within the OCWD. Based on these concerns, the 1998-99 Orange County Grand Jury (OCGJ) initiated a study to look at equity issues related to existing and future water provision in Orange County. In a June, 1999 report titled *Orange County Water District Annexations,* the Grand Jury stated upfront it *"believes that the OCWD must prove its ability to serve water to the population within its existing OCWD boundaries before the OCWD embarks on additional annexations."*

For its review, the Grand Jury interviewed representatives of the OCWD, other elected and appointed city and water district officials and reviewed various related publications including the OCWD 2020 Master Plan. After completing its study, the Grand Jury arrived at three main findings:

1. *During a 1977 LAFCO hearing, the OCWD did not prove its capacity to serve the population that would develop in the sphere of influence designated by LAFCO.*

2. *The OCWD is the conservator of the water supply for 2 million people and should be very cautious about additional annexations. District engineers believe that the $241 million capital improvement plan will increase groundwater production but that plan is not yet proven.*

3. *Since annexations will require additional capital improvements to increase groundwater production, a "buy-in fee" is justified.*

Based on its findings, the OCGJ made the following recommendations in June, 1999:

1. *The OCWD return to the LAFCO to re-define the District's sphere of influence to that geographic area that the District can serve.*

2. *The OCWD establish a moratorium on annexations until the Municipal Water District of Orange County water study is complete. The OCWD must prove that its capital improvement program will increase groundwater production before further annexations are approved. The OCWD must balance its obligation to serve with the ability to serve.*

3. *The OCWD 2020 Master Plan estimates that the proposed annexations would increase the demand on the groundwater basin by approximately ten percent; therefore, a buy-in fee or $1,000 per acre would mitigate part of the additional debt required to increase groundwater production.*

The findings and recommendations in the 1999 Grand Jury report were subsequently addressed by LAFCO and the OCWD. The OCWD Long Term Facilities Plan in final review at the time this report was drafted addresses future demand and service capacity for the District through the year 2025. Potential annexations to the District are assessed in that planning document as well as other projects to manage the groundwater basin, conserve and reclaim water and protect the quality of the groundwater supply.

B. Options

1. Maintain the Status Quo

This option would maintain the District's current SOI and boundary, and would not consider future annexations. The City of Anaheim, IRWD and YLWD would utilize existing sources of water to serve those areas outside the OCWD boundaries, as would other agencies which use groundwater from the Orange County groundwater basin as a source of supply. Under these conditions, a producer could pump groundwater from the basin from lands adjacent to the OCWD boundaries and within the Santa Ana River watershed. Although they would be benefiting from the groundwater management programs of the OCWD, they would not be subject to the Replenishment Assessment, Basin Production Percentage, or Basin Equity Assessment. Furthermore, they would not be subject to the financial and other controls implemented by OCWD through these management tools authorized by the OCWD Act.

The Orange County groundwater basin is not adjudicated, and there are no statutory limitations on where a water purveyor could develop a production well within its jurisdictional area (environmental issues aside). If the area lies outside the OCWD boundaries, the producer could produce as much groundwater as they had capacity or demand for in the overlying area, with no remuneration to the OCWD for its role in managing basin resources. This could cause hydrologic changes within the Basin as well as create considerable inequity for those producers within the Basin that are paying fees for groundwater management and abiding by the Basin Production Percentage to ensure the Basin's long-term sustainability. Planned growth within the existing OCWD boundaries is expected to increase total water demand by 77,000 afy by Year 2025, or an overall 15%. The Basin Pumping Percentage is expected to increase to 75-percent by 2007-2008 *(76-percent with new recharge projects) and remain at that level through 2010-2011. If status quo is maintained and no annexations were considered, the impact on the groundwater basin would be increased demand that is factored into the Basin Pumping Percentage. The impact on the BPP would be lessened by the operation of recharge projects that are currently under construction or being considered as part of the Long-Term Facilities Plan.

