

# Public Utilities

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**Description:**

Anaheim Public Utilities serves electricity and water to Anaheim's 343,000-plus residents and 16,000 businesses. We are Orange County's only customer-owned, not-for-profit electric and water utility.

**Department Mission Statement:**

The Public Utilities Department is committed to adding value to the community through a customer-focused approach to providing reliable, high quality water and power at competitive rates.

**Goals:**

- Provide a safe work environment for all employees.
- Operate and produce water and power in a manner that ensures public safety.
- Enhance service delivery and service options.
- Retain and attract customers.
- Enhance community goodwill.
- Use assets to produce maximum benefits at minimum cost.
- Maintain credit ratings.
- Strengthen the water and power systems.
- Improve internal communication.
- Increase communication to Latino and low-income populations.

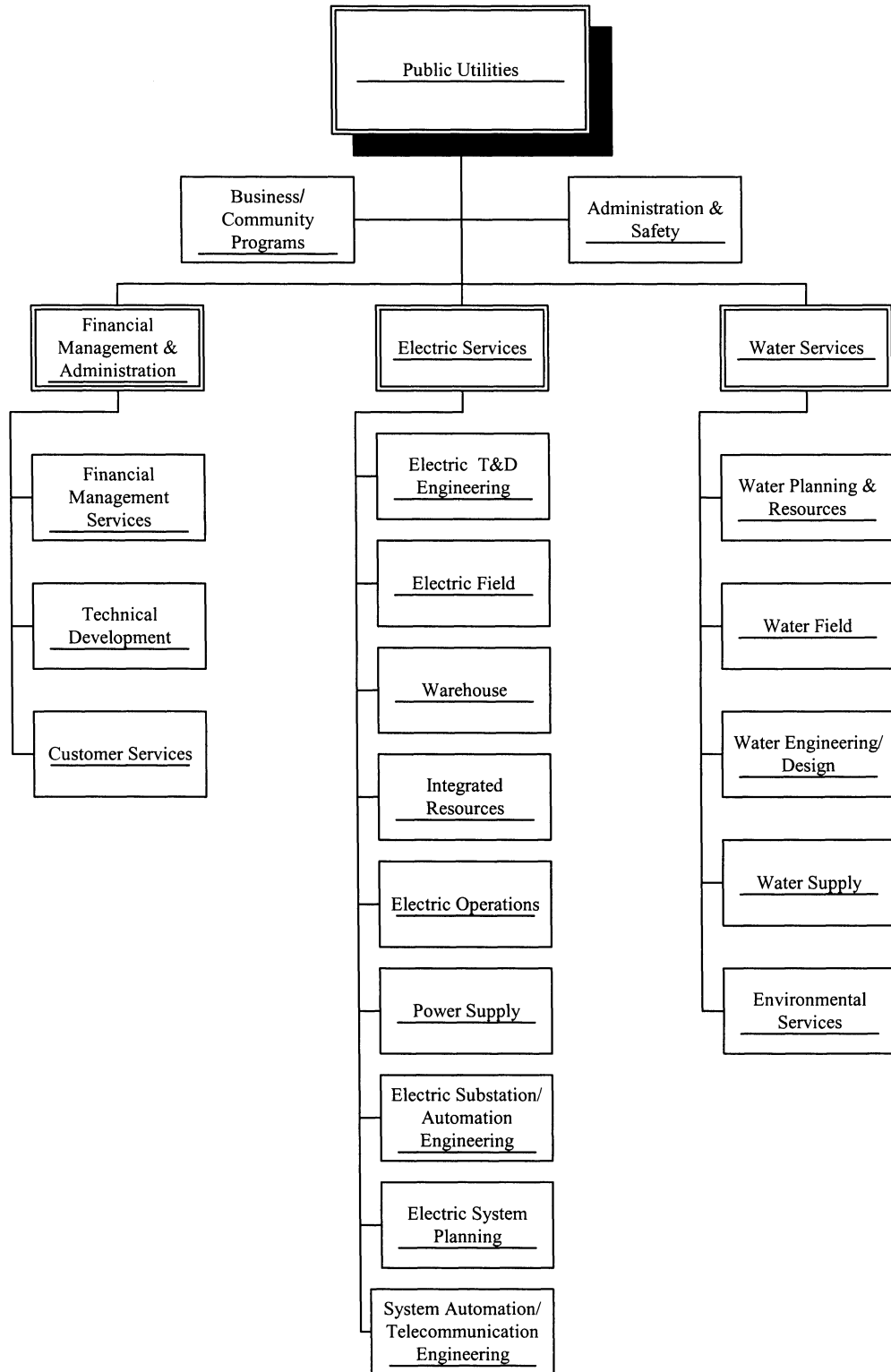
**Significant Changes:**

None to report.

