Laguna Beach County Water District



LAGUNA BEACH COUNTY WATER DISTRICT

2010/11 Annual Budget

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Adopted: June 2010

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District Overview

Since 1925, the Laguna Beach County Water District (District) has proudly provided retail water service to our customers. The mission of the District is to furnish a high quality, reliable water supply in a financially responsible manner, while promoting water-use efficiency.

History of the District

Until the early 1920's, the residents of Laguna Beach relied on privately owned shallow wells and intermittent rainfall for their water supply. Then, in the mid-20s, poor water quality and well failure combined to make an alternate water source urgent. The Laguna Beach County Water District was created by public vote in 1925. A year later, District voters approved a \$600,000 bond issue to purchase a well site in Huntington Beach, construct a transmission line, and acquire an existing private water company to provide service. The original bond was paid off in 1955.

With its continuing growth, the District was unable to rely solely on its wells and looked to imported water supplies. In 1943, it started purchasing Colorado River water supplied by the Metropolitan Water District of Southern California. Currently, all potable water is imported into Laguna Beach County Water District from both the State Water Project and the Colorado River. However, the District is again looking at various projects in the Santa Ana River Basin and elsewhere, as future sources of water.

The District Today

The District provides water services to approximately 23,000 people within an 8.5 square mile area of southern Orange County, including portions of the

city of Laguna Beach and a portion of Crystal Cove State Park. The District also provides contract services to the community of Emerald Bay.

On January 1, 2004, Emerald Bay Services District was deannexed from the District's service area. This represents approximately 556 customers or 6 percent of the District's services and accounts for approximately 337 acre feet of water provided by the District. The District continues to provide water service and administrative support through an agreement with Emerald Bay Services District.

The District's 8,008 service connections are mostly residential water users. The District purchases about 4,000 acre-feet of water annually. This is equal to approximately 1.3 billion gallons delivered on an annual basis. An acre-foot of water is enough to cover a football field one-foot deep or serve two average sized households for a year.

Operations

There are 21 water storage reservoirs with a total storage capacity of 33.5 million gallons within the District, providing up to approximately ten days of water to the community in the event of an emergency. These reservoirs are located within five elevation zones to ensure reliable distribution to all customers. They are monitored by the District's state-of-the-art telemetry system, allowing District personnel to manage water distribution throughout the system from the District's headquarters.

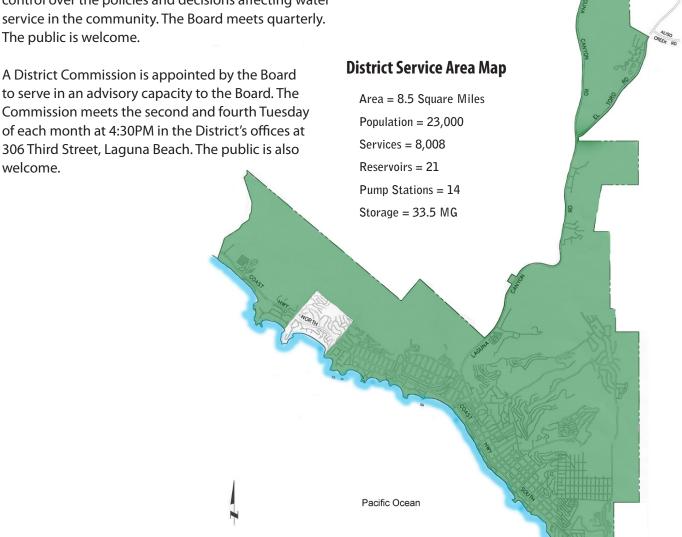
District staff operates and maintains 36 pumps in 14 pumping stations, a total approximate connected horsepower of 2,660. The system encompasses

135 miles of distribution pipelines, which range in diameter from 4 to 16 inches.

As lead agency in a joint powers relationship with the South Coast Water District, Irvine Ranch Water District, the city of Newport Beach, and the Santa Margarita Water District, the District also operates and maintains the Aufdenkamp and the Coast Supply transmission lines. These pipelines range in size from 24 to 42 inches in diameter and provide the District's imported water supply.

How the District is Governed

The publicly-elected Laguna Beach City Council members serve as the Board of Directors of the Laguna Beach County Water District, providing local control over the policies and decisions affecting water service in the community. The Board meets quarterly. The public is welcome.



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Budget Assumptions

The proposed fiscal year (FY) 2010/11 budget increases from the FY 2009/10 budget by 2.40 percent.

Labor

The 2010/11 labor budget has decreased 5.20 percent or \$120,720 below the 2009/10 budgeted amounts. This is based on the following factors:

- A. 40 Full-time positions (40 in 2009/10)
- B. 0 Part-time position (1 in 2009/10)
- C. Cost of Living Adjustment 2010/11 2.40 percent (Index for March 2010)

Benefits

The 2010/11 benefits budget has decreased 2.74 percent or \$36,420 below the 2009/10 budgeted amount. This is based on the following factors:

A. PERS

- 1. Employer Contribution 2010/11 7.052 percent (2009/10 6.216 percent)
- 2. Employee Contribution 2010/11 7 percent

B. Insurance

- Workers Comp Insurance E-Mod Rate 2010/11 -Estimated 103 (2009/10 -103)
- 2. Workers Comp Insurance 2010/11 Rates estimated at 100 percent of 2009/10.
- Medical insurance increased January 2010 by 7.37 percent; projected increase January 2011 by 4.0 percent. Employees pay a portion of medical insurance premiums.
- 4. All other insurance coverage remain at same levels as 2009/10 Budget.

Water Purchases

The cost for water purchases will increase by 6.16 percent or \$182,390 over 2009/10 charges due to a rate increase from Metropolitan Water District (MWD).

A. Water Purchases

 Estimated volume of water purchases is 4,000 acre feet (AF). This is our Tier 1 allocation from Metropolitan Water District (MWD).

B. MWD Water Rates

- MWD Water Rate \$701/AF July through December 2010. \$744/AF – January through June 2011
- 2. MWD RTS Charges 2010/11 \$11,710/mo (2009/10 \$9,360/mo)
- 3. MWD Capacity Charges 2010/11 \$38,930/yr (2009/10 \$59,940)
- C. Municipal Water District of Orange County (MWDOC) Charges 2010/11 \$5.75 per meter (5.50 in 2009/10) and \$6.75/AF (6.50 in 2009/10).

Water Sales

Water sales are estimated at 3,880/AF. The District is estimating a 3 percent unaccounted for water, which is the difference between the amount of water received and sold.

Revenue and Expenditures

Allocation of Projected Revenue vs. Expenditures	PROJECTED
	2010/11
OPERATING REVENUE	\$ 8,267,460
LESS: OPERATION AND MAINTENANCE EXPENSE	8,267,460
OPERATING INCOME/(LOSS)	0,207,400
OPERATING INCOME/(LOSS)	0
CAPITAL REVENUE	2,771,780
LESS: CAPITAL PROJECTS	4,572,820
INCREASE TO/(DECREASE FROM) RESERVES	<1,801,040>
MISCELLANEOUS REVENUE	
EMERALD BAY CONTRIBUTION TO DESIGNATED RESERVE	28,000
INCREASE TO/(DECREASE FROM) CASH BALANCE	\$ <1,773,040>

Analysis of 2010/11 Budget Revenue Projection	BUDG 2009/			BUDGET 2010/11
	2009/	10		2010/11
OPERATING REVENUE				
WATER SALES	\$ 7,651,8	30	\$	7,838,890
FIRE SERVICE	8,7	40		9,040
FEES & PENALTIES	75,0	00		71,220
OVERHEAD CHARGE	15,0	00		11,100
EQUIPMENT CHARGE	24,0	00		24,000
ANTENAE LEASE REVENUE	280,9	90		289,210
MISCELLANEOUS	18,0	00		24,000
TOTAL OPERATING REVENUE	8,073,5	60		8,267,460
TOTAL OPERATIONS & MAINTENANCE EXPENSE	8,073,5	60		8,267,460
OPERATING GAIN/(LOSS)	\$	0	\$	0
CAPITAL REVENUE				
RESERVE STORAGE	\$ 20,0	00		\$24,000
INTEREST REVENUE	610,8	80		648,100
PROPERTY LEASE REVENUE	34,6	40		34,680
PROPERTY TAX REVENUE	1,852,2	10		2,065,000
LOAN	4,000,0	00		
TOTAL CAPITAL REVENUE	6,517,7	30		2,771,780
CAPITAL EXPENDITURES				
CAPITAL PROJECTS LOAN PAYBACK	8,603,4 121,2			4,572,820
TOTAL CAPITAL EXPENDITURES	8,724,6	00		4,572,820
INCREASE TO/(DECREASE FROM) DESIGNATED RESERVES	\$ (2,206,87	0)	\$ (1	,801,040)
MISCELLANEOUS REVENUE				
EMERALD BAY CONTRIBUTION TO DESIGNATED RESERVES	\$ 28,0	00	\$	28,000
MISC GAIN/(LOSS)	\$ 28,0	00	\$	28,000

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Budget Overview

2010/11 Operations Budget

The operating budget includes the day-to-day operations of the District, which includes operations and maintenance, customer service, engineering, and administration. This fiscal year, water use efficiency efforts and water supply costs have increased, accounting for much of the \$193,900 increase in expenditures. This equates to 2.40 percent above the previous year's operation budget.

Water Purchases

Water supply costs from Metropolitan Water District of Southern California (MWD) and Municipal Water District of Orange County (MWDOC) will increase by \$182,390 for the 2010/11 Budget. Water purchases are estimated at 4,000 acre-feet. Our wholesale rates from MWD will increase from \$701 to \$744 an acrefoot, and our MWDOC per acre-foot charge increased from \$6.50 to \$6.75 making the per-acre foot charge \$751. The \$43 an acre-foot increase from MWD comes on top of a \$112 an acre-foot increase in 2009/10 for imported water.

Labor and Benefits

Labor and benefits are projected to decrease \$157,140 through a combination of retirements, hiring freeze, an increased allocation of labor and benefits to capital projects, and a 2.4 percent cost of living adjustment. The District will contribute 7.0 percent of payroll to PERS, versus last year's contribution of 6.2 percent. The increase in health benefits are being partially offset by the employees being asked to pay a portion of dependent coverage premiums. All other benefit coverages are either

based upon no change or have been adjusted accordingly for inflation. Workers' Compensation Insurance rates and the carriers experience modification rate are expected to remain the same.

Field and Maintenance

The field operations and maintenance component of the budget has decreased by \$22,570 or 8.40 percent. This area covers all operation and maintenance of the District's facilities, which include reservoirs, pump stations, distribution pipelines and appurtenances, vehicle maintenance, and all buildings. No appreciable program changes are projected for this fiscal year. The change in this area is attributed mostly to the allocation of labor and benefits to capital projects, and keeping existing programs at the same level.

General Manager's Office

Expenses relating to the Board, Commission, General Manager, Legal, Audit, and professional memberships, such as the Association of California Water Agencies (ACWA) and the American Water Works Association (AWWA), are under the General Manager's Office section. An increase of \$3,350 or .65 percent to this area is mainly due to salaries and benefits.

Administration and Customer Service

Three factors contributed to an increase of \$148,610 or 15.16 percent in the Administration and Customer Service budget. In Customer Service, a part-time position was taken to full-time status resulting in an increase in labor and benefits. Data Management,

which includes computer consulting services, increased by \$24,100 due to the need for additional IT support services given the District's continued efforts to update and streamline processes through technology. The District's Water Use Efficiency Budget increased by \$66,260 due to its continued proactive approach to public information, community relations, and water use efficiency programs. It is important to note that the funds for the District's water use efficiency programs are generated through the District's Tier 2 Rate. Other expenses included in Administration and Customer Service are human resources, meter reading, records retention and destruction, data management, and customer billing.

Finance

The finance section has increased \$30,830 or 5.63 percent. A increase in salaries, benefits and general and property insurance comprise the majority of the increased costs.

Engineering

The engineering section of the budget decreased \$148,590 or 37.40 percent. The engineering department primarily deals with customer inquiries concerning engineering and water quality, designing and managing capital projects, and is a source of support for the Operations Department. Staffing changes contributed to the decrease.

2010/11 Capital Budget

This year, the District has budgeted \$4,570,820 for capital improvements. This is a decrease from the 2009/10 Capital Budget. The District is pursuing local water supply projects to reduce our 100 percent dependence on imported water (as noted below in the Water Supply Reliability Projects). In the past five years, imported water supply costs have increased dramatically. Due to years of drought, the region's limited water reserves, and worsening environmental and regulatory conditions in Northern California's Sacramento-San Joaquin Delta, Southern California's water supplies have been curtailed by as much as 30 percent.

Joint Powers

The District manages the Aufdenkamp Transmission Main and Coast Supply Line, which are jointly owned with other water agencies. This category covers projects specific to these facilities and the costs are shared by each agency according to its capacity rights in each pipeline. The total cost of all projects for this fiscal year is \$624,800 with the District's share being \$136,220.

Reservoir and Pump Station Improvements

These are projects too large to be considered maintenance items. Six projects totaling \$150,000 are proposed for this fiscal year, they include: replacement of two seismic valves at Platz Reservoir, installation of anti-cavitation Hytol valves at Nyes and Castle Rock, improvements to drainage at Viejo Reservoir, upgrade to SCADA system, and rehabilitation of pumps at Ridge and Tiajuana pump stations.

Transmission and Distribution

Capital funds are designated annually for ongoing replacement programs and miscellaneous projects that are large enough to be considered capital in nature. The majority of work in this category includes valve, fire hydrant, and meter replacement. The goal is replacement before these items fail. This year, \$530,000 will be spent in this category.

Cast Iron Pipe Replacement

The District started replacing its old cast iron pipe in the 1970's. It is nearing its goal of finishing the last portions of the old pipe in the 2013/14 fiscal year. This year, the District proposes to focus on projects in Monterey Drive, High Drive, and Viejo Street, totaling \$570,000.