2. Annexation of Lands within the City of Anaheim

The City of Anaheim is seeking annexation of 2,355 acres in the eastern portion of the City to the OCWD. The estimated increase in demand attributable to the annexation is 2,785 afy by Year 2025. The City has not provided water service to this area in the past; however, development is imminent with the approval of The Irvine Company's Mountain Park community. The Mountain Park development encompasses approximately 3,001 acres, 838 acres of which are developable. The development has been approved for up to 2,500 homes, an elementary school, a park, a trail access site, a fire station and convenience store. Rule 15 of the City's Water Rates, Rules and Regulations requires that a property must be entirely within the OCWD boundaries as a condition of the City providing water service to the property. Currently there are no specific proposals for new groundwater production facilities in the annexing area; however groundwater is considered an essential source of supply to meet overall water demands for the City.

Annexation of the east Anaheim area would be consistent with both OCWD's policy regarding annexations and the City's policies regarding water service. It would ensure that Anaheim continues to bear its fair share of the cost for groundwater produced and utilized within the City's water service area. The proposed area would be subject to OCWD's annual annexation fee. It is estimated that the annexation would generate an

additional $100,000 per year in in-lieu property taxes to OCWD at ultimate development.

(See Section 7, Economies of Service page 37 for an example of how the annual annexation fee is calculated.)

Potential impacts from the annexation include a reduction in the Basin Pumping Percentage as it is based on total water available for pumping (factoring in all sources of supply) and net total water demands within the OCWD service area. An increase in demand would effectively reduce the BPP in the absence of a compensating additional source of supply. A lower BPP would require producers to use more imported water or pump over the BPP and pay the Basin Equity Assessment. Given the size of the area in east Anaheim and the projected water demands, the impact on other producers would likely be minimal. The Replenishment Assessment is set annually based on District operating expenses and groundwater produced; therefore, the east Anaheim annexation is expected to have little impact on the RA. The annual annexation fee would reimburse the District for a portion of past capital expenses and contribute to the financial resources of the District for future projects.

3. Annexation of Lands within the Irvine Ranch Water District

The Irvine Ranch Water District is pursuing annexation of the remaining areas within IRWD that are currently outside the boundaries of the OCWD, but within the Santa Ana River Watershed. Specifically IRWD would like to have OCWD annex 38,852 acres in three separate parcels: 1) 9,272 acres which are currently developed; 2) 8,666 acres that are available for future development, including 2,301 acres currently or recently under construction; and 3) 20,913 acres which is committed as a permanent open space reserve. The estimated combined water demand for these areas is 43,004 afy in Year 2025, of which approximately 9,000 afy will be met by IRWD reclaimed water. It is estimated that the annexation would generate an additional $1.3 million per year in in-lieu property taxes to OCWD.

This option would require amending OCWD's sphere of influence as the southeast corner of IRWD's proposed annexation area lies outside OCWD's current SOI.

Annexation of the IRWD area would be consistent with OCWD's policy regarding annexations. The proposed area would be subject to OCWD's annual annexation fee calculated as previously shown and therefore it would ensure that IRWD shares in the cost of OCWD's existing infrastructure and planned capital improvements.

Furthermore, it would extend OCWD's management programs to a larger area within the watershed.

IRWD's most recent water supply assessment, adopted on November 28, 2005, concluded that total water supplies available to IRWD in normal and dry years were sufficient to meet total water demands for existing and planned land uses within IRWD's entire service area over a 20-year projection. For the assessment, the analysis included the proposed annexation area, but considered only IRWD's current groundwater production capacity that is already within OCWD. Therefore, any additional groundwater production capacity would not be necessary to supply the annexation area's existing population or planned development. Rather, it would provide IRWD with supply diversification, enhanced reliability and quality, and lower total water supply cost.

Potential impacts to existing basin producers from the annexation include a reduction in the Basin Pumping Percentage as it is based on total water available for pumping (factoring in all sources of supply) and net total water demands within the OCWD service area. The act of annexing additional land has no direct impact on the BPP; impacts occur only when additional demand occurs within the OCWD boundary and additional groundwater is produced. An increase in demand would effectively reduce the BPP in the absence of a compensating additional source of supply. A lower BPP would require producers to use more imported water or pump over the BPP and pay the Basin Equity Assessment. Given the size of the area proposed for annexation by IRWD and the projected water demands, the impact on other producers would likely be an annual reduction in the BPP of four to five-percent by Year 2025.