The following spreadsheet includes the Electric & Water Utilities' proportionate share of the Financial and Administrative support they receive:

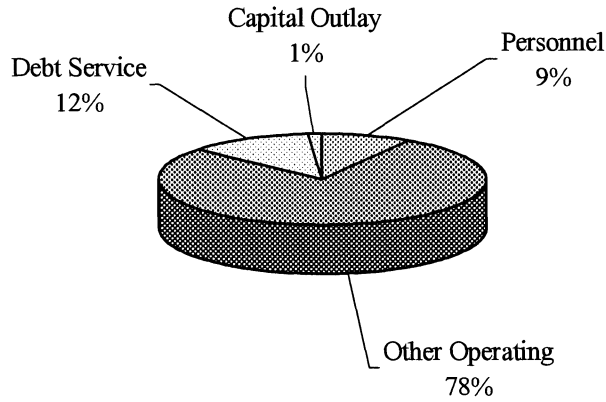
<b>Budget Summary:</b>	<b>FY 2003/04</b>	<b>FY 2004/05</b>	<b>FY 2005/06</b>
	<b>Actual</b>	<b>Adopted</b>	<b>Adopted</b>
Electric Utility	\$ 270,530,498	\$ 279,006,949	\$ 305,581,816
Water Utility	40,536,022	44,198,789	46,285,540
Operating Expenditure Total	311,066,520	323,205,738	351,867,356
Capital Improvements	46,233,492	191,838,747	182,321,565
Department Expenditure Total	<u>\$ 357,300,012</u>	<u>\$ 515,044,485</u>	<u>\$ 534,188,921</u>