Master Plan Improvements

The District has completed most of the critical projects outlined in the 1996 Master Plan. Its goal is to complete all of the projects by the 2013/14 fiscal year. For this budget, the District proposes two projects to improve flow. The first is in the area served by the La Brea Pressure Regulating Station in the north end of the District; the second is in the area of Palmar and Catalina streets. \$708,000 will be spent in this category.

Office Equipment

This category includes network improvements, implementation of the first phase of GIS, purchase a check processing scanner for customer service, purchase office furnishings in need of replacement, computer replacement, file cabinets for the vault, and update of the District's website. Total expenses are \$147,000.

Equipment and Vehicles

The District replaces equipment and vehicles on a regular basis. For this fiscal year, the District proposes to replace two trucks, upgrade a third vehicle, as well as purchase miscellaneous equipment such as tripods for confined space, portable saw, bucket for backhoe, and pipe freezer for \$154,600.

Facility Improvements

This category covers improvements to the remaining District facilities that are not covered under reservoirs, pump stations, or pipelines. This fiscal year, \$130,000 is proposed for replacement of the District's office heating/air conditioning systems. Also, \$30,000 is proposed for reconfiguring and replacing workspaces in the Operations field offices, and \$15,000 is being allocated for minor improvements and upgrades to the exterior/interior of the District's headquarters office. A total of \$175,000 has been budgeted for this category.

Water Supply Reliability Projects

The District continues to seek alternate sources of water supplies as water reliability becomes more critical and imported supplies continue to be cut back. Last year, Metropolitan implemented its water supply shortage allocation program, reducing the District's water supply reliability to 86.7 percent. The water shortage allocation program will remain in effect through the 2010/11 fiscal year, maintaining a 13.3 percent cutback in the District's wholesale water supplies.

To mitigate the water supply shortage, the expenditures being proposed in this category address securing additional supplies. These projects include continued work on the Dana Point Ocean Desalination Project, a proposed Laguna Canyon Blending Project, and a

project to reestablish the exercise of the District's groundwater right in the Santa Ana Groundwater Basin.

The District's Master Plan will be produced in conjunction with the 2010 Urban Water Management Plan Update. The expenses proposed for this category total \$2,000,000.

2009/10 & 2010/11 OPERATING AND MAINTENANCE BUDGET COMPARISON

SECTION/PAGE	DESCRIPTION	BUDGET 2009/10	BUDGET 2010/11
	5200/III /10/1	2000/10	2010/11
5-12	OPERATIONS - SOURCE OF SUPPLY (51000)		
	SOURCE OF SUPPLY - SYSTEM OPERATIONS (51100)	\$ -	\$ -
	SOURCE OF SUPPLY-CSL (51200)	48,580	47,880
	SOURCE OF SUPPLY-ATM (51300)	54,820	52,320
	SOURCE OF SUPPLY-WELLS (51400)	-	-,
	PURCHASED WATER (51500)	2,959,030	3,141,420
	TOTAL SOURCE OF SUPPLY	3,062,430	3,241,620
5-13	OPERATIONS - PUMPING (52000)		
	PUMPING EXPENSE (52100)	306.030	282,900
	PUMPING POWER (52200)	157,320	162,060
	TOTAL PUMPING	463,350	444,960
5-14	OPERATIONS - TRANSMISSION & DISTRIBUTION (54000)		
	RESERVOIR EXPENSE (54100)	387,950	462,540
	MAINLINE EXPENSE (54200)	1,081,380	1,086,120
	METER EXPENSE (54300)	127,560	125,040
	VALVE, VAULT, FIRE HYDRANT EXPENSE (54400)	269,200	234,240
	PAVING EXPENSE (54500)	48,000	50,040
	GENERAL PLANT - EQUIPMENT O&M (54600)	-	-
	GENERAL PLANT - BUILDING (54700)	193,430	148,560
	TOTAL TRANSMISSION & DISTRIBUTION	2,107,520	2,106,540
5-15	GENERAL MANAGERS OFFICE (55000)		
	GENERAL MANAGERS OFFICE EXPENSE (55100)	352,780	359,820
	COMMISSION/BOARD (55300)	107,310	103,560
	LEGAL (55400)	38,000	38,040
	AUDIT(55500)	16,600	16,620
	TOTAL GENERAL MANAGERS OFFICE	514,690	518,040
5-16 & 5-17	ADMINISTRATION AND CUSTOMER SERVICE (56000 & 57000)		
	ADMINISTRATIVE OFFICE EXPENSE (56100)	165,200	161,340
	DATA MANAGEMENT (56200)	27,000	51,180
	RECORDS RETENTION (56300)	1,500	840
	PUBLIC INFORMATION (56400)	18,250	30,600
	COMMUNITY RELATIONS (NA)	6,000	, <u>-</u>
	WATER USE EFFICIENCY (56500)	169,300	235,560
	SCHOOL EDUCATION (NA)	2,500	-
	DISTRICT RECOGNITION (56800)	32,000	27,540
	HUMAN RESOURCES (56900)	129,820	141,360
	CUSTOMER SERVICE - FIELD (57100)	86,460	92,580
	METER READING (NA)	60,180	-
	CUSTOMER SERVICE - OFFICE (57200)	282,080	387,840
	TOTAL ADMINISTRATION AND CUSTOMER SERVICE	980,290	1,128,840
5-18	FINANCE (58000)		
	FINANCE EXPENSE (58100)	353,250	376,860
	GENERAL OFFICE EXPENSE (58200)	53,800	55,920
	INSURANCE (58300)	139,860	144,960
	INSURANCE CLAIMS (58400)	1,080	1,080
	TOTAL FINANCE	547,990	578,820
5-19	ENGINEERING (59000)		
	ENGINEERING OFFICE EXPENSE (59100)	204,350	46,020
	WATER QUALITY EXPENSE (59200)	192,940	202,620
	TOTAL ENGINEERING	397,290	248,640
	TOTAL OPERATING BUDGET	\$ 8,073,560	\$ 8,267,460

2010/11 OPERATING AND MAINTENANCE BUDGET SUMMARY BY EXPENSE

SECTION/PAGE	DESCRIPTION	BUDGET 2010/11
5-12	OPERATIONS - SOURCE OF SUPPLY (51000)	
	LABOR	\$ 46,080
	BENEFITS	28,920
	MATERIALS	2,916,840
	OUTSIDE SERVICES	239,460
	VEHICLE/EQUIPMENT	10,320
	TOTAL SOURCE OF SUPPLY	3,241,620
5-13	OPERATIONS - PUMPING (52000)	
	LABOR	119,160
	BENEFITS	76,200
	MATERIALS	20,040
	OUTSIDE SERVICES	198,540
	VEHICLE/EQUIPMENT	31,020
	TOTAL PUMPING	444,960
5-14	OPERATIONS - TRANSMISSION & DISTRIBUTION (54000)	
	LABOR	930,660
	BENEFITS	526,440
	MATERIALS	100,200
	OUTSIDE SERVICES	373,440
	VEHICLE/EQUIPMENT	175,800
	TOTAL TRANSMISSION & DISTRIBUTION	2,106,540
5-15	GENERAL MANAGERS OFFICE (55000)	
	LABOR	226,620
	BENEFITS	191,880
	MATERIALS	9,540
	OUTSIDE SERVICES	90,000
	VEHICLE/EQUIPMENT	
	TOTAL GENERAL MANAGERS OFFICE	518,040
5-16 & 5-17	ADMINISTRATION AND CUSTOMER SERVICE (56000 & 57000)	
	LABOR	551,160
	BENEFITS	297,240
	MATERIALS	104,880
	OUTSIDE SERVICES	175,920
	VEHICLE/EQUIPMENT	
	TOTAL ADMINISTRATION AND CUSTOMER SERVICE	1,128,840
5-18	FINANCE (58000)	
	LABOR	216,960
	BENEFITS	123,360
	MATERIALS	28,800
	OUTSIDE SERVICES	209,700
	VEHICLE/EQUIPMENT	
	TOTAL FINANCE	578,820
5-19	ENGINEERING (59000)	
	LABOR	101,460
	BENEFITS	49,920
	MATERIALS	3,120
	OUTSIDE SERVICES	94,140
	VEHICLE/EQUIPMENT	
	TOTAL ENGINEERING	248,640
	TOTAL OPERATIVE BURGET	
	TOTAL OPERATING BUDGET	\$ 8,267,460

2010/11 CAPITAL BUDGET SUMMARY

SECTION/PAGE	DESCRIPTION	BUDGET 2010/11
6-23	JOINT POWERS PROJECTS	
	COAST SUPPLY LINE AUFDENKAMP TRANSMISSION LINE	\$ 46,190 90,030
	TOTAL JOINT POWERS PROJECTS	136,220
6-24	RESERVOIR AND PUMP STATION IMPROVEMENTS	
0-24	RESERVOIR SEISMIC VALVE REPLACEMENT PROJECT	30.000
	NYES PLACE AND CASTLE ROCK PRV UPGRADES	10,000
	DRAINAGE IMPROVEMENT PROJECT AT VIEJO AND ZITNIK	30,000
	SCADA PHASE 3 UPGRADE PROJECT	50,000
	RIDGE PUMP STATION PUMP REHABILITATION PROJECT TIJUANA PUMP STATION REHABILITATION PROJECT	15,000
	TOTAL PUMP STATION IMPROVEMENTS	15,000 150,000
	TOTAL TOWN STATION IN HOVEMENTS	150,000
6-25	TRANSMISSION AND DISTRIBUTION	
	METER REPLACEMENT FIRE METER REPLACEMENT	80,000
	VALVE REPLACEMENT	100,000 200,000
	FIRE HYDRANT REPLACEMENT	100,000
	CITY PROJECTS	50,000
	TOTAL TRANSMISSION AND DISTRIBUTION PROJECTS	530,000
6-26	CAST IRON PIPE REPLACEMENT PROJECTS	
	MONTEREY DRIVE AND HIGH DRIVE	410,000
	VIEJO STREET TOTAL CAST IRON REPLACEMENT PROJECTS	<u>160,000</u> 570,000
		370,000
6-27	MASTER PLAN IMPROVEMENTS	100.000
	LA BREA AREA FLOW IMPROVEMENT PALMAR AND CATALINA STREETS AREA FLOW IMPROVEMENT	463,000
	TOTAL MASTER PLAN IMPROVEMENTS	<u>245,000</u> 708,000
	OFFICE FOURNESS.	
6-28	OFFICE EQUIPMENT OFFICE FURNITURE	20,000
	COMPUTERS	15,000
	NETWORK IMPROVEMENTS	20,000
	DISTRICT GIS SYSTEM	60,000
	FILE CABINETS FOR DISTRICT VAULT	10,000
	UPDATE DISTRICT WEBSITE CHECK PROCESSING SCANNER	15,000
	DOCUMENT MANAGEMENT SOFTWARE UPDATE	4,000
	TOTAL OFFICE EQUIPMENT	3,000 147,000
6-29	EQUIPMENT AND VEHICLES	
0-29	TRIPODS	16,500
	ARC FLASH SAFETY GEAR	3,500
	3500 LB TRAILER FOR SAW CUTTER	2,000
	REPLACE PORTABLE SAW ON SERVICE CREW TRUCK 18-INCH BUCKET FOR BACKHOE	2,000
	115 VOLT PIPE FREEZER	2,000 3,600
	DISTRICT VEHICLE NO. 42 REPLACEMENT (1996 F-250 HD 4X4)	30,000
	DISTRICT VEHICLE NO. 35 REPLACEMENT (1993 F-477 XL)	57,000
	UPGRADE VEHICLE NO. 41 (1996 F-450)	16,000
	REFURBISH BOBCAT	9,000
	PAYMENT NO.3 - LEASED DUMP TRUCK TOTAL EQUIPMENT AND VEHICLES	15,000 156,600
	EA OU ITY IMPROVEMENTO	,
6-31	FACILITY IMPROVEMENTS DISTRICT OFFICE - HEATING/AIR CONDITIONING	130,000
	FIELD OPERATIONS WORKSPACES	30,000
	DISTRICT OFFICE - EXTERIOR IMPROVEMENTS AND UPGRADES	15,000
	TOTAL FACILITIES IMPROVEMENT	175,000
6-32	WATER SUPPLY RELIABILITY PROJECTS	
	DANA POINT OCEAN DESALINATION PROJECT	300,000
	LAGUNA CANYON BLENDING PROJECT	930,000
	SANTA ANA BASIN PROJECT	500,000
	WATER MASTER PLAN 2010 URBAN WATER MANAGEMENT PLAN	250,000
	TOTAL SUPPLY SOURCE PROJECTS	<u>20,000</u> 2,000,000
	TOTAL CAPITAL BUDGET	<u>\$ 4,572,820</u>

Operating and Maintenance Budget Detail

Source of Supply	Labor	Benefits	s Materials	Outside Services	Vehicles/ Equipment	Totals
SOURCE OF SUPPLY (51000)						
SYSTEM OPERATIONS (51100)						
SYSTEM OPERATION - EXPENSE (51110)	\$ 68,340	\$ 36,360	\$ 1,080	\$ 30,000	\$ 9,240	\$ 145,020
SYSTEM OPERATION - REALLOCATION (51120)	(68,340)	(36,360)	(1,080)	(30,000)	(9,240)	(145,020)
SOURCE OF SUPPLY - COAST SUPPLY LINE (51200)						
REACH 1 (51210)	6,420	4,020	1,260	1,560	1,020	14,280
REACH 2 (51220)	6,840	4,380	120	1,260	1,080	13,680
REACH 3 (51230)	9,240	5,760	240	2,100	2,580	19,920
SOURCE OF SUPPLY - AUFDENKAMP TRANS. LINE (51300)						
REACH 1 (51310)	8,040	4,920	1,080	2,100	2,460	18,600
IRWD METER (51320)						
SMWD METER (51330)						
REACH 2 (51340)	9,660	6,060	480	1,860	2,100	20,160
REACH 3 (51350)	5,880	3,780	480	1,860	1,080	13,080
LBCWD METER (51360)			480			480
	46,080	28,920	4,140	10,740	10,320	100,200
PURCHASED WATER (51500)						
WATER CHARGE (51510)			2,912,700			2,912,700
METROPOLITAN WATER DISTRICT CHARGES (51520)				179,460		179,460
MUNICIPAL WD OF ORANGE COUNTY CHARGES (51530)				49,260		49,260
			2,912,700	228,720		3,141,420
TOTAL SOURCE OF SUPPLY (51000)	\$ 46,080	\$ 28,920	\$2,916,840	\$239,460	\$ 10,320 \$	3,241,620