The timing of a potential reduction in the BPP is dependent upon when IRWD develops additional pumping capacity. IRWD's ability to pump groundwater is limited by the Dyer Road Wellfield Agreement and the limited availability of new well sites. IRWD has limited areas within their service area to locate new wells due to hydrogeologic conditions and contamination issues.

4. Annexation of Lands within the Yorba Linda Water District

In July 2006 the Yorba Linda Water District submitted a request to OCWD to annex approximately 2,732 acres of territory located north and east of the existing OCWD boundary within the YLWD. The proposed annexation was not addressed in the Draft Long Term Facilities Plan or the Program EIR created by OCWD. Estimated water demand for the proposed annexation area is 3,100 afy in Year 2025, which includes approximately 1,800 afy of existing demand. Annexation of the YLWD area would be

consistent with OCWD's policy regarding annexations. The proposed area would be subject to OCWD's annual annexation fee calculated as previously shown and therefore it would ensure that YLWD shares in the cost of OCWD's existing infrastructure and planned capital improvements. The annexation would generate an estimated $115,000 per year in additional in-lieu property taxes to OCWD. Furthermore, it would extend OCWD's management programs to a larger area within the watershed.

YLWD has built a flexible supply system that allows the District to supply 75% of its water demands from either groundwater or imported water. For this reason the YLWD annexation presents less concern about supply reliability. Rather, YLWD could assist with supply diversification in times of shortage.

As stated under options 2 and 3 above, annexation of additional territory to OCWD would likely cause the BPP to be lower for everyone within the District. In OCWD's groundwater modeling that considered Year 2025 conditions, the YLWD annexation had very little regional effect on the basin.

The following table 8.1 indicates the estimated impact on the BPP from annexation:

	FY 05-06	FUTURE 2025			
	Current AFY	Future Pumping – 400,000 AFY		Future Pumping – 500,000 AFY	
		Without Annexations (AFY)	*With Annexations (AFY)*	*Without Annexations (AFY)*	*With Annexations (AFY)*
Total Water Demands	491,000	568,000	614,000	568,000	614,000
Local & Reclamation Supplies[1]	-18,000	-18,000	-27,000	-18,000	-27,000
Net Total Water Demands	473,000	550,000	587,000	550,000	587,000
Assumed Basin Pumping	318,000	400,000	400,000	500,000	500,000
Water Quality Projects Pumping Above BPP[2]	-14,000	-35,000	-35,000	-35,000	-35,000
BPP Pumping	304,000	365,000	365,000	465,000	465,000
BPP Calculation	304,000/ 473,000= 64%	365,000/ 550,000= 66%	365,000/ 587,000 = 62%	465,000/ 550,000 = 84%	465,000/ 587,000 = 79%

Table 8.1 does not include any potential impacts of a proposed YLWD annexation. YLWD estimates that demand within the proposed annexation area will be 3,100 afy in either scenario.

Assumptions:

1) For future 2025 condition, local and reclamation supplies do not increase unless annexations occur. If annexations occur, then 9,000 afy additional reclamation by IRWD is assumed

2) For future 2025 condition, assumes expansion of currently planned Water Quality projects (from current 14,000 afy to 35,000 afy)

Source: Final Draft Long-term Facilities Plan, January 11, 2006

5. Reduce the sphere of influence to exclude areas that are outside the Metropolitan Water District service area

OCWD's current sphere of influence extends to the County's eastern boundary and includes area that is not within Metropolitan's service area. Per OCWD policy, the District could not annex this area. This option would adjust OCWD's sphere to only include area that could potentially be served (i.e., within the Santa Ana River watershed and within Metropolitan's service area). This would clean up the District's sphere so that is consistent with Board policy.