# Public Utilities

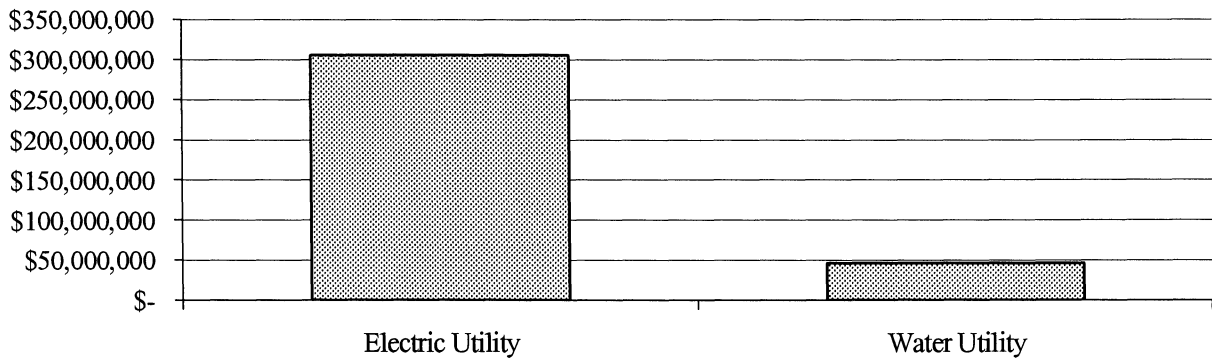


# Public Utilities

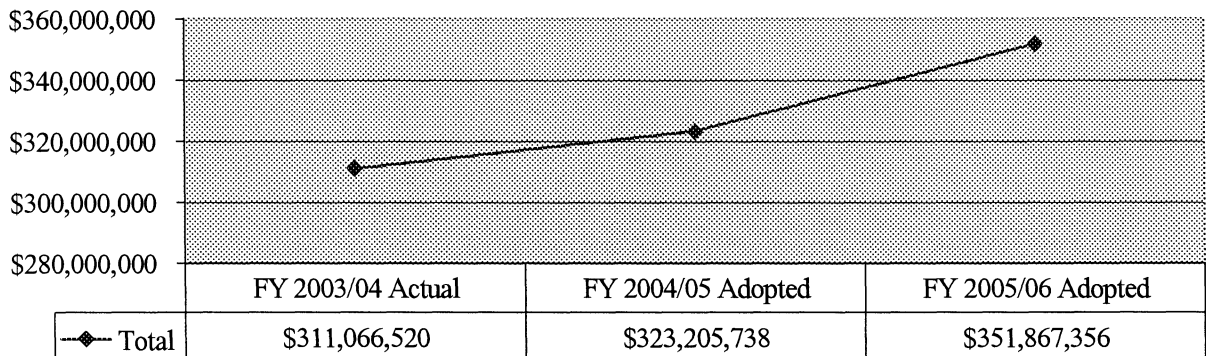
## Public Utilities FY 2005/06 Operating Budget of \$351,867,356



## Public Utilities FY 2005/06 Operating Budget by Division



## Public Utilities FY 2003/04-2005/06 Operating Expenditure History



# Public Utilities

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## Electric Utility

### Mission Statement/Description:

The Electric Utility is committed to adding value to the community through a customer-focused approach to providing reliable, high quality power at competitive rates.

### Fund Support:

The Electric Utility is supported by retail electric sales.

### FY 2005/06 Objectives:

- Reduce all lost-time and vehicle accidents by 50%.
- Train and test employees on the Department's Disaster Response Plan.
- Educate the public on electric safety.
- Enhance participation by minority communities and low-income residents in Advantage Services programs:
  - Continue Latino Utility Coalition meetings to solicit input from the Latino community on Utility issues.
  - Provide Spanish translation for Town Hall and outreach events, as well as outreach materials.
- Maintain a meter reading accuracy rate of 1 error per 2,000 reads.
- Answer 80% of customer calls within 20 seconds or less.
- Respond to 90% of streetlight repair requests within two days.
- Patrol streetlights on main thoroughfares once a year, and weekly in the Anaheim Resort Area.
- Maintain electric system performance at or above industry first quartile benchmarks for:
  - Average number of outages experienced per customer (SAIFI<sup>1</sup> = 0.81\* outages per customer per year).
  - Average duration per outage experienced (SAIDI<sup>2</sup> = 59.70\* minutes).
  - Average length of outage (CAIDI<sup>3</sup> = 70.50\* minutes).
- Reduce energy demand through conservation and efficiency programs.
- Increase grant funding applications for energy related projects.
- Research and test new technologies that will add value to the department and customers.
- Determine customer's perspective on the Electric Utility – increase ratings.
- Increase load available from customers for curtailment during system emergencies.
- Research, field test, and install distributed generation and photovoltaic technologies.
- Underground 12 circuit miles of overhead electric distribution lines.
- Develop power quality program options.

\* Note- These numbers are based on the 1<sup>st</sup> Quartile of the Industry Average.

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<sup>1</sup> System Average Interruption Frequency Index.

<sup>2</sup> System Average Interruption Duration Index.

<sup>3</sup> Customer Average Interruption Duration Index.

# Public Utilities

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## Electric Utility (continued)

- Explore real time pricing and advanced metering options:
  - Provide technical and financial support for a six-month advanced metering pilot program to 85 small commercial and residential locations.
  - Assess real-time pricing options.
  - Expand advanced metering to business customers with loads of less than 200 kW.
- Optimize wholesale power/transmission sales and purchases to meet forecasted net revenue projections.
- Maintain a 90% combustion turbine availability rate (net of scheduled maintenance).
- Complete a 10-year integrated resource forecast for power resource planning.
- Develop strategies and programs to increase the use of renewable energy in the power portfolio.
- Maintain the Electric Utility's overall financial strength:
  - Meet all continuing financial and bond coverage requirements by maintaining debt service coverage of 1.5 or greater.
  - Improve the 20-year financial planning model to aid debt and cash reserve management, feasibility of future electric supply sources, and identify revenue requirements for capital projects.
  - Maintain Standard and Poor's credit rating of A+.
  - Continue to evaluate and develop rate options that are competitive, adequately recover costs, and reduce revenue risk.
- Continue to review outsourcing or process improvement opportunities if advantageous in terms of cost, operating flexibility, or efficiency.
- Unbundle costs into FERC accounting structure to facilitate benchmark comparisons, and project/process costing analyses.
- Implement Electric System Planning Study recommendations:
  - Lewis Substation 230kV Extension Project with the power grid.
  - Install additional substation, transmission and distribution system capacity.
- Implement generation study recommendations.
- Use assets to produce maximum benefits at minimum cost:
  - Extend fiber optic access to provide telecommunication capabilities to twelve water facilities, the planned Park Substation, and three municipal facilities.
  - Implement a remote fiber test system to improve reliability and monitoring capability of the Utilities fiber optics network.
- Meet planned annual system maintenance goals:
  - Maintain 150 primary switches and disconnects.
  - Maintain 55 substation power circuit breakers.
  - Complete the inspection and maintenance of all overhead and underground electric systems equipment during FY 2005/06.
  - Perform dissolved gas analysis testing on 28 substation transformers.
  - Test accuracy of 5,200 electric meters.
  - Test 150 protective relays.