Pumping	Labor	Benefits	Materials	Outside Services	Vehicles/ Equipment	Totals
PUMPING (52000)						
PUMPING EXPENSE(52100)						
GENERAL EXPENSE (52110)	\$ 119,160	\$ 76,200	\$ 20,040	\$27,840	\$ 31,020	\$274,260
SCADA (52120)				8,640		8,640
POWER (52200)				162,060		162,060
TOTAL PUMPING (52000)	\$ 119,160	\$ 76,200	\$ 20,040	\$198,540	\$ 31,020	\$ 444,960

Transmission and Distribution	Labor	Benefits	Materials	Outside Services	Vehicles/ Equipment	Totals
TRANSMISSION AND DISTRIBUTION (54000)						
RESERVOIR EXPENSE (54100)						
RESERVOIR EXPENSE (54110)	\$ 123,660	\$ 62,880	\$ 15,480	\$ 24,300	\$ 27,960 \$	254,28
LANDSCAPING (54120)			600	63,900		64,50
TREE TRIMMING (54130)				55,380		55,38
CHLORINATION/INSPECTION (54140)				2,100		2,10
SCADA (54150)			180	2,220		2,40
EL MORRO (54160)	3,480	1,800	240	4,080	600	10,200
WATER TREATMENT (54170)	34,860	17,700	12,360	480	8,280	73,680
MAINLINE EXPENSE (54200)						
MAINLINE EXPENSE (54210)	536,280	309,840	37,080	24,840	86,520	994,560
UNIFORMS EXPENSE (54220)			4,020	14,280		18,30
PROFESSIONAL DEVELOPMENT (54230)			1,200	5,040		6,24
COMMUNICATIONS (54240)				7,020		7,02
EMERGENCY RESPONSE HOUSING (54250)				54,000		54,00
TRUCKING/COUNTY FEES (54260)				6,000		6,00
OUTSIDE CONTRACTORS (54270)						
METER EXPENSE (54300)						
METER EXPENSE (54310)	62,580	36,120	12,420	1,500	12,420	125,04
OUTSIDE CONTRACTORS (54320)						
VALVE, VAULT, FIRE HYDRANT EXPENSE (54400)						
VALVE, VAULT, FIRE HYDRANT EXPENSE (54410)	116,160	67,140	4,020	2,100	40,020	229,440
OUTSIDE CONTRACTORS (54420)				4,800		4,800
PAVING EXPENSE (54500)				50,040		50,040
EQUIPMENT EXPENSE (54600)						
EQUIPMENT EXPENSE (54610)	125,100	72,300	16,440	4,800		218,64
FUEL (54620)			46,380	9,600		55,98
OUTSIDE CONTRACTORS (54630)				38,040		38,04
CAR ALLOWANCE (54640)						
REALLOCATION (54650)	(125,100)	(72,300)	(62,820)	(52,440)		(312,660
BUILDING/WAREHOUSE EXPENSE (54700)						
BUILDING EXPENSE (54710)	53,640	30,960	8,460	12,360		105,42
LANDSCAPING (54720)				4,980		4,98
UTILITIES (54730)				21,660		21,660
JANITORIAL (54740)			4,140	12,360		16,500
TOTAL TRANSMISSION AND DISTRIBUTION (54000)	\$ 930,660	\$ 526,440	\$ 100,200	\$ 373,440	\$ 175,800 \$	2,106,540

General Manager's Office	Labor	Benefits	Materials	Outside Vehicles/ Services Equipment	Totals
GENERAL MANAGER (55000)					
GENERAL MANAGER EXPENSE (55100)					
OFFICE EXPENSE (55110)	\$ 212,820	\$ 113,580	\$ 1,440	\$ 1,440	\$ 329,280
PUBLICATIONS/MEMBERSHIPS (55120)			480	17,520	18,000
PROFESSIONAL DEVELOPMENT (55130)			4,500	6,000	10,500
GRANT WRITING SERVICES (55140)				2,040	2,040
COMMISSION/BOARD (55400)					
OFFICE EXPENSE (55410)	13,800	78,300	480	420	93,000
PROFESSIONAL DEVELOPMENT (55420)			2,640	7,920	10,560
LEGAL (55500)				38,040	38,040
AUDIT (55600)				16,620	16,620
TOTAL GENERAL MANAGER'S OFFICE (55000)	\$ 226,620	\$ 191,880	\$ 9,540	\$ 90,000	\$ 518,040

Admininstration and Customer Service	Labor	Benefits	Material	Outside Services	Vehicles/ Equipment	Totals
ADMINISTRATIVE SERVICES (56000)						
ADMINISTRATIVE EXPENSE (56100)						
OFFICE EXPENSE (56110)	\$ 107,580	\$ 46,440	\$ 720	-	\$	154,74
PUBLICATIONS/MEMBERSHIPS (56120)			120	\$ 240		36
PROFESSIONAL DEVELOPMENT (56130)			240	6,000		6,24
DATA MANAGEMENT (56200)						
CONSULTING SERVICES (56210)			780	50,400		51,18
RECORDS RETENTION (56300)						
RECORDS MANAGEMENT (56320)				840		84
PUBLIC INFORMATION (56400)						
PUBLIC INFORMATION OUTREACH (56410)			5,040	10,020		15,06
COMMUNITY PARTICIPATION (56420)			3,000	1,980		4,98
SCHOOL EDUCATION (56430)			2,520			2,52
WATER-WISE GARDEN (56440)			4,020	4,020		8,04
WATER USE EFFICIENCY (56600)						
OFFICE EXPENSE (56610)	101,220	51,960	1,980			155,16
PROGRAMS/REBATES (56620)			10,380			10,38
OUTREACH/EVENTS (56630)			25,020			25,02
DEVICES/MATERIALS (56640)			15,000	-		15,00
CONSULTING SERVICES (56450)				30,000		30,00
DISTRICT RECOGNITION (56800)						
MISCELLANEOUS DISTRICT ACTIVITIES (56810)			7,500			7,50
EMPLOYEE RECOGNITION PROGRAMS (56820)			20,040			20,04
HUMAN RESOURCES (56900)						
OFFICE EXPENSE (56910)	79,500	44,520	1,500	1,500		127,020
PUBLICATIONS/MEMBERSHIPS (56920)			480	960		1,44
PROFESSIONAL DEVELOPMENT (56930)				960		96
SAFETY TRAINING (56940)				1,200		1,20
HEALTH AND WELLNESS PROGRAM (56450)			3,000	1,040		4,04
EMPLOYEE EDUCATION (56960)				5,500		5,50
EMPLOYEE RECRUITMENT (56970)				1,200		1,20
TOTAL ADMINISTRATION (56000)	\$ 288,300	\$ 142,920 \$	101,340	\$ 115,860	\$	648,42

ADMINISTRATION AND CUSTOMER SERVICE (CONTINUED ON NEXT PAGE)

Admininstration and Customer Service	Labor	Benefits	Materials	_	utside ervices	Vehicles/ Equipment		Totals
CUSTOMER SERVICE (57000)								
CUSTOMER SERVICE - FIELD (57100)								
CUSTOMER SERVICE - FIELD EXPENSE (57110)	\$ 58,260	\$ 31,920	\$ 1,000	\$	1,400		\$	92,580
CUSTOMER SERVICE OFFICE (57200)								
OFFICE EXPENSE (57210)	165,600	102,300	2,220		1,980			272,100
METER READING (57220)	39,000	20,100						59,100
PROFESSIONAL DEVELOPMENT (57230)					1,500			1,500
BILL OUTSOURCING (57240)					30,300			30,300
CONSULTING SERVICES (57250)					16,800			16,800
UNCOLLECTIBLES (57260)					8,040			8,040
TOTAL CUSTOMER SERVICE (57000)	\$ 262,860	\$ 154,320	\$ 3,220	\$	60,020		\$ 4	480,420
TOTAL ADMINISTRATION AND CUSTOMER SERVICE (56000 & 57000)	\$ 551,160	\$ 297,240	\$ 104,560	\$ 1	75,880	\$	6 1, ⁻	128,840

Finance	Labor	Benefits	Materials	Outside Services	Vehicles/ Equipment	Totals
FINANCE (58000)						
FINANCE EXPENSE (58100)						
OFFICE EXPENSE (58110)	\$ 216,960	\$ 123,360	\$ 1,080	\$ 600		\$ 342,000
PUBLICATIONS/MEMBERSHIPS (58120)				300		300
PROFESSIONAL DEVELOPMENT (58130)			300	1,800		2,100
PAYROLL SERVICES (58140)				7,200		7,200
BANKING SERVICES (58150)				10,200		10,200
SAFEKEEPING - INVESTMENTS (58160)				2,400		2,400
CONSULTING SERVICES (58170)				12,660		12,660
GENERAL OFFICE EXPENSE (58200)						
OFFICE EXPENSE (58210)			25,020			25,020
POSTAGE (58220)			2,400	10,200		12,600
UTILITIES (58230)				10,800		10,800
MAINTENANCE - OFFICE EQUIPMENT (58240)				7,500		7,500
INSURANCE (58300)						
GENERAL LIABILITY (58310)				125,100		125,100
PROPERTY (58320)				15,240		15,240
STORAGE TANKS (58330)				3,420		3,420
MISCELLANEOUS (58340)				1,200		1,200
INSURANCE CLAIMS (58400)						
GENERAL LIABILITY (58410)				540		540
PROPERTY (58420)				540		540
TOTAL FINANCE (58000)	\$ 216,960	\$ 123,360	\$ 28,800	\$ 209,700		\$ 578,820

Engineering	Labor	Benefits	Materials	Outside Services	Vehicles/ Equipment	Totals
ENGINEERING (59000)						
ENGINEERING EXPENSE (59100)						
OFFICE EXPENSE (59110)						
PUBLICATIONS/MEMBERSHIPS (59120)						
PROFESSIONAL DEVELOPMENT (59130)						
CONSULTING SERVICES (59140)				\$ 46,020	\$	46,020
WATER QUALITY EXPENSE (59200)						
ROUTINE SAMPLING (59210)	\$ 53,400	\$ 26,460	\$ 1,620	15,960		97,440
RESERVOIR SAMPLING (59220)	33,480	16,500	540	15,960		66,480
BACKFLOW (59230)	14,580	6,960	960	360		22,860
DHS FEES (59240)				12,000		12,000
ANNUAL WATER QUALITY REPORT (59250)				3,840		3,840
TOTAL ENGINEERING (59000)	\$ 101,460	\$ 49,920	\$ 3,120	\$ 94,140	\$	248,640

6

Capital Budget Detail

Since its incorporation, the District has provided a reliable source of high quality potable water and excellent service to the community at a reasonable cost. The Capital portion of the budget has always been an integral part of the District's overall program of system maintenance and improvement. The Capital Budget is funded by property taxes, office lease revenue, reserve storage fees, and interest income earned.

Categories within the Capital Budget include:

Joint Powers Projects

The District manages two jointly owned water transmission lines that convey potable water into the District. These pipelines are the District's only source of supply.

The Coast Supply Line (CSL) delivers domestic water to the District from an MWD connection in Newport Beach. Originally built in 1926, it is jointly owned by the City of Newport Beach, Irvine Ranch Water District (IRWD) and the District. The pipeline ranges in diameter from 27-inches to 24-inches and runs parallel to Pacific Coast Highway from Fernleaf Street in Newport Beach to San Joaquin Street in Laguna Beach. Imported water from Metropolitan Water District of Southern California (MWD) supplies the CSL at its connection (CM-1) in Newport Beach. The El Morro Reservoirs, which are connected directly to the CSL, are used as flow equalizing structures. El Morro Reservoir No. 1 is jointly owned by LBCWD (67 percent) and IRWD (33 percent).

The Aufdenkamp Transmission Line (ATM) delivers domestic water to the District from an MWD connection in Irvine. The transmission line runs through Laguna Canyon and terminates at Agate Street in Laguna Beach where it splits and feeds South Coast Water District

(SCWD) and the District. The pipeline ranges in diameter from 42-inches in Irvine to 30-inches at its terminus on Agate Street. Owners in the ATM include IRWD, Santa Margarita Water District, SCWD, and the District.

Reservoir and Pump Station Improvements

This category funds large reservoir and pump station improvement projects.

Transmission and Distribution

This category funds valve, fire hydrant, and meter replacement projects.

Cast Iron Pipe Replacement

This category funds the replacement of cast iron pipe in the District's distribution system.

Master Plan Improvements

This category funds improvements to the District's distribution system as outlined in the District's Master Plan.

Office Equipment

This category funds office system improvements.

Equipment and Vehicles

The items listed in this category cover replacement of District equipment and vehicles.

Facility Improvements

This category funds improvements to District facilities not coverered in reservoirs, pump stations, or pipelines.

Water Supply Reliability Projects

The District continues to seek alternate sources of water supplies as water reliability becomes more critical and imported supplies continue to be cut back.