6. Merge OCWD with MWDOC (Municipal Water District of Orange County)

This government structure reorganization option has not been considered in the past due to the differing missions of these agencies. OCWD is a groundwater basin management agency whereas MWDOC is a wholesale imported water distribution organization. OCWD's current sphere of influence extends to the County's eastern boundary, south to the cities of Irvine and Lake Forest and west to the Pacific Ocean. As the Metropolitan Water District wholesale water provider for Orange County, MWDOC's sphere of influence and service area covers Orange County in its entirety excluding only the cities of Anaheim, Santa Ana and Fullerton which are direct Metropolitan member agencies.

This option is not considered feasible for other reasons including: Implementing it would take an act of legislation because it involves changing OCWD's principal act. A merging of these two agencies would not necessarily achieve great efficiencies in overall management of water resources in Orange County. Keeping these two agencies separate maintains an important check and balance system, preventing one agency from having control over water supply for the entire County.

C. Summary

Growth within the OCWD boundaries, whether due to annexation or infill development, will increase total water demand and likely cause a decrease in the Basin Pumping Percentage. Increasing water demands with a fixed amount of available groundwater translates into a lower BPP. It is important to reiterate that annexation of additional territory to the District does not automatically impact the cost or availability of groundwater supplies to existing Basin producers. The BPP is established yearly

based on water available in the basin divided by the net water demands from the previous year within the service area. In the future, the water demands for the annexing areas would be calculated into the BPP. The cost impact to existing producers occurs when the BPP decreases and demand increases tripping the need to pump more groundwater and pay the BEA or access more imported water. Internal or "*infill*" growth is expected to have a much greater impact to the BPP than potential annexations. In planning to meet future water demands and fulfill its responsibilities for groundwater management, it has been the District's historical practice to create additional local water supplies for recharge that in turn support increased annual basin pumping. Thus the additional groundwater supply counteracts the impacts of increased water demands, allowing the BPP to be set at a higher level.

Existing District groundwater management practices appear to be sufficient to address projected growth within the basin service area whether due to future annexation and/or infill development. No significant government structure options were noted. Potential annexation proposals will likely affect a change in the District's sphere of influence which will be reviewed and updated subsequent to this report.

Section 9:

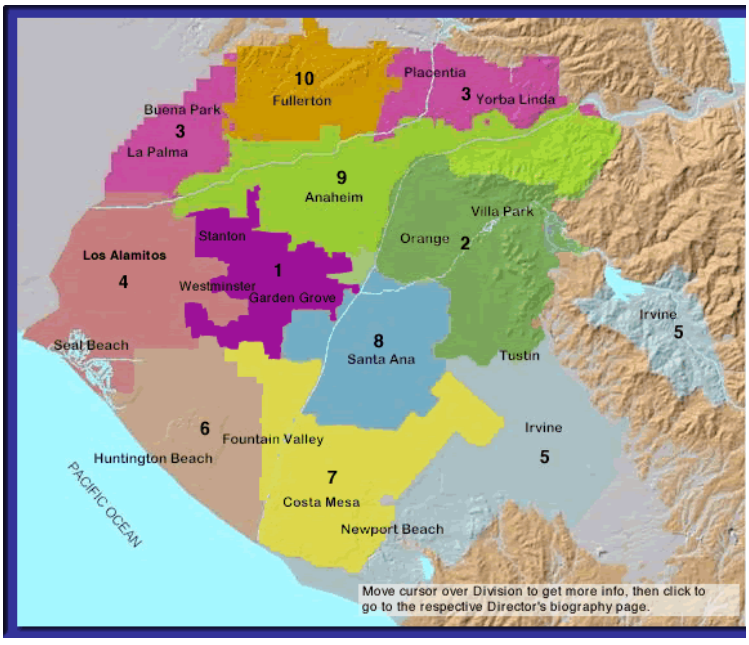
LOCAL ACCOUNTABILITY & GOVERNANCE

LOCAL ACCOUNTABILITY & GOVERNANCE

A. Overview

The Orange County Water District's service area is geographically divided into ten divisions or regions, as shown below in Figure 9.1. The District is governed by a ten-member board of Directors. Directors for Regions 1 through 7 must be residents of the divisions they represent and are elected by voters within that division; directors for Regions 8 (City of Santa Ana), 9 (City of Anaheim) and 10 (City of Fullerton) are appointed by each City Council. All directors serve four-year terms.