## Public Utilities

### Electric Utility (continued)

- Perform 300 maintenance and security inspections of distribution and consumer substations.
- Perform infrared inspections on all 10 distribution substations and 250 miles of the overhead distribution system.
- Inspect 4,000 wood power poles under the pole test and treat program.
- Meet planned annual system capital improvement goals:
  - Replace 15 miles of direct buried cable.
  - Rehabilitate 20,000 circuit feet of overhead distribution system.
  - Install fault indicators and automation equipment at 105 facilities.
  - Install 64 digital relays and other protective devices.
- Reduce the number of grievances through greater employee-management interaction.

Performance Measures:	FY 2003/04 Actual	FY 2004/05 Adopted	FY 2005/06 Adopted
<b>Outcome/Effectiveness:</b>			
Disabling injury incidence rate: (disabling injuries per 100 employees)	1.22	1.75	1.0
Days away from work rate: (lost workdays per 100 employees)	66	150	100
Meter reading error rate. (1 error per 2000 = 0.0005)	0.0002	0.0005	0.0005
Percentage of calls answered in 20 seconds or less.	75%	80%	80%
SAIFI. <sup>4</sup>	0.7930	0.6644	0.8100*
SAIDI. <sup>5</sup>	35.57	39.605	59.70*
CAIDI. <sup>6</sup>	44.85	61.055	70.50*
Combustion Turbine availability rate.	90%	90%	90%
Standard & Poor's credit rating.	A+	A+	A+
Debt Service Coverage Ratio.	1.74	>1.5x	>1.5x
Competitive Rate Options.	--	No increases in Electric rates until 1/1/06	Implement Alternative Competitive Rates
Labor grievances reported.	2	4	4
Employee turnover rate: Utility wide - includes retirees (national average = 16.5%)	7.28	4.63	6.00

\* Note- These numbers are based on the 1<sup>st</sup> Quartile of the Industry Average.

<sup>4</sup> System Average Interruption Frequency Index.

<sup>5</sup> System Average Interruption Duration Index.

<sup>6</sup> Customer Average Interruption Duration Index.

## Public Utilities

### Electric Utility (continued)

Performance Measures:	FY 2003/04 Actual	FY 2004/05 Adopted	FY 2005/06 Adopted
<b>Workload:</b>			
Number of streetlight heads replaced.	290	360	300
Number of commercial and industrial automated meters installed.	100	150	150
Overhead miles placed underground (in miles, cumulative).	72	84	96
Planned maintenance goals:			
• Number of primary switches and disconnects maintained.	150	150	150
• Number of substation power circuit breakers maintained.	78	55	55
• Number of substation transformers undergoing dissolved gas analysis testing.	28	28	28
• Number of electric meters tested for accuracy.	4,300	5,200	5,200
• Number of protective relays tested.	175	150	150
• Number of maintenance and security inspections on distribution and consumer substations.	300	300	300
• Number of wood power poles under the pole test and treat program.	4,135	2,000	4,000
• Miles of overhead distribution system inspected with the infrared scanner.	125	250	250
Capital improvement plan goals:			
• Cumulative miles of direct buried cable replaced.	120	135	150
• Circuit feet of overhead distribution system rehabilitated/re-conducted.	18,000	16,000	20,000
• Number of facilities where automation equipment was installed.	50	120	105
• Number of 69kV digital relays installed and other protective devices.	60	64	64
• Feet of service wire replaced.	17,000	17,000	17,000
Combustion Turbine - hours in operation.	1,677	2,114	1,400
Number of participants in energy efficiency incentive and education programs:			
• Residential.	15,029	15,000	15,000
• Commercial, industrial, institutional.	256	250	250