SECTION/PAGE	DESCRIPTION	BUDGET 2010/11
6-23	JOINT POWERS PROJECTS COAST SUPPLY LINE	\$ 46,190
	AUFDENKAMP TRANSMISSION LINE	90,030
	TOTAL JOINT POWERS PROJECTS	136,220
6-24	RESERVOIR AND PUMP STATION IMPROVEMENTS	
	RESERVOIR SEISMIC VALVE REPLACEMENT PROJECT	30,000
	NYES PLACE AND CASTLE ROCK PRV UPGRADES	10,000
	DRAINAGE IMPROVEMENT PROJECT AT VIEJO AND ZITNIK	30,000
	SCADA PHASE 3 UPGRADE PROJECT RIDGE PUMP STATION PUMP REHABILITATION PROJECT	50,000 15,000
	TIJUANA PUMP STATION REHABILITATION PROJECT	15,000
	TOTAL PUMP STATION IMPROVEMENTS	150,000
6-25	TRANSMISSION AND DISTRIBUTION	
	METER REPLACEMENT	80,000
	FIRE METER REPLACEMENT	100,000
	VALVE REPLACEMENT	200,000
	FIRE HYDRANT REPLACEMENT CITY PROJECTS	100,000 50,000
	TOTAL TRANSMISSION AND DISTRIBUTION PROJECTS	530,000
6-26	CAST IRON PIPE REPLACEMENT PROJECTS	
	MONTEREY DRIVE AND HIGH DRIVE VIEJO STREET	410,000 160,000
	TOTAL CAST IRON REPLACEMENT PROJECTS	570,000
6-27	MASTER PLAN IMPROVEMENTS	
	LA BREA AREA FLOW IMPROVEMENT	463,000
	PALMAR AND CATALINA STREETS AREA FLOW IMPROVEMENT	245,000
	TOTAL MASTER PLAN IMPROVEMENTS	708,000
6-28	OFFICE EQUIPMENT OFFICE FURNITURE	20,000
	COMPUTERS	15,000
	NETWORK IMPROVEMENTS	20,000
	DISTRICT GIS SYSTEM	60,000
	FILE CABINETS FOR DISTRICT VAULT	10,000
	UPDATE DISTRICT WEBSITE	15,000
	CHECK PROCESSING SCANNER DOCUMENT MANAGEMENT SOFTWARE UPDATE	4,000 3,000
	TOTAL OFFICE EQUIPMENT	147,000
6-29	EQUIPMENT AND VEHICLES	
	TRIPODS	16,500
	ARC FLASH SAFETY GEAR	3,500
	3500 LB TRAILER FOR SAW CUTTER REPLACE PORTABLE SAW ON SERVICE CREW TRUCK	2,000 2,000
	18-INCH BUCKET FOR BACKHOE	2,000
	115 VOLT PIPE FREEZER	3,600
	DISTRICT VEHICLE NO. 42 REPLACEMENT (1996 F-250 HD 4X4)	30,000
	DISTRICT VEHICLE NO. 35 REPLACEMENT (1993 F-477 XL)	57,000
	UPGRADE VEHICLE NO. 41 (1996 F-450)	16,000
	REFURBISH BOBCAT PAYMENT NO.3 - LEASED DUMP TRUCK	9,000 15,000
	TOTAL EQUIPMENT AND VEHICLES	156,600
6-31	FACILITY IMPROVEMENTS	
	DISTRICT OFFICE - HEATING/AIR CONDITIONING	130,000
	FIELD OPERATIONS WORKSPACES	30,000
	DISTRICT OFFICE - EXTERIOR IMPROVEMENTS AND UPGRADES TOTAL FACILITIES IMPROVEMENT	15,000 175,00 0
6-32	WATER SUPPLY RELIABILITY PROJECTS	
	DANA POINT OCEAN DESALINATION PROJECT	300,000
	LAGUNA CANYON BLENDING PROJECT	930,000
	SANTA ANA BASIN PROJECT	500,000
	WATER MASTER PLAN	250,000
	2010 URBAN WATER MANAGEMENT PLAN TOTAL SUPPLY SOURCE PROJECTS	20,000 2,000,00 0

Joint Powers Projects - Coast Supply and Aufdenkamp Transmission Line

To address future improvements that were recommended in the Vulnerability Assessment required by EPA, the existing 12-year old SCADA system continues to be upgraded to accept advanced telemetry options. The system utilizes 900 mhz radio communication system that is outdated and is no longer being manufactured. Phase 3 of the project is a continuation from the previous 2 years and includes addressing discrepancies and continuing with the communication upgrades needed to provide a service life of 10 years.

The District has a 5-year plan to install insertion points and leak test all the reaches of both the Aufdenkamp Transmission Line (ATM) and the Coast Supply Line (CSL). The 2010/11 Budget lists the improvements needed to leak test 35,000 feet of Reach 3 of the ATM using the "Sahara" method as performed by the Pressure Pipe Inspection Company Ltd.

The 2010/11 budget also lists continuation of the cathodic protection program on both the ATM and the CSL and the replacement of the pressure differential transmitters for more accurate flow monitoring.

			Total		LBCWD		NB	IRWD	SMWD	SCWD
COAST										
		SCADA Network Phase 3	Φ 7.500	Φ.	0.400	ф	COO #	0.400	Φ 0	Φ 0
	1.1.1 1.1.2	CM-1A Signal Peak (IRWD)	\$ 7,500 7,500	\$	3,409 0	\$	682 \$	3,409 7,500	\$ 0 0	\$ 0 0
	1.1.2	North-South Meter (LBCWD)	28,000		28,000		0	7,300	0	0
	1.1.0	Worth Godin Weter (EDGWD)	20,000		20,000		O	O	O	O
	athodic P Replace	Protection Assessment and Retifier								
	1.2.1	Reach 1	6,700		3,045		610	3,045	0	0
	1.2.2	Reach 2	6,700		3,350		0	3,350	0	0
	1.2.3	Reach 3	6,700		6,700		0	0	0	0
1.3 Pro	essure D	Oifferential Transmitter Replacement Reach	1 3,700		1,682		336	1,682	0	0
AUFDEN	NKAMP '	TRANSMISSION LINE								
1.4 Up	ograde S	CADA Network Phase 3								
	1.4.1	CM-12	7,500		2,218		0	979	2,739	1,564
	1.4.2	PA-17 (IRWD)	7,500		0		0	7,500	0	0
	1.4.3	Lion Country (IRWD)	7,500		0		0	7,500	0	0
	1.4.4	SMWD	7,500		0		0	0	7,500	0
	1.4.5	PC-1	7,500		2,218		0	979	2,739	1,564
	1.4.6	PC-2	7,500		3,165		0	0	0	4,335
	1.4.7	Agate Street	7,500		3,165		0	0	0	4,335
1.5 Pro	essure D	Differential Transmitter Replacement								
	1.5.1	Reach 1	6,000		1,775		0	780	2,190	1,255
	1.5.2	Reach 2	3,000		1,230		0	0	0	1,770
4.0 1	-4-11 1	otica Deiate and Leals Test 05 000								
	stall inse feet of F	rtion Points and Leak Test 35,000	159,000		65,190		0	0	0	93,810
	ieet oi r	nedoli 3	159,000		65,190		U	U	U	93,610
1.7 Re	each 2 - I	Rebuild flow control valve	5,000		2,713		0	0	0	2,287
	athodic P Replace	Protection Assessment and Rectifier								
	1.8.1	Reach 1	6,700		1,983		0	873	2,446	1,398
	1.8.2	Reach 2	6,700		3,635		0	0	0	3,065
	1.8.3	Reach 3	6,700		2,747		0	0	0	3,953
		TOTAL	\$312,400		\$136,220	\$1	,630	\$37,600	\$17,610	\$119,340

Reservoir and Pump Station Improvements

The District currently has 22 reservoirs and 14 pump stations that serve areas within the District from sea level to over 1,000 feet in elevation. All of these reservoirs and pump stations must be maintained. Constant preventive maintenance is performed throughout the year that is part of the Operations and Maintenance Budget. Larger improvement projects occur on a regular basis and are included in this Capital Budget.

2.1	Reservoir Seismic Valve Replacement Project – This project consists of the upgrade replacements for two (2) valves needed to ensure proper operation of seismic valves during an earthquake event at Platz Reservoir.	\$ 30,000
2.2	Nyes Place and Castle Rock PRV Upgrades – This project consists of the installation of Anti-cavitation Hytol valves on the PRV's at Nyes Place and Castle Rock.	10,000
2.3	Drainage Improvement Project at Viejo and Zitnik – This project includes the design and construction of improvements to drainage at Viejo Reservoir and Pump Station and Zitnik Reservoir.	30,000
2.4	SCADA Phase 3 Upgrade Project – This is a continuation of the project started the prior year. This phase addresses discrepancies and upgrades needed to update the system to provide a service life of 10 years. This portion of the project is for the SCADA system that operates the District's pump stations and reservoirs.	50,000
2.5	Ridge Pump Station Pump Rehabilitation Project – This is phase 1 of a 3 phase project to rehabilitate all three pumps at the Ridge Pump Station. All pumps have over 10,000 operational hours and are displaying signs of wear.	15,000
2.6	Tiajuana Pump Station Rehabilitation Project - This is phase 1 of a 2 phase project to rehabilitate both pumps at Tiajuana Pump Station. The pumps are showing signs of deterioration.	15,000
	TOTAL	\$ 150,000

Transmission and Distribution

From the Aufdenkamp Transmission Main and Coast Supply Line, the District's water is fed into smaller transmission and distribution lines. Most of the work required within this category includes valves, fire hydrants and meters replacement. The programs of meter, fire hydrant, and valve replacement were developed to address those facilities identified as potential problems during the District's yearly inspection program. The goal is preventive replacement before these items fail. Capital funds are designated annually for ongoing replacement programs and miscellaneous projects that are large enough to be considered capital in nature.

3.1 **Meter Replacement** - This is an ongoing program to replace damaged or worn out water meters throughout the distribution system. Our experience with residential meters as well as industry standards suggests that a meter may last approximately 17.5 years before it should be replaced. An in-house survey revealed that over 25 percent of the District's meters are over 20 years old and 50 percent of the meters are over 15 years old. This covers replacement of 450 meters.

\$ 80,000

3.2 **Fire Meter Replacement** - This is a program to replace designated water meters that serve fire sprinklers throughout the distribution system. AWWA industry standards do not approve positive displacement (PD) meters to be used in a fire sprinkler application. Studies show the PD meters may seize up during high usage preventing proper fire sprinkler operation. This covers replacement of 250 of the approximately 500 meters that need to be replaced.

100,000

3.3 Valve Replacement - The District has an ongoing program of inspecting and exercising valves throughout the distribution system. A list is generated of valves that no longer function properly. With approximately 1,800 valves in the system, the District should be replacing approximately 30 valves per year assuming that their useful life is 60 years.

200,000

3.4 Fire Hydrant Replacement - The District has an ongoing program of inspecting and exercising fire hydrants throughout the distribution system. A list is generated of hydrants that no longer function properly. Our experience with fire hydrants shows that their useful life is about 70 years. With regular maintenance, this number can be extended as long as replacement parts can be found. Using 70 years as the useful life for the 830 fire hydrants within the District, we should be replacing them at a rate of around 12 per year.

100,000

3.5 **City Projects** - The City of Laguna Beach has ongoing projects that often require the Water District to modify or relocate its facilities. Smaller items, such as the raising of valve cans or meter boxes due to street paving make up the bulk of this item.

50,000

TOTAL

\$ 530,000

Cast Iron Replacement

The District continues on an aggressive program to replace all cast iron pipe within the District. It is the District's goal to complete all of the CIP replacement by the end of the 2013/14 fiscal year. The prioritization of the projects may change as warranted by conditions and is based on several factors which include leak reports, location, fireflow conditions, length of project, difficulty of project, and other criteria. As part of the District's ongoing program, the following projects are recommended for this fiscal year:

4.1	Monterey Drive and High Drive - Replace approximately 760 lineal feet of 10-inch cast iron pipe with 10-inch PVC pipe in Monterey Drive and approximately 320 lineal feet of 8-inch cast iron pipe with 8-inch PVC in High Drive.	
	Construction	\$ 360,000
	Project Management	50,000
4.2	Viejo Street - In conjunction with the La Brea area Master Plan Project, replace approximately 350 lineal feet of 6-inch cast iron pipe with 6-inch PVC pipe in Viejo Street between Hillcrest Drive and North Coast Highway.	
	Construction	140,000
	Project Management	20,000
	TOTAL	\$ 570,000

Master Plan Improvements

These projects are compiled from the recommendations made in the 1996 Water Master Plan Update. It is the District's goal to complete these projects by the 2013/14 fiscal year. The prioritization of the projects may change from time to time, and therefore the list is reviewed on a regular basis. From the Master Plan, the following projects are recommended for this fiscal year:

5.1 La Brea Area Flow Improvement - It is recommended that 1,660 lineal feet of 6-inch pipeline be installed to provide improved flow in Hillcrest Drive and North Coast Highway and connect to the existing distribution system between Viejo Street and Beverly Street. Several dead-end portions of this area will benefit with flow increases from 500 gpm to over 1,500 gpm.

Construction on Hillcrest Drive	\$ 253,000
Construction on North Coast Highway	150,000
Project Management	60,000
TOTAL	463,000

5.2 Palmar and Catalina Streets Area Flow Improvement - It is recommended that 600 lineal feet of 6-inch pipeline be installed to upgrade the existing 4-inch pipeline system to provide improved flow in Palmar Place/Catalina Street and connect to the existing distribution system. Dead-end portions of this area will benefit with flow increases from 300 gpm to over 1,100 gpm.

Construction	200,000
Project Management	45,000
TOTAL	245,000

TOTAL \$ 708,000

Office Equipment

The items listed under this category cover necessary office system improvements as well as larger office needs.