Figure 9.1 – Orange County Water District Divisions



The following summarizes the governance and local accountability of the District:

Orange County Water District			
Date formed:	October 24, 1933		
Statutory Authorization:	Chapter 924 of California Statutes of 1933. – Orange County Water District Act		
Board Meetings:	Monthly on 1st and 3rd Wednesday, 5 p.m.		
Board of Directors	**Title**	**Term Expiration**	**Compensation**
Kathryn L. Barr	2nd VP, Region 1	2006	$200.57/meeting *(for up to ten meetings/month)*
Denis Bilodeau	Director, Region 2	2008	
Roger Yoh	Director, Region 3	2008	
Philip L. Anthony	President, Region 4	2008	
Stephen R. Sheldon	Director, Region 5	2006	
Wes Bannister	Director, Region 6	2008	
Jan Debay	1st VP, Region 7	2006	
Jose Solario	Director, Region 8	2008	
Richard Chavez	Director, Region 9	2008	
Shawn Nelson	Director, Region 10	2008	

OCWD's governing structure ensures fair and equitable representation across the ten divisions. The District's boundaries encompass approximately 229,000 acres within the Santa Ana River watershed below Prado Dam. As discussed above in *Section 8.0, Government Structure Options*, the District has established a policy such that its boundaries may not extend beyond the limits of the Santa Ana River Watershed and all area within the District must also be included within the service area of the Metropolitan Water District. This ensures that there is a shared interest among the groundwater producers for how local water resources are developed and managed. Furthermore, the OCWD Act requires that the District adjust division boundaries following each federal census so that the divisions are equal in population and share common interests, to the extent practicable.

The District's website (www.ocwd.com) offers a wide range of information including meeting notices, agendas and minutes, District services, conservation and education, public documents, and project information. District board meetings are held at the District's main office and they are open and accessible to the public.

No issues of local accountability & governance were identified.

Appendix A:
STAKEHOLDER INPUT

ORANGE COUNTY WATER DISTRICT STAKEHOLDER INPUT SESSION NOTES

Orange County Local Agency Formation Commission
Orange County Water District Municipal Service Review
Member Stakeholder Meeting Notes
August 9, 2006

Attendees:

Don Calkins – Anaheim	Rick Shintaku-Anaheim
Lorrie Laustem– Fullerton	Patrick Scanlon – Golden State Water Co
Diana Leach – Mesa Consol WD	Thom Coughran – Santa Ana
Bob Kellison – Fountain Valley	John Kennedy – OCWD
Shivaji Deshmukh – OCWD	Tim DeTurk – Serrano WD
Ken Vecchiarelli – YLWD	Joe DeFrancesco – Orange
Zack Barrett – Garden Grove	Lonnie Curtis – Golden State Water Co
Matt Stone – MWDOC	George Murdoch – Newport Beach
Keith Lyon – MWDOC	Oliver Pacifico – Golden State Water Co
Bob McVicker – Mesa Consol WD	Ron Wildermuth – OCWD
Ray Burk – Santa Ana	Alexis Clark – OCWD
Craig Miller – OCWD	Fred Adjarian – Tustin
Paul Cook – IRWD	Howard Johnson – Huntington Beach
Rich Mathis – Garden Grove	Lo Tan – OCWD
Paul Jones - IRWD	

LAFCO

Attendees: Joyce Crosthwaite (Executive Officer), Kim Koeppen (Project Manager), Sharon Browning (Sharon Browning & Associates; facilitator)

Call to Order

The meeting was called to order by Bob Kellison (Field Service Manager for the City of Fountain Valley) who announced that the Groundwater Basin Producer's meeting agenda would be devoted to inputting LAFCO's draft OCWD Municipal Service Review (MSR) report and providing stakeholder input to the review process. Following self-introductions John Kennedy (OCWD Assistant General Manager) provided additional background information and then introduced Sharon Browning the LAFCO meeting facilitator.