## Public Utilities

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### Electric Utility (continued)

<b>Performance Measures:</b>	<b>FY 2003/04</b>	<b>FY 2004/05</b>	<b>FY 2005/06</b>
	<b>Actual</b>	<b>Adopted</b>	<b>Adopted</b>
<b>Workload continued:</b>			
Energy efficiency goals:			
• Energy (kWh) reduced.	13,128,528	13,000,000	13,000,000
• Demand (kW) reduced.	6,592	5,000	5,000
Demand Response (kW) available for emergency curtailment from customer programs.	22,000	25,000	30,000
<b>Budget Summary:</b>			
	<b>FY 2003/04</b>	<b>FY 2004/05</b>	<b>FY 2005/06</b>
	<b>Actual</b>	<b>Adopted</b>	<b>Adopted</b>
Personnel	\$ 20,570,477	\$ 20,573,444	\$ 22,242,118
Other Operating	217,251,134	218,475,649	240,009,374
Debt Service	29,881,733	36,154,725	39,002,723
Capital Outlay	2,827,154	3,803,131	4,327,601
<b>Total Expenditures</b>	<b>\$ 270,530,498</b>	<b>\$ 279,006,949</b>	<b>\$ 305,581,816</b>



# Public Utilities

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## Water Utility

### **Mission Statement/Description:**

To add value to the community through a customer-focused approach to providing reliable, high quality water at competitive rates.

### **Fund Support:**

The Water Utility is supported by retail water sales.

### **FY 2005/06 Objectives:**

- Reduce lost-time and vehicle accidents to zero.
- Train and test employees on the Department's Disaster Response Plan.
- Educate the public on the safety of drinking water.
- Determine customer's perspective on the Water Utility – increase ratings.
- Enhance participation by minority communities and low-income residents in Advantage Services programs:
  - Continue Latino Utility Coalition meetings to solicit input from the Latino community on Utility issues.
  - Provide Spanish translation for Town Hall and outreach events, as well as outreach materials.
- Maintain a meter reading accuracy rate of 1 error per 2,000 reads.
- Answer 80% of customer calls within 20 seconds or less.
- Promote the delivery of the highest quality drinking water that is economically feasible.
- Ensure 100% compliance with federal and state environmental and water quality regulations:
  - Maintain State Certification of Water Quality Laboratory for microbiological analyses.
  - Conduct over 30,000 water quality analyses each year.
  - Conduct environmental compliance audits of waste disposal sites and Utilities owned facilities.
  - Maintain a state approved cross connection control program that prevents possible contamination of water supplies from customer facilities and requires backflow prevention device owners to perform annual tests and make any necessary repairs.
- Implement improvements identified in the water system vulnerability assessment.
- Continue groundwater protection programs:
  - Ensure the proper destruction of abandoned water wells.
  - Require owners of leaking underground storage tanks to conduct necessary cleanup.
  - Develop educational outreach efforts for the Groundwater Protection Zone.
- Maintain water system reliability:
  - Limit the number of unplanned outages.
  - Respond to customer reports of water service problems within one hour.

# Public Utilities

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## Water Utility (continued)