6.1	Office Furniture - Purchase miscellaneous large office furnishings that are in need of replacement. Upgrade Audio/Visual equipment in Board Room.	\$ 20,000
6.2	Computers - There are approximately 25 computers being used at the District, with associated peripherals. It is recommended that the District have an annual program of computer replacement as the need occurs.	15,000
6.3	Network Improvements – This is an ongoing project to improve security and add redundancy to the District's computer network system.	20,000
6.4	District GIS System – Implement the first phase of a District Geographical Information System (GIS).	60,000
6.5	File Cabinets for District Vault - Purchase two (2) additional rotary file cabinets for the District's Vault.	10,000
6.6	Update District Website - The District's web site was launched in 2007. Since then, new technologies, content management software, customer notification capabilities, and social networking opportunities have been developed that would enhance our ability to regulary update the site.	15,000
6.7	Check Processing Scanner - Purchase an additional check processing scanner for customer service. The scanner is used to process incoming customer payments.	4,000
6.8	Document Management Software Update - Software upgrade of the District's document management system (LaserFische).	3,000
	TOTAL	\$ 147,000

Equipment and Vehicles

The annual auditor's report states that replacement of vehicles should be considered between four and ten years. Presently, approximately half of the fleet is over 10 years old. Approximately two or three vehicles and some minor miscellaneous equipment are scheduled to be replaced each year based upon wear and tear, cost of maintenance, and mileage. The current fleet consists of 28 light-medium duty vehicles (pick-up trucks and admin. vehicles) and 5 heavy duty vehicles (dump trucks and flat-beds). This does not include equipment such as backhoes, bobcats, tractors, portable generators, or portable pumps.

7.1	(3)-Tripods for confined space entry – Existing units a unreliable.	are 13 years old and	\$	16,500
7.2	(1)-Arc Flash Safety Gear, amp probes and multi-met	ers.		3,500
7.3	(1)-3500 LB. Trailer to haul saw-cutter – The existing ported on the Ditch Witch trailer, which is not properly air compressor.	_		2,000
7.4	Replace Portable Saw on Service Crew Truck - The exold and is not funtioning properly.	kisting saw is several years		2,000
7.5	7.5 (1) - 18-inch Bucket for the Backhoe - The District currently has a 12-inch and 24-inch bucket. An 18-inch backhoe bucket is needed.			
7.6	(1) - 115 VOLT Pipe Freezer – A pipe freezer may elimit the water service in an area to perform a service line repipe up to 2-inch, which eliminates crimping the copp service interruptions.	pair. The device freezes		3,600
7.7	Replace Vehicle No. 42 1996 F-250 HD 4X4 - Used by reservoir and cla-valve maintenance with 62,373 miles utility bed, spray in bed liner, radio for communication and controls, and a back-up alarm). Recommendation and retire from fleet.	(Equipment to include s, overhead safety lighting		
	Vehicle cost \$26,			
		400		
	<i></i>	600		20.000
	TOTAL COST			30,000

Equipment and Vehicles (continued on next page)

7.8 **Replace Vehicle No. 35 1993 F-477 XL** with an arrow board and valve exercise equipment used by valve and fire hydrant exercise and repair crew with 36,898 miles. (Equipment to include Wach's valve exercise equipment, air compressor, utility bed, spray in bed liner, radio for communications, overhead safety lighting and controls and a back-up alarm). Recommendation to replace existing vehicle and retire from fleet.

Vehicle cost	\$26,000
Valve exercise equipment	27,000
Tax and License	2,400
Emergency lighting and radio	1,600

TOTAL COST

\$ 57,000

7.9 **Upgrade Vehicle No. 41 1996 F-450** - Used by Street Crew for water main repair with 30,517 miles. The existing diesel-powered vehicle was scheduled to be replaced in Budget Year 2010/11. The existing vehicle has been assessed to be well within its usable service life, but due to AQMD regulations, diesel powered vehicles must be upgraded to meet new diesel particulate emmission standards. A refurbishment of the old unit can bring it back into AQMD compliance and prolong the life an additional 4 years. The project includes the purchase of a diesel particulate filtering device, which can accomodate up to 5 filters. This vehicle will be rescheduled to be replaced in 2014/15.

> Upgrade vehicle No. 41 \$8,000 Device Particulate Filtering 8,000 **TOTAL COST**

16,000

7.10 **Refurbish Bobcat** – The bobcats were scheduled for replacement in 2010-2011. One of the Bobcats is having mechanical problems and needs to be repaired or replaced. A refurbishment of the old unit can restore it to proper operating order and prolong the life an additional 5 years. One of these units will be rescheduled to be replaced in 2012/13 and the other in 2015/16.

9,000

7.11 Payment No. 3 of 5 - Leased Dump Truck

15,000

TOTAL

\$156,600

Facility Improvements

This category covers improvements to the District's facilities that are not covered under reservoir, pump station, or pipeline facilities.

8.1	District Office – Assess and replace the District office heating/air conditioning systems (including load and duct size calculations, heating and cooling units, zone damper, and duct installation.	\$ 130,000
8.2	Field Operations Workspaces – Reconfigure and replace workspaces in Operations Field offices.	30,000
8.3	District Office - Exterior/Interior Improvements and Upgrades – Minor improvements to exterior and interior of District office facility including sidewalk tile replacement, and touch-up paint.	15,000
	TOTAL	\$ 175,000

\$ 2,000,000

Water Supply Reliability Projects

The District relies totally on imported water supply. As the reliability of the region's supply becomes more fragile, finding new sources that can augment that supply is a high priority. Several projects fall within this category. These projects will improve the District's source of supply, as well as its flexibility in the event of a major catastrophe.

9.1	Dana Point Ocean Desalination Project - Preliminary studies have shown there is potential for an ocean desalination plant in Dana Point. The District has agreed to participate in further study to determine the viability of the project as an additional source of potable water.	\$ 300,000
9.2	Laguna Canyon Recyling Project - The District is developing a plan to treat blended groundwater and waste water in Laguna Canyon for use in non-potable applications. It will be planned, designed, and constructed over a two-year period. The project includes purchasing recycled water from Moulton Niguel Water	
	District and construction of the necessary appurtenances to provide said water.	930,000
9.3	Santa Ana Basin Project – Project to groundwater in the Santa Ana Basin.	500,000
9.4	Water Master Plan – The last full scale master plan for the District was prepared in 1996. It was updated in 2001. This item is for preparing a new water master plan for the District's infrastructure that will take into consideration changes in the system and water reliability since the last master plan.	250,000
9.5	2010 Urban Water Management Plan Update - In 1983, the California Legislature enacted the Urban Water Management Planning (UWMP) Act. The Act states that every urban water supplier that provides water to 3,000 or more customers, or that provides over 3,000 acre-feet of water annually, should outline a plan for conservation and efficient use of water and update that plan every 5 years. An	
	update of the District's plan is due July 1, 2011.	20,000

TOTAL

7 Resolutions

RESOLUTION NO. 750

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE LAGUNA BEACH COUNTY WATER DISTRICT OF ORANGE COUNTY, CALIFORNIA, ADOPTING THE LBCWD 2010-2011 BUDGET

NOW, THEREFORE, BE IT RESOLVED, the Board of Directors of Laguna Beach County Water District, does hereby resolve and order as follows:

1. That the budget estimate for the General Fund and Capital Fund of the District as submitted for fiscal year 2010-2011 is hereby approved.

ADOPTED, SIGNED, AND APPROVED this 15th day of June, 2010.

ATTEST:

CERTIFICATION

I, Renae M. Hinchey, Secretary of the Laguna Beach County Water District, of Orange County, California, do hereby certify that the foregoing Resolution No. 750 was duly adopted at a regular meeting of the Board of Directors of said District, held on the 15th day of June, 2010, by the following vote of Members of the Board:

AYES:

Directors: - Egly, Boyd, Iseman, Pearson, Rollinger

NOES:

Directors: - None

ABSENT:

Directors: - None

And I further certify that Jane Egly as President, and Renae M. Hinchey, as Secretary, signed and approved said Resolution on the 15th day of June, 2010.

(District Seal)

STATE of CALIFORNIA)

COUNTY OF ORANGE)

I, Renae M. Hinchey, Secretary of the Laguna Beach County Water District of Orange County. California, do hereby certify that the foregoing is a full, true and clear copy of Resolution No. 750 passed and adopted by the Board of Directors of said District at a regular meeting hereof held on June 15, 2010. In witness whereof, I have hereunto set by hand and affixed the official seal of said district this 15th day of June, 2010.

(District Seal)

RESOLUTION NO. 751

A RESOLUTION OF THE LAGUNA BEACH COUNTY WATER DISTRICT, OF ORANGE COUNTY, CALIFORNIA, ESTABLISHING A JOB CLASSIFICATION PLAN AND SALARY RANGES; AND REPEALING RESOLUTION NO. 737 AND ALL OTHER RESOLUTIONS AND MOTIONS INCONSISTENT HEREWITH TO THE EXTENT OF SUCH INCONSISTENCY.

NOW, THEREFORE BE IT RESOLVED, The Board of Directors of the Laguna Beach County Water District, does hereby resolve and order as follows:

- 1. That pursuant to the authorization contained in Ordinance No. 91, adopted June 2, 1987, authorizing the Salary Schedule of Section 11 entitled "Basic Pay Plan" of Ordinance No. 65, adopted February 6, 1973, as amended, to be established from time to time by resolution of this District, the Board of Directors does hereby resolve and order as follows:
- That effective July 9, 2010, the beginning of the second payroll period in July, the "Salary Schedule" of the "Job Classification Plan" is hereby fixed and established as follows:

MONTHLY SALARY SCHEDULE

Grade	Minimum	Control Point	Maximum
31	11,856	14,820	17,044
30	10,310	12,888	14,820
29	8,965	11,207	12,888
28	8,151	10,188	11,716
27	7,582	9,477	10,899
26	7,053	8,816	10,139
25	6,561	8,201	9,431
24	6,103	7,629	8,773
23	5,677	7,097	8,161
22	5,282	6,602	7,592
21	4,913	6,141	7,062
20	4,679	5,849	6,726
19	4,456	5,570	6,406
18	4,244	5,305	6,101
17	4,042	5,052	5,810
16	3,849	4,812	5,533
15	3,666	4,582	5,270
14	3,491	4,364	5,019
13	3,325	4,156	4,780
12	3,093	3,867	4,447

That effective July 9, 2010, the beginning of the second payroll period in July, the 3. following pay grade numbers shall replace those as set forth in Section 11 of Ordinance No. 65 of this District and be and the same are hereby allocated and assigned to the following employment positions of the Laguna Beach County Water District, as follows,

EMPLOYMENT POSITION	
CLASSIFICATION	PAY GRADE NUMBER
GENERAL MANAGER'S OFFICE:	
General Manager	31
Executive Assistant	20
ADMINISTRATION/CUSTOMER SERVICE:	
Assistant General Manager	30
Customer Service Supervisor	24
Human Resources Manager	23
Customer Service/Water Use Efficiency Technician	20
Customer Service Representative II	16
Community Relations/Water Use Efficiency Coordin	ator 14
Customer Service Representative	13
Meter Reader	13
Customer Service Technician	13
FINANCE:	
Manager of Finance	27
Accountant	22
Senior Accounting Technician	17
OPERATIONS	
Manager of Operations	29
Facilities Maintenance Supervisor	24
Field Maintenance Supervisor	24
Construction Inspector/Water Quality	21
Maintenance Worker III	21
Water Quality Specialist	21
Underground Facility Locator	19
Maintenance Worker II	17
Maintenance Worker I	13
Office Assistant	13
Facilities Maintenance Worker	12

That Resolution No. 737 and all other resolutions and motions inconsistent 4. herewith be and the same are hereby repealed to the extent of such inconsistency. This resolution shall be in effect on July 9, 2010, beginning with the first payroll period in July.

ADOPTED, SIGNED AND APPROVED this 15th day of June, 2010.

ATTEST:

CERTIFICATION

I, Renae M. Hinchey, Secretary of the LAGUNA BEACH COUNTY WATER DISTRICT, of Orange County, California, do hereby certify that the foregoing Resolution No.751 was duly adopted at a regular meeting of the Board of Directors of said District, held on the 15th day of June, 2010, by the following vote of members of the Board:

AYES:

Directors: - Egly, Boyd, Iseman, Pearson, Rollinger

NOES:

Directors: - None

ABSENT:

Directors: - None

And I further certify that Jane Egly, as President, and Renae M. Hinchey, as Secretary, signed and approved said Resolution on the 15th day of June, 2010.

Secretary, Laguna Beach County Water District

(District Seal)

STATE of CALIFORNIA)

) ss.

COUNTY OF ORANGE)

I, Renae M. Hinchey, Secretary of the Laguna Beach County Water District of Orange County, California, do hereby certify that the foregoing is a full, true and clear copy of Resolution No. 751 passed and adopted by the Board of Directors of said District at a regular meeting hereof held on June 15, 2010. In witness whereof, I have hereunto set by hand and affixed the official seal of said District this 15th day of June, 2010.