Agenda Review

Browning explained that LAFCO had been invited to conduct this stakeholder input meeting by Virginia Grebbien (OCWD General Manager) who believes an open appraisal of OCWD's services is an appropriate part of the MSR and will benefit everyone. Following review of the agenda and meeting discussion guidelines Browning explained that she would prepare the meeting minutes and that they would be available to anyone requesting them from LAFCO.

Explanation of MSR/SOI Process

Kim Koeppen presented an overview of Orange County's MSR process.

OCWD Stakeholder Input

Stakeholder participants engaged in an evaluation of OCWD's strengths, areas where improvement is desired and offered suggestions for new services.

- Strengths
  - ✓ Water quality management and regulatory assistance
  - ✓ Data collection
  - ✓ Financial planning; is an excellent funding catalyst; successful at securing grants which reduces over all costs
  - ✓ Hydro-geological understanding of the Basin
  - ✓ Gathering and analyzing samples required by regulatory agencies
  - ✓ Has increased the yield of the ground water basin
  - ✓ Sea water barrier management

- ✓ Public outreach and communication – particularly on Groundwater Replenishment (GWR) project
- ✓ Annual engineers report
- ✓ Developing and implementing innovative programs to support groundwater basin management principles
- ✓ Advocate for groundwater issues with Metropolitan (MET); coordinates well with MWDOC and the three cities
- ✓ Effective single point of coordination and information for the public on water quality and water levels
- ✓ Represents member interests with other agencies including agencies outside of Orange County
- ✓ Provides a good forum for stakeholder input
- ✓ Prado Dam and work with the Corp of Engineers to increase elevation
- ✓ Relationship with MWDOC; conjunctive use and emergencies

- Improvements desired
  - ✓ Control spending, especially projects that don't produce water
  - ✓ More aggressive regarding processing abandoned wells – particularly working with County Health Department on this issue
  - ✓ Follow through on input received at discussion forums
    - Some feel their input is not given "full consideration"
    - Satisfactory "closure" is not always achieved
    - Disconnect between Producers and Board
  - ✓ Include special districts when working with the cities
  - ✓ More investigation/ understanding threat of sea water intrusion
  - ✓ Continue building on the already excellent working relationship with MWDOC relative to conjunctive use and emergencies outside of basin
  - ✓ Improved empathy and understanding of all customers
    - Serve customers with different needs equally
    - Some feel that they "get lost" and there is a sense of "callousness" regarding their needs
    - Recognize and deal with the different needs of the "direct customer" and the "residential customer"
    - Directors are ultimately accountable to the residential customer
  - ✓ Ensure that BPP/RA numbers are distributed early enough for agencies to budget; five year projections
  - ✓ Conduct a cost/benefit analysis of operations on a regular basis
  - ✓ Provide an on-going tracking system for projects (costs, implementation) so that producers can easily monitor progress and change
  - ✓ Provide full communication relative to issues going to the Board

- Provide a system that easily identifies issues of importance to producers and a means for tracking the issues

Draft OCWD MSR Report

Stakeholder participants made the following comments relative to the draft OCWD MSR Report:

- Page 13: Under POPULATION; new numbers need to be confirmed with the appropriate agencies
- Page 13: under POPULATION, clarify discussion in second paragraph; population growth is different than growth of the number of homes
- Page 5: Under SERVICE AREA WATER SUPPLY; add in the average; add the year production is based on and revise financial information reference
- Page 4: Under SANTIAGO WATER DISTRICT delete reference to Santiago – it is now IRWD, change SOUTHERN CALIFORNIA Water Company to GOLDEN STATE Water Company
- Page 46-47: Under ANNEXATION AND IMPACTS; the report states that the impacts on other producers will be minimal but does not mention IRWD; Yorba Linda annexation is not mentioned; show the nexus between the change in basin pumping percentage and cost to producers and overall impact to water supply due to annexations
- Page 45: Under ANAHEIM; second sentence note that only 838 acres are developable
- Section 4: add to section 4 a discussion that infill growth needs to be factored into BPP
- Page 45 or where appropriate in Section 8: insert background information on OCWD annexation policy
- Page 14: Under Section 4; check the numbers in table #2; current and updated numbers need to be substituted; agencies will send to LAFCO by August 16, 2006
- Page 11: provide a range of gallons per day usage; agencies will send their numbers to LAFCO by August 16, 2006
- Page 47: There are no conclusions under Governance Options, when are conclusions drawn?
- Page 18: Need to correct that the reference to "future" Metropolitan Diemer Treatment Plant, the bypass IS in place now
- Under agency profile section need to more clearly articulate that the purchase of water goes through one of four agencies
- Under EFFICIENCIES (Section 7) note the working relationship between OCWD and MWDOC and acknowledge their coordination of planning assumptions, joint