- Improve water use efficiency within Anaheim with an ultimate goal of reducing total demand by 15% from 1993 levels by the year 2020:
  - Increase participation in the CII Water Use Survey Program.
  - Assist Haskett Library Staff in developing a bilingual, water conservation/water quality program for the library's evening story times.
  - Promote Orange County SmartTimer Weather Based Irrigation Controller Rebate Program.
  - Increase grant funding applications for water conservation projects.
- Ensure adequate future water supplies:
  - Update Urban Water Management Plan.
  - Analyze the potential to increase Lenain Filtration Plant production capability.
  - Estimate capital improvements needed to support the optimal water supply mix.
  - Monitor water supply development from the Orange County Water District and Metropolitan Water District.
- Reduce operating costs and efficiency:
  - Review Field Transmission and Distribution and Water Production work plans for outsourcing opportunities.
  - Reduce large meter testing and repair program costs.
  - Develop a plan to reduce power costs at water production and treatment facilities.
- Maintain the Water Utility's overall financial strength:
  - Meet all continuing financial and bond coverage requirements by maintaining debt service coverage of 2.0 or greater.
  - Improve the 10-year financial planning model to aid debt and cash reserve management, feasibility of future water supply sources, and identify revenue requirements for capital projects.
  - Develop rate mechanisms that reduce rate and revenue volatility from uncertain water supply conditions.
- Work with other City departments to find new uses for the Geographic Information System.
- Continue to implement Water System Planning Study capital project recommendations:
  - Re-coat the interior and exterior of selected existing potable water steel tanks.
  - Rehabilitate or replace selected water mains where needed to improve flow capacity, water quality or reliability.
  - Construct one new deep well each year.
  - Complete design for the Nohl Canyon Tank – a new major storage facility.
  - Complete design for rehabilitation of the Walnut Canyon Reservoir – a major untreated water storage facility.
  - Define improvements for major storage and pumping facilities such as the Linda Vista Complex and the La Palma Complex.
  - Rehabilitate or replace selected large valves, large meter vaults, and M-vaults (MWD connections).
- Meet planned annual system maintenance goals:
  - Conduct efficiency tests on all pumps annually.

## Public Utilities

### Water Utility (continued)

- Test all large meters on a six-year cycle.
- Inspect all fire hydrants on a four-year cycle.
- Exercise all system valves on a five-year cycle.
- Reduce the number of grievances reported through greater employee-management interaction.

Performance Measures:	FY 2003/04 Actual	FY 2004/05 Adopted	FY 2005/06 Adopted
<b>Outcome/Effectiveness:</b>			
Disabling injury incidence rate: (disabling injuries per 100 employees)	2.1	1.0	1.0
Days away from work rate: (lost workdays per 100 employees)	133	38	100
Meter reading error rate. (1 error per 2000 = 0.0005)	0.0002	0.0005	0.0005
Percent of calls answered in 20 seconds or less.	75.0%	80.0%	80.0%
Percent of water samples complying with water quality regulations.	100%	100%	100%
Number of water quality or environmental regulation violations.	0	0	0
Number of unplanned water outages.	19	10	10
Standard & Poor's credit rating.	AA+	AA+	AA+
Debt Service Coverage Ratio.	2.33	>2.4	2.0
Number of Labor grievances reported.	0	1	1
Employee turnover rate: Utility-wide. (national average = 16.5%)	9.7	4.0	8.75
<b>Workload:</b>			
Number of water quality analyses conducted.	32,500	30,000	30,000
Number of abandoned wells destroyed.	2	6	3
Number of residential surveys completed.	1,857	1,500	1,500
Number of residential ultra low flush toilets distributed.	5,820	5,000	3,000
Number of home water saving devices installed.	5,412	3,000	4,000
Number of student participants in Water Education Program.	5,631	5,000	5,000
Number of residential high efficiency washer rebates issued.	905	800	600
Miles of unlined cast iron pipe replaced or lined (cumulative).	40.9	41.0	41.8

## Public Utilities

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### Water Utility (continued)

<b>Performance Measures:</b>	<b>FY 2003/04 Actual</b>	<b>FY 2004/05 Adopted</b>	<b>FY 2005/06 Adopted</b>
<b>Workload continued:</b>			
Number of new wells put into service.	0	1	1
Number of pressure regulating stations rehabilitated.	5	0	0
Number of tests completed on:			
• Valves.	5,548	6,500	6,500
• Fire Hydrants.	1,801	1,500	1,740
• Meters. <sup>7</sup>	154	235	235
• Pump efficiency. <sup>8</sup>	72	72	72
<b>Budget Summary:</b>			
	<b>FY 2003/04 Actual</b>	<b>FY 2004/05 Adopted</b>	<b>FY 2005/06 Adopted</b>
Personnel	\$ 7,124,145	\$ 8,148,535	\$ 8,647,595
Other Operating	29,067,639	31,319,159	33,257,715
Debt Service	4,089,422	4,373,779	3,811,386
Capital Outlay	254,816	357,316	568,844
Total Expenditures	<u>\$ 40,536,022</u>	<u>\$ 44,198,789</u>	<u>\$ 46,285,540</u>

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<sup>7</sup> This number does not include items that were replaced.

<sup>8</sup> Ibid.