(District Seal)

8 Appendices

LAGUNA BEACH COUNTY WATER DISTRICT **WATER RATE HISTORY** 1975 TO PRESENT

PC		151	5 TO PRESEN	41			
				WATER	%WATER	MWD	%MWD
RESOLUTION OR	EFFECTIVE	SERVICE		CHARGE	CHARGE	WATER	WATER RATE
ORDINANCE #	DATE	BI-MON		(PER CCF)	INCREASE	RATE (AF)	INCREASE
ORD. #69	07/01/75	3/4" - 5.00		0.28			
		1 1/2" - 11.25	2" - 15.00				
	07/04/77	3" - 25.00	4" - 40.00				****
DEO // 004	07/01/77	0/411 =				75	
RES. # 301	07/01/78	3/4" - 7.50	1" - 11.25	0.52	86%	84	12%
		1 1/2" - 16.88	2" - 22.50				
	07/04/04	3" - 37.50	4" - 60.00				
RES. # 367	07/01/81		SAME	SAME	100/	121	44%
RES. # 377	07/01/82		SAME	0.62	19%	192	59%
RES. # 384	07/01/83		SAME	0.71	15%	SAME	
(AMENDS SEC 2-377)	07/01/83		SAME	0.83	17%	SAME	
RES. # 395	07/01/84		SAME	0.07	E 0/	CANE	
RES. # 406	07/01/85		SAME	0.87	5%	SAME	4-70/
(AMENDS SEC 2-395)	07/01/03		SAIVIE	0.91	5%	224	17%
RES. # 424	07/01/86		SAME	0.06	5%	220	20/
(AMENDS SEC 2-406)	07701700		SAME	0.96	5%	230	3%
RES. # 499	07/01/91		SAME	1.11	4.60/	004	400/
(REPEALS 377,384,395)	07/01/91		SAIVIE	1.11	16%	261	13%
RES. # 503	07/01/92	3/4" - 10.00	1" - 15.00	1.37	23%	200	000/
(REPEALS ORD.67,69,	07/01/92	1 1/2" - 22.50	2" - 30.00	1.37	23%	322	23%
RES.301,367,395,424,499)		3" - 50.00	4" - 80.00				
BOARD MOTION	01/06/93	3 - 30.00	SAME	1.65	20%*	CAME	
RES. # 523	07/01/93		SAME	1.98	20%	SAME	000/
(REPEALS RES. #503)	07/01/93		SAME	1.90	20%	385	20%
(NET EXECUTES: 17000)	07/01/94		SAME	1.98		412	7%
BOARD MOTION	02/01/95		SAME	2.12	7%	SAME	1%
DO, IND MOTION	07/01/95		SAME	2.12	1 70	426	20/
BOARD MOTION	09/01/95	3/4" - 11.50	1" - 23.00	2.12	4%	SAME	3%
BO, II B MO HOIL	00/01/00	1 1/2" - 45.00	2" - 60.00	2.20	4 70	SAME	
		3" - 100.00	4" - 160.00				
	1/1/1997	0 - 100.00	SAME	2.20		431	1%
BOARD MOTION	3/1/1999		SAME	2.20	5%	SAME	170
BOARD MOTION	4/1/2000		SAME	2.43	5%	SAME	
BOARD MOTION	7/1/2001		SAME	2.43	3%	SAME	
BOARD MOTION	7/1/2002	3/4" - 15.00	1" - 30.00	2.50	370	JAIVIL	
	17172002	1 1/2" - 60.00	2" - 75.00	2.50			
		3" - 130.00	4" - 205.00				
BOARD MOTION	7/1/2003	0 100.00	SAME	2.64	6%	435	1%
	1/1/2004		SAME	2.64	<u> </u>	451	3%
BOARD MOTION	7/1/2004		SAME	2.74	4%	451	J 70
	1/1/2004		SAME	2.74	770	476	6%
RESOLUTION # 680	7/1/2005		SAME	2.82	3%	473	-1%
	1/1/2006		SAME	2.82	U 70	482	2%
RESOLUTION # 700	7/1/2006	3/4" - 18.00	1" - 36.00	2.85	1%	479	-1%
		1 1/2" - 72.00	2" - 90.00	2.00	170	7/3	-170
		3" - 156.00	4" - 246.00				
	1/1/2007	- 100.00	SAME	2.85		490	2%
RESOLUTION #710	7/1/2007	3/4" - 20.00	1" - 40.00	2.94	3%	490	<u> </u>
		1 1/2" - 80.00	2" - 100.00	2.04	O 70	750	
		3" - 173.00	4" - 273.00				
	1/1/2008	0 170.00	SAME	2.94		520	6%
	7/1/2008		SAME	2.94		529	2%
L	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	L	OAIVIL	2.04		1 228	L 70

LAGUNA BEACH COUNTY WATER DISTRICT WATER RATE HISTORY 1975 TO PRESENT

				WATER	%WATER	MWD	%MWD
RESOLUTION OR	EFFECTIVE	SERVICE	CHARGE	CHARGE	CHARGE	WATER	WATER RATE
ORDINANCE#	DATE	BI-MO1	NTHLY	(PER CCF)	INCREASE	RATE (AF)	INCREASE
RESOLUTION #729	12/1/2008	3/4" - 21.60	1" - 53.99	30 - 3.02	3%	604	14%
		1 1/2"-107.98	2" - 172.76	over - 3.29			
		3" - 345.52	4" - 539.88	(single fam)			
				3.17			
				(all others)			
RESOLUTION # 736	7/1/2009	3/4" - 22.69	1" - 56.73	30 - 3.23	7%	586	-3%
		1 1/2"-113.46	2" - 181.53	over - 3.58		701	16%
		3" - 363.06	4" - 567.28	(single fam)			
				3.42			
				(all others)			

^{*} Offsets Property Tax Revenue Loss

Revised 07/01/09

\$1.78 /ccf

Table 1. 2009 RETAIL DOMESTIC WATER COMMODITY RATES AND FIXED CHARGES

		Uniform	<u> </u>		***************************************		R	ate with	Tiers	per Bi	lling Period		******************************			Fixed [9]
	Date	Rate	ccf	-	ccf		ccf		ccf	•	lccf	ccf	ccf	above	Billing	Charge
Water Agency	Effective	\$/ccf	up to	\$/ccf	up to	\$/ccf	up to	\$/ccf	up to	\$/ccf	up to \$/ccf	up to \$/ccf	up to \$/ccf	\$/ccf	Period	\$/Period
Anaheim, City of	Jul-2009	1.775					***************************************		*********				demokratika di para di	Arrest Constitution of the	bi-monthly	10.00
Brea, City of	Oct-2009		12	2.350	24	2.810	36	3.100					l	3.410	monthly	5.60
Buena Park, City of [1]	Sep-2009		11	0.763	28	1.406	132	1.885						2.648	bi-monthly	29.19
East Orange CWD Retail	Jun-2009	2.000												***************************************	bi-monthly	41.50 [9]
El Toro WD	Jul-2009	1.890													monthly	10.14
Emerald Bay Serv. Distr.	Jul-2009		30	2.920										3.270	bi-monthly	22.69
Fountain Valley, City of	Dec-2009	2.040										-			bi-monthly	5.02
Fullerton, City of [1]	Jul-2009		10	1.683	27	1.913								2.133	bi-monthly	10.24
Garden Grove, City of	Jul-2007		36	2.370	250	2.450	500	2.520						2.590	bi-monthly	10.84 [9]
Golden State WC [8]	Jan-2009		16	2.147										2,469	monthly	12.50
Huntington Beach, City of	Oct-2009	1.705				***************************************	********************								monthly	10.70 [9]
Irvine Ranch WD Allocation											T T	T T		Ī T		1
20 ccf's [5][6][8]	Jul-2009		6	0.910	14	1.150	[5]	2.330	151	4.650				9 300	monthly	7.75
Irvine Ranch WD Allocation							1		1			 		0.000	Thomas,	† · · · · · ·
40 ccf's [5][6][8]	Jul-2009		16	0.910	24	1.150	151	2.330	151	4.650				9 300	monthly	7.75
La Habra, City of [3]	Aug-2009		170	2.010	***************************************		hii		1			 	l		monthly	8.98
La Palma, City of [10]	Jul-2005	2.040			***************************************		·····			***************************************		d	L	*******	bi-monthly	26.00
Laguna Beach CWD	Jul-2009		30	3.230					<u> </u>	***************	I	T T	T T		bi-monthly	22.69
Mesa Consolidated WD	Sep-2008	2.500							L	-	4		£		bi-monthly	15.00
Moulton Niguel WD	Jun-2009		10	1.000	20	1.120	30	1.350	50	1.580		T			monthly	7.67
Newport Beach, City of	Sep-2005	2.080			***************************************		h					***************************************	h		bi-monthly	9.00
Orange, City of	Jun-2009		20	0.885	70	1.480			T			1	<u> </u>		bi-monthly	17.66
San Clemente summer [7]	Sep-2009		13	1.890	21	2.860				***************************************		1			monthly	9.70
San Clemente winter [7]	Sep-2009		. 9	1.890	15									6.590	monthly	9.70
San Juan Capistrano July [4]	Jul-2009		25	2.700	50									7.370	monthly	11.70
San Juan Capistrano Jan. [4]	Jul-2009		12	2.700	24	3,680								7.370	monthly	11.70
Santa Ana, City of	Jul-2009		44	2.673										3.097	bi-monthly	7.00
Santa Margarita WD [8]	Sep-2009		6	1.890	20			2.460	70	2.950				3.770	monthly	6.03
Seal Beach, City of [2]	Jul-2008		12.0	1.400	22.5	2.020	27.5	2.320						2.790	bi-monthly	35.12
Serrano WD	Jul-2009	2.490													bi-monthly	53.26
South Coast WD	Jul-2009		5	1.520	13					6.080				7.600	monthly	19.66
Trabuco Canyon WD Warm	May-2009		9	1.980		2.030		2.080	36	2.570		54 3.700	63 4.440	5.290	monthly	8.25
Trabuco Canyon WD Cool	May-2009		6	1.980	12		<u> </u>	2.080	24	2.570	30 3.100	36 3.700	42 4.440	5.290	monthly	8.25
Tustin, City of	Jan-2008		12	0.490	40	1.560	60	1.670						1.840	bi-monthly	22.26
Westminster, City of [8]	Sep-2009		28	1.970										3.260	bi-monthly	12.26 [9]
Yorba Linda WD	Sep-2009	2.520													monthly	10.20

ccf = hundred cubic feet. 1 ccf is about 748 gallons.

[1] Fullerton monthly tiers for single-family residences shown; Fullerton has 50% lower tiers for multi-family residences. Buena Park Bi-Monthly tiers for single family shown. All other customers price per unit is \$1.406

[2] Seal Beach rate applies to the entire monthly usage. For example, 20 ccf in 1 month all charged at

[3] La Habra's upper tier rate is applicable only May-Sept.

[4] San Juan Capistrano's tier ccfs vary by user type, month and lot size. Shown tiers are for a single family residential lot < 7,000 s.f.

- [5] The customer's water demand needs are met by the Low Volume and Base Rate tiers. Generally no more than 6% of the customers base exceeds these tiers. All water used between 100 % and 150% of the allocation will be charged @ \$2.33/ccf; all water used between 150% and 200% of allocation will be charged at \$4.65/ccf; and all usage above 200% of allocation will be charged @ \$9.30/ccf. Usage exceeding the lower allocation of 20 ccfs will result in 21 ccf @ \$2.33, 28 ccf @ \$4.65 and anything above that at \$9.30 Usage exceeding the higher allocation of 40 ccfs will result in 36 ccf at \$2.33, 48 ccf @ \$4.65 and anything above that at \$9.30.
- [6] IRWD provides water to three service areas with rates that differ. The rates presented identify 89% of the water usage within the District.
 [7] San Clemente "summer"= May-December; "winter" = January-April. Tiers shown are for SFR with lot size < 7,000 s.f. Average commodity rate is

[8] The following agencies have a tax or surcharge on top of the rates shown: Irvine Ranch WD and Santa Margarita WD have a Power Surcharge for high elevation areas, not included here.

Golden State Water Co. Westminster

1.4% PUC surcharge 4.0% general utility users' tax

[9] Fixed Charge is usually "meter charge"; various names are used, and the following should be noted: East Orange CWD fixed charge shown is for a 3/4" meter residence: \$20 "Capital Project Fee". \$1.38

Garden Grove has a bi-monthly "Water Capital Improvement" charge

Westminister has a fixed Customer charge =\$12.26 for 56 days for meters <= 3/4", pro-rated for periods different than 56 days.

[10] La Palma's commodity rate applies to each ccf above the first 5 ccf.

2009 MONTHLY RESIDENTIAL WATER BILL

for Three Levels of Potable Water Use

Bill * with ccf of water used in 1 month:

typical single family wsage [1]

		typical onigio ian	,	~ [·]			
OCWD Basin Agency	et.	10 ccf		20 cc	ef)	30	ccf
Anaheim, City of	\$	22.75	\$	40.50	\$	58.25	
Buena Park, City of	\$	22.23	\$	35.84	\$	50.83	
East Orange CWD Retail	\$	40.75	\$	60.75	\$	80.75	
Fountain Valley, City of	\$	22.91	\$	43.31	\$	63.71	
Fullerton, City of	\$	21.95	\$	41.07	\$	60.92	
Garden Grove, City of	\$	29.12	\$	52.82	\$	76.52	
Golden State WC	\$	33.97	\$	56.73	\$	81.42	
Huntington Beach, City of	\$	27.75	\$	44.79	\$	61.84	
Irvine Ranch WD			***************************************				**************
with allocation of 20 ccf's	\$	17.81	\$	29.31	\$	52.61	
Irvine Ranch WD			•		•		
with allocation of 40 ccf's	\$	16.85	\$	26.91	\$	38.41	
La Palma, City of	\$	23.20	\$	43.60	\$	64.00	,
Mesa Consolidated WD	\$	32.50	\$	57.50	\$	82.50	
Newport Beach, City of	\$	25.30	\$	46.10	\$	66.90	
Orange, City of	\$	17.68	\$	26.53	\$	41.33	
Santa Ana, City of	\$	30.23	\$	56.96	\$	87.08	
Seal Beach, City of	\$	31.56	\$	57.96	\$	101.26	
Serrano WD	\$	39.08	\$	63.98	\$	88.88	
Tustin, City of	\$	20.31	\$	35.91	\$	52.61	
Westminster, City of	\$	25.83	\$	45.53	\$	67.81	
Yorba Linda WD	\$	35.40	\$	60.60	\$	85.80	
Non-Basin Agency							
Brea, City of	\$	29.10	\$	56.28	\$	86.12	
El Toro WD	\$	29.04	\$	47.94	\$	66.84	
Emerald Bay Services Distr.	\$	40.55	\$	71.50	\$	104.20	
La Habra, City of	\$	29.08	\$	49.18	\$	69.28	
Laguna Beach CWD	\$	43.65	\$	77.70	\$	113.50	
Moulton Niguel WD	\$	17.67	\$	28.87	\$	42.37	
San Clemente summer	\$	28.60	\$	54.29	\$	116.46	
San Clemente winter	\$	29.57	\$	76.82	\$	142.72	
San Juan Capistrano July	\$	38.70	\$	65.70	\$	97.60	
San Juan Capistrano Jan.	\$	38.70	\$	73.54	\$	132.48	
Santa Margarita WD	\$	25.41	\$	45.51	\$	65.61	
South Coast WD	\$	42.46	\$	83.50	\$	136.70	
Trabuco Canyon WD warm	\$	28.10	\$	48.50	\$	70.77	***************************************
Trabuco Canyon WD cool	\$	28.25	\$	49.93	\$	78.81	

^{*} Monthly bill includes commodity charge based on rates shown in Table 1 plus fixed charge. If fixed charge is bimonthly, half of the bimonthly charge is used. ccf = hundreds of cubic feet. See notes on Table 1.