planning of projects, shared facilities, idea for water campus and coordination of communications and legislative work.

LAFCO MSR Process

Stakeholder participants made the following comments on LAFCO's MSR process:

- LAFCO should consider an inclusive approach within the MSR process to recognize private agencies serving these areas

Next Steps

Stakeholder participants agreed to the following next steps:

Action	Due Date
▪ Stakeholders will submit to LAFCO any additional comments they may have on the MSR report in addition to updated date for use in the report	August 16, 2006
▪ LAFCO distribute revised MSR report to stakeholders	August 23, 2006
▪ Producers meeting to make final comments on revised MSR report	September 13, 2006
▪ LAFCO will work independently with Mesa Consolidated to gather input from its Board of Directors	September 12, 2006

Adjournment

The LAFCO portion of the meeting was adjourned at 12:00 PM by Kim Koeppen.

Recorded and submitted by Sharon M. Browning

Appendix B:
OCWD ANNEXATION POLICY

ORANGE COUNTY WATER DISTRICT ANNEXATION POLICY

RESOLUTION NO. 86-2-15

**RESOLUTION OF THE BOARD OF DIRECTORS OF
THE ORANGE COUNTY WATER DISTRICT
ADOPTING POLICY REGARDING ANNEXATIONS TO THE DISTRICT**

WHEREAS, by Resolution No. 85-2-17, this Board adopted its policy regarding annexations to the District; and

WHEREAS, the Board of Directors desires to amend its policy on such annexations;

NOW, THEREFORE, the Board of Directors of the Orange County Water District does hereby resolve as follows:

Section 1: It shall be the policy of the Orange County Water District to accommodate the long-term producers within the District's groundwater management programs and provide uniformity of cost of and access to groundwater throughout the District by consenting to requests for annexation of areas within the Orange County portion of the Santa Ana River watershed, provided that the annexing territory is within the boundaries of The Metropolitan Water District of Southern California.

Section 2: Prior to annexation, an agreement shall be entered into between the District and the applicable water purveying agency providing for payment to the District of an annual annexation charge calculated by the following formula:

$$X = A \times B \times \frac{C}{D} \times E$$

Where
- X = Annexation Charge
- A = Current year's Basin Production Percentage
- B = Current year's total water demand within annexed territory or 10% of ultimate annual total water demand within annexed territory, whichever is greater
- C = Previous year's *ad valorem* income
- D - Previous year's total groundwater production
- E - Applicable percentage (determined from following table):

% Groundwater Used Within Service Area of Annexing Purveyor			Applicable
0.0	-	5.99	10%
6.0	-	9.99	16%
10.0	-	14.99	25%
15.0	-	19.99	30%
20.0	-	24.99	40%
25.0	-	29.99	48%
30.0	-	34.99	55%
35.0	-	39.99	64%
40.0	-	44.99	72%
45.0	-	49.00	80%
50.0	-	100.00	100%

Section 3: Said agreement shall provide for the payment of annexation processing costs as follows: The water purveying agency shall be solely responsible for: a) all direct costs and fees imposed or required by any governmental body or agency having jurisdiction over the processing and completion of the annexation of the subject territory to OCWD; and b) preparing any legal descriptions, boundary surveys or maps required for the processing and completion of such annexation.

Section 4: The staff of the District is authorized and directed to draft pre-annexation agreements with entities which have requested annexation to the District and which meet the above-described criteria.

Section 5: Resolution No. 85-2-17 is rescinded.