^[1] Typical single-family water usage varies within Orange County due to local climate, lot size and other factors; see Agency detail pages.

RETAIL AGENCY WATER SOURCES, FY 2008-09

Source of Water, %

				***************************************	11	
				Re-		
SARAN AND AND AND AND AND AND AND AND AND A				cycled		
·				/ Non-		
The second secon	Met-			Pot.		
	ropolitan	Ground	Surface			
Retail Water Agency	Water [1]	Water	Water	[2]	Total	Comments
Anaheim, City of	28%	72%		1-1	100%	Long-Term "in-Lieu" water counted w/Met
Brea, City of	40%	60%			100%	
Buena Park, City of	16%	84%			100%	
East Orange CWD Retail	31%	69%	······································	·	100%	
El Toro WD	96%			4%	100%	
Emerald Bay Services Dis	100%		***************************************	***************************************	100%	EBSD contracts w/ Laguna Bch CWD for water
Fountain Valley, City of	29%	65%		6%	100%	
Fullerton, City of	31%	69%		***************************************	100%	In Lieu included in MET percent
Garden Grove, City of	31%	69%			100%	Long-Term "in-Lieu" water counted w/Met
Golden State WC	34%	66%			100%	
Huntington Beach, City of	31%	69%			100%	
Irvine Ranch WD	35%	43%		22%	100%	Long-Term "in-Lieu" water counted w/Met
La Habra, City of	30%	70%			100%	Well outage- normally 70% groundwater
La Palma, City of	30%	70%			100%	
Laguna Beach CWD	100%				100%	
Mesa Consolidated WD	15%	80%		5%	100%	Colored water included with groundwater
Moulton Niguel WD	81%			19%	100%	
Newport Beach, City of	34%	66%		<1%	100%	
Orange, City of	24%	72%	4%		100%	
San Clemente	89%	5%		6%	100%	
San Juan Capistrano	71%	26%	3%	~~~	100%	
Santa Ana, City of	31%	69%		<1%	100%	C.U.P. "In-lieu" water counted w/ MET
Santa Margarita WD	90%	0%	······································	10%	100%	
Seal Beach, City of	30%	70%	***************************************		100%	
Serrano WD		68%	32%		100%	
South Coast WD	79%	9%	-	12%	100%	Includes South Laguna service area.
Trabuco Canyon WD	71%	7%	5%	17%	100%	
Tustin, City of	36%	64%		**************************************	100%	Desalter water included with groundwater
Westminster, City of	31%	69%			100%	
Yorba Linda WD	48%	52%			100%	

^[1] Metropolitan Water District of Southern California (MET) imports water to Southern California from the Colorado River Basin and from Northern California. Long-Term "In-Lieu" water deliveries that indirectly replenish aquifers are counted here as Metropolitan water, and are not counted as Groundwater, unless indicated otherwise.

^[2] Recycled municipal wastewater and/or Non-Potable surface or ground water.

n.r. No response was given to this item.

AGENCY POPULATION AND WATER SYSTEM FACILITIES, 2009

-		-	-	-			-		-	-		-			-			-		-	-		-							-					-	-		
*		Non-Pot.	Water	Storage	Capacity	(MG)			-		12		0					9,300					344.7			0.9	0	0.5		1,478			4.7	44				11,190
NON BOTABLE *	0 - L O 1-NI	Number of	Non-Pot.	Water	Tanks &	Resvs.					-		0					15					12			-	0	1	-	6			3	τ-				43
JA	2		Miles	of 8" or	Larger	Pipe							7					399				-	140			32	9	12		114			29	3				742
		Capacity	98000000	Booster	Pumps	(GPM)	71,010	8,300	4,000	2,000	18,300		14,000	19,000	41,600	20,930	44,365	93,120	6,639	5,975	19,100	29,000	80,700	37,000	50,095		26,000	10,350	72,490	166,774	6,500	5,800	23,230	8,100	11,000	9,000	38,000	942,378
		Number	ō	Booster	Pump	Stations	6	4	-	2	8		2	12	5	13	3	45	5	2	14	2	28	ည	16		16	8	7	19	2	2	10	5	4	-	12	262
ZA.A	IVI	Surface	Water	Treatment	Capacity	(MGD)	15																				0					4		4				23
DOTABLE WATED SYSTEM	1000	Untreated	Water	Stored for	Potable	Use (MG)	920																				0					387						1,307
I E WAT		-	Water	Storage	Capacity	(MG)	29	29	20	1.8	137		10	69.5	53	13	55	149	17.5	4.5	34	28	83.4	200	43		23	14.0	49	246	7	6	21.6	10	12	16	20	1,471
DOTAB	0 N	Number of Potable	Potable	Water	Tanks &	Resvs.	13	9		3	9		2	16	8	15	4	38	3	2	21	2	28	3	18		14	6	8	31	2	2	. 13	7	9	. 2	13	296
			Capacity	of Active	Wells	(GPM)	55,970	1	16,000	1,500			15,000	22,950	32,150	21,175	30,000	52,513	1,600	3,400		15,000	0	11,000	28,279		1,200	5,080	45,090	009	8,000	3,900	069	850	10,400	19,649	12,600	414,596
		-	Number	o	Active	Wells	20	0	8	2	0	0	5	-	10	28	10	27	-	2	0	6	0	4	16		2	8	20	2	3	3	-	2	11	11	6	225
			Miles of	8" or	Larger	Pipe	4	162	216	17	148	2	142	300		224		1,131		34	132	197	740	169	259		175	161	236	579	99	43	119					7,272
					Population	Served [1]	355,252	40,016	83,834	3,463	52,170	1,268	58,803	137,088	176,526	168,846	203,649	334,010	62,687	15,543	20,844	110,568	170,169	66,417	139,902		57,431	39,791	355,564	152,665	25,147	95/9	36,785	14,126	68,355	94,914	77,097	3,129,686
		-				Water Agency	Anaheim, City of	Brea, City of	Buena Park, City of	East Orange CWD Retail	El Toro WD	Emerald Bay Serv. Distr.	Fountain Valley, City of	Fullerton, City of	Garden Grove, City of	Golden State WC	Huntington Beach, City of	Irvine Ranch WD	La Habra, City of	La Palma, City of	Laguna Beach CWD	Mesa Consolidated WD	Moulton Niguel WD	Newport Beach, City of	Orange, City of	Orange County WD	San Clemente	San Juan Capistrano	Santa Ana, City of	Santa Margarita WD	Seal Beach, City of	Serrano WD	South Coast WD [1]	Trabuco Canyon WD	Tustin, City of	Westminster, City of	Yorba Linda WD	Totals

* "Non-Potable"system is for landscape irrigation and other non-domestic uses. The water served includes recycled water and/or non-potable ground and surface water.

I.f. No response was given to this item.

[1] Population as of Jan. 1 2008 per Center for Demographic research, CSU Fullerton. Draft unpublished data set. Population is for the actual service area of the water agency. Population for a City water department will be different than for the City if the water service area is is different than the City area.

FY 2008-09 NUMBER OF WATER SERVICES AND SALES, BY SERVICE TYPE

	Totals	68,235	10,140	15,581	1,029	10,828	305	13,073	29,291	26,423	28,375	29,937	87,997	12,601	2,228	3,826	19,453	38,123	12,043	30,316	10,232	9,030	40,240	35,710	3,891	3,239	7,845	3,687	12,117	12,298	23,926	602,019
	Recycled & Non- Potable mixed use [4]																0	7,474			126			149			0		0	-		7,749
(1	Recycled & Non- Pot. Dedicated Irrigation Meters [3]	0		0		368		1,572					23,346	all other w/ C-I-I	S.		1,063	5,215	299	0		778	117	7,250	S.	0	972	782		0	0	41,762
re-Fee	Agricultural	n.r.		0		0		0	11	13	4		8,579	all othe	-am. Re		0		0	211		122	0	0	⁻am. Re	8	0	176	10	0	107	9,241
Sales (Acre-Feet)	[2] əsu bəxim I-I-O	27,963	4,692	6,700		4,175	31	4,661	9,122	7,810	4,071		21,884	1,094	all other combined with Single Fam. Res	664	4,809		2,703	10,255	984	2,508	10,729	1,782	all other combined with Single Fam. Res	92	1,062	589	2,376	2,927	6,276	139,959
0,	L-I-I Dedicated refers											8,528			combined \	210	1,288	2,939	-		2,399		2,210	6,321	combined v		1,125					25,020
	Multi- Family Residential [1]	13,675	985	2,337	w/S.F.	3,575		729	4,610	5,136	8,105	6,579	5,668	595	all other c	561	5,696	2,657	2,194	4,767	1,576	975	11,315	736	all other o	0	1,266	29	2,815	2,496	w/S.F.	89,047
	Single Family Residential	26,597	4,463	6,544	1,029	2,710	274	6,111	15,547	13,464	16,195	14,830	28,520	10,942	2,228	2,391	6,597	19,838	6,847	15,083	5,147	4,647	15,869	19,472	3,891	3,139	3,420	2,111	6,916	6,875	17,543	289,241
-	Retail Water Agency	Anaheim, City of	Brea, City of	Buena Park, City of	East Orange CWD Retail	El Toro WD	Emerald Bay Serv. Distr.	Fountain Valley, City of	Fullerton, City of	Garden Grove, City of	Golden State WC	Huntington Beach, City of	Irvine Ranch WD	La Habra, City of	La Palma, City of	Laguna Beach CWD	Mesa Consolidated WD	Moulton Niguel WD	Newport Beach, City of	Orange, City of	San Clemente	San Juan Capistrano	Santa Ana, City of	Santa Margarita WD	Seal Beach, City of	Serrano WD	South Coast WD	Trabuco Canyon WD	Tustin, City of	Westminster, City of	Yorba Linda WD	Totals
	Totals	62,726	11,872	19,750	1,209	10,225	548	16,931	31,524	34,200	42,650	52,242	99,467	12,569	4,367	8,010	23,912	53,952	24,680	37,249	17,300	11,034	44,531	53,210	5,170	2,259	12,357	3,988	14,119	20,221	23,649	755,921
	Recycled & Non- Potable mixed use [4]												09	-	-			1,255			2			5					0			1,322
vices	Recycled & Non- Pot. Dedicated Irrigation Meters [3]			0	0	-		14		0			4,292				42	1,394	7	0		74	14	1,213		0	170	22		0	1	7,244
ter Ser	Agricultural	0		0	-	0		2	4	4	က		65				0		0	-13	0	14	0	0		4	0	3	10	0	13	136
Number of Water Services	[2] esu bexim I-I-O	8,532	1,904	3,700	3	1,739	20	1,514	2,996	3,469	1,495		9,082	264	163	613	3,455		1,243	4,184	875	666	4,646	2,157	330	13	629	156	1,473	1,640	1,735	59,079
Numb	L-I-D Dedicated erefers Inigation	-										4,072	1,807			74	523	4,824			766		694	1,496			365					14,621
	Multi- Family Residential [1]	4,232	180	200	26	2,809		172	1,916	1,459	1,185	4,113	2,582	830	w/S.F.	1,070	3,441	13,944	4,198	6,122	3,527	3,034	3,309	292	557	0	1,561	31	847	991	228	63,131
	Single Family Residential	49,962	9,788	15,850	1,179	5,676	528	15,229	26,608	29,268	39,967	44,057	81,579	11,475	4,204	6,253	16,451	32,535	19,232	26,930	12,130	6,913	35,868	47,772	4,283	2,242	9,582	3,776	11,789	17,590	21,672	610,388

n.r. No response was given to this item.
[1] Multi-Family sector includes apartments, master-metered condominiums, mobile homes, et al. that are not billed individually.
[2] Commercial Industrial & Institutional (C-I-I) sector includes businesses, schools, hydrants, fountains, etc. Mixed use meters
[3] Recycled wastewater and other Non-potable water used for irrigation. Note: exclude Agricultural usage of Recycled/Non-Po [4] Recycled wastewater and other Non-potable water other-than-irrigation uses: toilet flushing, carpet dying, fountains, etc.

Commercial Industrial & Institutional (C-I-I) sector includes businesses, schools, hydrants, fountains, etc. Mixed use meters can serve indoor and outdoor uses. Recycled wastewater and other Non-potable water used for irrigation. Note: exclude Agricultural usage of Recycled/Non-Potable Water. Recycled wastewater and other Non-potable water other-than-irrigation uses: toilet flushing, carpet dying, fountains, etc.

PER-CAPITA WATER USAGE, FY 2008-09

gpcd= gallons per capita per day

[1] Municipal, Commercial & Industrial, and Institutional (M&I) water is all water use except for Agricultural water use. Total water usage includes Recycled water usage and system losses. M&I Per Capita Per Capita sees with dissimilar climate, land use, and other factors.

[2] Population as of Jan. 1 2009 per Center for Demographic research, CSU Fullerton. Draft unpublished data set. Population is for the actual service area of the water agency. Population for a City water department will be different than for the City if the water service area is is different than the City area.
[3] Sales of water to residences (includes detached and multiple-residential housing). Data is per the retail water agencies (see Table 5). Some of the retail water agencies were not able to separate Residential Sales from total Sales. Sales numbers do not include system losses. Residential Per Capita lacks validity when comparing areas with dissimilar climate, lot size, seasonal rental, and other factors.

WHY RETAIL WATER RATES VARY **IN ORANGE COUNTY**

December 1999 **Updated February 2009**

Orange County Water Agencies Water Rates, Water System Operations and Financial Information

Why Retail Water Rates Vary in Orange County

Summary

- Retail water rate setting is a complicated and complex process that varies somewhat from jurisdiction to jurisdiction. Each year as the Orange County Water Rates Survey is compiled. it is important to review the rate setting process and the factors involved. Retail water rate setting involves capturing the external costs of importing from Metropolitan or producing the water from local sources, the internal costs of distribution and service and establishing the financing or funding sources for these costs.
- There are understandable reasons, both physical and philosophical, that cause retail rates to vary from agency to agency. These will be discussed below.
- Providing a reliable and high quality water supply system for existing and future users is a capital-intensive process. Water rates are significantly affected by the level of capital funding required, the financing mechanisms and the other sources of revenue available to an agency. These issues will also be discussed below.

Detailed Discussion

Discussed below are the following sections pertaining to retail water rate setting:

- □ Sources and Uses of Funds Available to a Water Utility
- Geographical Factors Affecting Water Rates
- □ Rate Design Identifying Costs and Funding Them
- □ Purpose and Function of "Reserve Funds"

Sources and Uses of Funds Available to a Water Utility

The sources of funds available to a water utility for any use (not restricted in the type of use) include:

Retail water sales, fixed service charges on monthly or bimonthly basis plus variable charges based on water use, wholesale water sales for those agencies that provide water

to other agencies, fees charged for services rendered (such as engineering and plan check fees), delinquent penalties for non-payment, investment earnings on funds set aside, rents from properties and tax revenues from the general 1% property tax levy (not all agencies receive these funds).

Sources of funds that are restricted for use only for capital improvements include:

Voter authorized taxes and assessments, developer and customer contributions such as connection charges, development impact fees and contributed facilities, standby charges, proceeds from long-term financings, redevelopment funds, grants in aid of construction and investment earnings. If these sources of funds are not used or only partially cover the capital improvements necessary, water sales revenue must be structured to carry a heavier burden.

The uses of funds for a water utility include (1) the external costs of getting the supply to the agency, water costs, pumping, storage and water treatment; (2) the internal costs of transmission, distribution and storage to serve the consumers, customer service (billing, meter reading, etc.) and general and administrative expenses (including insurance, office and office maintenance costs and office staff); (3) the funding requirements for debt service and capital improvements (new construction, replacements and upgrades and rehabilitation).

Geographical Factors Affecting Water Rates

It is likely that the two most predominant geographical factors affecting retail water rates from area to area are (1) whether an area receives local groundwater from the lower Santa Ana River groundwater basin managed by Orange County Water District (OCWD), and (2) how much pumping is required to provide water throughout an agency's service area.

Portions of the county overlie the OCWD groundwater basin area. Water supplies produced from the basin area cost around \$435 per AF (includes a replenishment assessment paid to OCWD for basin operations and to purchase imported replenishment water to balance the basin needs, energy and other operational costs for well production and an estimate of annual amortized costs for land and facilities). This cost is considerably less than the cost of receiving imported water from MWD at around \$595 per AF. These costs just discussed, \$435 per AF for groundwater and \$595 for imported water, are essentially the production costs and do not include the costs of distribution, storage, treatment or pumping (except to pump the groundwater to system pressure). Translating these basic source costs down to the consumer and given the assumption that the groundwater basin areas can produce 65% of their supplies from the groundwater basin, the average source costs for the two areas would be:

Non-Basin Area: 100% MWD Import = \$595/AF or \$1.37/ccf

Basin Area: 65% Groundwater and 35% Import = \$491/AF or \$1,13/ccf

This factor is one of the major factors affecting rates to the consumer.

The next geographical factor affecting retail rates is the proximity to the MWD feeders. MWD feeders are Metropolitan facilities and paid for by water rates paid when purchasing imported water; these costs are already in the \$595 per AF cost of water paid to Metropolitan. The local agency feeders have had to be constructed, operated, maintained and repaired with local agency funding in addition to the water rates paid to Metropolitan. Once again, the agencies overlying the groundwater basin are generally those agencies which lie in close proximity to the MWD feeders as they crisscross the northern portion of the county, and hence, these agencies do not incur additional costs for facilities to distribute the MWD supplies. Some of the agencies had to build transmission pipelines 20 to 30 miles to get the water into their service area from where the MWD lines stop. Considerable costs are incurred for these extensions.

Another significant geographical factor is that of system elevation and the pumping necessary to lift the water to the service elevation of the homes and businesses. For example, Trabuco Canyon WD must pump virtually 100% of its import supplies to serve its consumers in the 1100 foot to 1400 foot service elevations of the foothills of the Santa Ana Mountains. The cost for pumping to the higher elevations must be factored into the retail rate. Some agencies charge a similar rate throughout their service area while other agencies charge more to residents living at a higher elevation. For example, the first block of water in the IRWD service area costs \$0.91 per ccf, however, a pumping surcharge of \$0.42 per ccf is imposed for the pumping required to get the water to the higher elevation of the Portola Hills service area of IRWD, thus raising the rate on the first block of water sold in Portola Hills, Zone 9 to \$1.33 per ccf.

In addition, those areas with hilly terrain include multiple service elevations and the associated facilities, capital costs and O&M costs for additional pump stations, reservoirs and pressure reducing stations. Both San Juan Capistrano and Laguna Beach are examples of this type of terrain that ultimately leads to higher consumer costs.

Also, in communities surrounded by vast areas of open-space vegetation, provision of sufficient storage for fire fighting is an added cost.

The last geographical factor influencing water rates is that of treatment requirements. For example, the areas furthest away from the MWD sources are required to rechlorinate the supplies as they are conveyed to the service areas to protect against bacterial growth. Also, some areas of the groundwater basin contain contaminants or constituents such as high salts or color that must be removed - sometimes a very expensive process that can drive the costs of local water to that of MWD water or beyond.

Rate Design - Identifying Costs and Funding Them

Rate Design involves figuring out the revenue needs and how to structure and establish the rates within a service area to generate the required revenue. The costs of a water system vary for geographical reasons, but they also vary due to the age of the system, the level of development required to meet the customer mix in the service area (newly developing areas, types of businesses and their water needs and the need to meet fire flow requirements) and due to the cost allocation methodology to the various customer groups and also due to the philosophical factors of an agency such as providing lifeline service at minimal costs.

Times have changed since the passage of Proposition 13 in 1978 which lowered tax revenue and eliminated the use of general obligation bonds as a financing vehicle for capital improvements, unless voter approval is secured. Decisions must be made regarding how to fund new growth whether through bonds other than general obligation bonds, a connection or meter fee, a fixed charge collected through an assessment district or directly with revenue generated through water sales. All of these options will affect what the consumer sees when he pays his monthly or bimonthly water bill.

There are many theories for the allocation of both fixed and variable costs within a retail water service area and how to fund them through the water rates. Some propose that all fixed costs be funded via a fixed revenue source such as the fixed monthly or bimonthly service charge to consumers and that the commodity rate be structured to cover the variable costs of water such as the cost of the source water itself, treatment costs and pumping costs. Others subscribe to different theories. The theory adopted by the local jurisdiction needs to reflect the philosophy of the constituents.

Lastly, the level of conservation and recycling in a community also affects the retail water rates. These efforts typically require capital expenditures and may actually result in somewhat higher costs in the short run but will save costs in the long run as the availability of these sources (or reduced demand) offsets the need for higher cost imported supplies.

In addition, the lot size and home size of the community served will also affect the rate structure design and the actual rates charged.

Purpose and Function of "Reserve Funds"

The level of "reserve funds" is indirectly related to the process of setting rates, but still very important. Reserve funds are misunderstood by some and construed to be "bad", yet reserve funds have a necessary and usually specific purpose. True "reserves", similar to our own personal savings accounts that are used for unexpected purposes or that have been set aside for specific planned uses, can be distinguished from "encumbered" funds that are necessary for specific financial or legal purposes.

Reserve funds include many types of funds with specific uses; these include (1) Working Capital Funds to meet cash flow purposes, (2) Construction Funds from bond proceeds that generally must be spent within three years of issuance, (3) Rate Stabilization Funds to moderate short term rate fluctuations, (4) Debt Service Funds to collect funds and make debt service payments when due, (5) Conservation Revenue Funds which all agencies may not have but which collect payments from high water users and reinvests in the system for conservation purposes and (6) Self Insurance Funds, similar to normal business insurance funds. The only "true" reserves are made up of (7) Capital Replacement Funds, which all agencies do not necessarily have, which consist basically of funds set aside for future improvements and (8) Emergency Repair Funds which is a contingency fund to handle emergencies (also a normal business requirement).

Variances exist in these funds when compared from agency to agency. In part, the differences are explained by the development cycle of a water supply system. Initially in the development cycle, when an agency is "young," an agency incurs disproportionately high costs because investments are made not only to meet the existing needs but also as an investment to minimize future costs (e.g., only certain components of a treatment plant can be phased on a capacity basis, a pipeline is constructed to supply existing demands and some level above that for meeting future demands). In the next part of the cycle, as an agency "ages," smaller investments are required on an incremental basis as demands build because the system is supported by past investments; however, it is also at this time that preparations must be made to bridge to the third phase, which is that of an older system that requires high repair, maintenance and replacement obligations (this is when capital replacement funds come in handy). An agency can approach Replacement Funds in three manners or a combination thereof, (1) "pre-paying" by setting aside funds for the future, (2) "pay-as-you-go" in which annual capital requirements are generated directly from water sales, or (3) "post pay" in which debt is issued and the payments for the improvements are made over time into the future. How replacements are handled is up to the discretion of the governing board with input from the community at the time of rate setting and budget adoption.

Conclusion

Retail water rate setting is a complicated and complex process that results in variations in retail water rates from jurisdiction to jurisdiction in Orange County. Each year as the Orange County Water Rates Survey is compiled, it is important to review the rate setting process and the factors involved. These factors have been briefly discussed herein and are summarized in Exhibits A and **B** attached.

water rates 2007.doc revised 02/2009

Exhibit A

Factors Causing Differences in Water Rates Between Agencies

- 1. Source of Supply - Metropolitan vs. local groundwater
- Distance to Metropolitan import pipelines 2.
- 3. Service area elevation and pumping required
- 4. Make-up of adjacent service areas
- 5. Ability to interconnect with surrounding agencies
- 6. Age of system
- Service area mix of commercial, industrial, single family, etc. 7.
- 8. Density and lot sizes
- 9. Customer income
- Funding of capital pay as you go vs. debt financing 10.
- Funding of repairs, replacements and depreciation 11.
- Water only vs. water and sewer by same agency 12.
- Recycling supplies and conservation philosophy 13.
- Recovery of administrative services by municipalities 14.
- Level of grant funding or other funding incentives 15.
- 16. Rate setting philosophy and methodology
- Funding of growth through developers or water rates 17.
- 18. Level of taxes to agency
- Necessary level of reserves (cash flow, replacement, rate stabilization, etc.) 19.
- 20. Public input during ratemaking
- Availability of redevelopment funding 21.
- Metering policy per unit or per complex 22.
- 23. Level of treatment required for local supplies

Exhibit B Effect of Various Factors on Retail Water Rates [1] in Orange County

	R	or on Retail Water ate [1]
Category/Factor	Lower Rate	Higher Rate
Cost of Supply		
 Purchases of Metropolitan water (as % of total supply) 	Small % Met	Large % Met
 Production of Local Ground/Surface Water (as % of total supply) 	Large % Local	Small % Local
 Proximity to a Metropolitan feeder 	Near Met Feeder	Far from Met Feeder
Service Area Elevation	Low	High
Treatment Required	No/Little Treatment	Much Treatment
Water Use Efficiency and Non-Potable	Large reduction in	Small reduction
Water System	potable demand	in potable demand
Distribution System Costs (capital costs + O&M)		
Terrain	Flat	Hilly
Shape of Service Area	Compact	Branched/Severed
 Age of Capital Facilities 	Older	Newer
 Ability to issue tax-free debt instruments 	Able	Unable
Interest Rate on Loans	Low-Interest	High-Interest
Customer Service		
Number of Customers	Many	Few
Level of Service	Low	High
Alt. Sources of Revenue (other		0
than sale of water + fixed charge)		
 Property Tax and Special Assessments 	Large Collection	None/Small Collection
 Investment Earnings 	Large	Small
Metropolitan Incentives	Large	None/Small

^[1] Water bill divided by the number of ccf of water used.

LAGUNA BEACH COUNTY WATER DISTRICT **COLA History**

MARCH OF:	CPI	LBCWD COLA
1987		4.00%
1988		3.00%
1989		4.70%
1990		5.50%
1991		3.10%
1992		3.86%
1993		1.50%
1994		1.80%
1995		1.40%
1996	1.70%	1.70%
1997	1.50%	1.60%
1998	0.60%	3.00%
1999	2.10%	3.00%
2000	3.50%	3.40%
2001	3.20%	3.20%
2002	2.80%	2.80%
2003	4.50%	2.80%
2004	1.80%	1.80%
2005	3.90%	3.00%
2006	4.50%	4.36%
2007	4.00%	3.86%
2008	3.60%	3.45%
2009	-1.60%	0.00%
2010	2.40%	2.40%