

"B" SESSION  
NO. **A**

**CITY OF SAN ANTONIO  
INTERDEPARTMENTAL MEMORANDUM  
SAN ANTONIO WATER SYSTEM**

**TO:** Mayor and City Council

**FROM:** Eugene E. Habiger, General, USAF (Ret.), President/Chief Executive Officer, San Antonio Water System and Thomas G. Wendorf, P.E., Director of Public Works, City of San Antonio

**THROUGH:** Terry M. Brechtel, City Manager

**COPIES:** Melissa Byrne Vossmer, Assistant City Manager, File

**SUBJECT:** Third Quarter 2003 Report on Water Resources and Proposed 2004 Water Supply Fee Increment

**DATE:** December 18, 2003

**SUMMARY AND RECOMMENDATIONS**

The City of San Antonio/Bexar County community reached a significant milestone on October 19, 2000. The San Antonio City Council via Ordinance # 92753 approved a multi-year funding mechanism for the construction and development of additional water resources to meet our projected water demands for the next 50 years. City Council requested a status report of all on going water resources projects that are being funded through the water supply fee on a quarterly basis. This report will be the third quarterly report for calendar year 2003.

- The Executive Summary (Attachment I) provides an overview of the San Antonio Water System's overall water resource development program. The summary includes third quarter status of water resources projects, achievements, and a financial summary.
- The full report includes a recap of the water supply fee; detailed project summary sheets for all water resource related activities, projected timelines, budgets and expenditures for the period January 2001 through September 2003.
- The full report also includes an affordability section that outlines SAWS efforts to assist low income customers. These programs include:
  - Meter Charge Discount
  - Project Agua
  - Plumbers to People
  - Laterals to People
- Appendix I includes financial summaries by SAWS core business' which include Water Supply, Water Delivery, Wastewater, and Heating and Cooling.

- Appendix II addresses SAWS organizational improvement initiatives.
- The Second Quarter Report (April – June) 2004 activities) will be distributed with the Third Quarter Report.

In addition to the project related information contained in the Third Quarter Report on Water Resources, SAWS staff will provide a briefing to City Council regarding the 2004 increment of the Water Supply Fee. An overview of 2003 financial information, financial assumptions for 2004, and methodology utilized in the development of the new increment will be presented. A review of the Water Supply Fee Ordinance requirements as well as estimates of capital and operating and maintenance expenses for major water supply projects will be provided. The San Antonio Water System Board of Trustees approved a rate of \$0.1100 per 100 gallons on November 18, 2003, effective on or about January 5, 2004. The rate approved by the SAWS Board of Trustees is less than the maximum 2004 rate of \$0.1128 allowed by Ordinance 92753. This represents a reduction of approximately 2.5% in the rate since inception of the Water Supply Fee and the second consecutive quarter that the full authorization has not been approved. The San Antonio Water System recommends adoption of \$0.1100 per 100 gallons for the 2004 increment of the Water Supply Fee.

### **BACKGROUND INFORMATION**

In 1998, the SAWS Board recommended and City Council unanimously adopted a 50-year water supply plan to be used as a sounding board to meet the future water needs of San Antonio. With that action City Council directed SAWS to begin implementing that plan. The supply plan is the final product of a long series of planning efforts involving a succession of broad-base citizen committees for nearly a decade.

The next stage in the implementation process was to create a funding mechanism to pay for the needed additional water supplies. SAWS is financing these requirements through a new Water Supply Fee that is shown as a separate item on all water and sewer bills. This fee was passed by City Council in October of 2000 and went into effect in January of 2001.

The financing plan provides for annual incremental increases in the water supply charge that are specifically directed toward the funding requirements of the projects being developed. The funds raised by the fee are restricted by City Ordinance to the following purposes:

- The acquisition of new water supplies, water rights, and associated costs such as permits;
- Land acquisitions for new water resource projects;
- Debt service for new water resource projects;
- Operation and maintenance of the new water resources;
- The infrastructure required to integrate the new water supplies into SAWS' existing distribution system; and
- Administration overhead specifically related to water resources acquisition, water quality protections, permits, etc.

One of the provisions that City Council authorized with the adoption of the water supply fee was strict accountability of the funds being generated and awarded. Along with the strict accountability, Council also requested a status report of all ongoing water resources projects funded through the Water Supply Fee on a quarterly basis.

### **POLICY ANALYSIS**

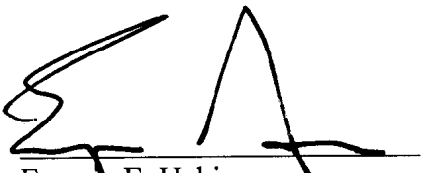
This briefing is consistent with the policy set forth by City Council that SAWS present a report of the water resources projects funded through the Water Supply Fee.

### **FISCAL IMPACT**

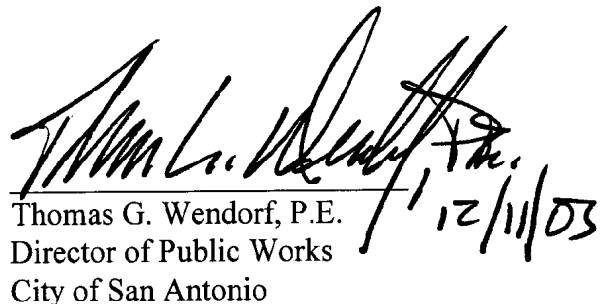
This briefing will not have fiscal impact on the City of San Antonio.

### **COORDINATION**

This request has been coordinated by the San Antonio Water System and the Public Works Department.



Eugene E. Habiger  
General, USAF, (Ret.)  
President/Chief Executive Officer  
San Antonio Water System

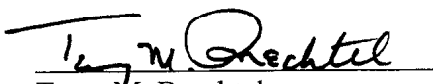
  
12/11/03

Thomas G. Wendorf, P.E.  
Director of Public Works  
City of San Antonio



Melissa Byrne Vossmer  
Assistant City Manager  
City of San Antonio

Approved:



Terry M. Brechtel  
City Manager  
City of San Antonio

# **San Antonio Water System**

## **Quarterly Report on Water Resources**

### **July - September 2003**

#### **Executive Summary**

The City of San Antonio/Bexar County community reached a significant milestone on October 19, 2000. On this day the San Antonio City Council via Ordinance # 92753 approved a multi-year funding mechanism (Water Supply Fee) for the construction and development of additional water resources to meet our projected water demands for the next 50 years. City Council required strict accountability of the funds generated by the Water Supply Fee with respect to new water supply project investigation and development. To address accountability, a quarterly report to City Council, city staff, and the public outlining the financial status and water supply project progress was requested. This report serves as the third quarterly report to City Council for calendar year 2003.

The year-to-date Water Supply Fee projected revenue was \$34.0 million compared to actual year-to-date revenue of \$32.2 million. Cumulative water supply revenue (since implementation of the water supply fee) was projected to be \$92.3 million through the third quarter 2003. Actual revenue collected was \$89.0 million. The San Antonio Water System (SAWS) continues to manage existing water supplies and develop additional water resources pursuant to the multi-year financial plan. **The electronic version of this report (Adobe pdf format) contains project maps and progress photos in Section 2. The links to the maps and photos are indicated in blue type.** Third quarter activities are summarized below.

#### **Significant Accomplishments:**

- Bexar County Aquifer Storage & Recovery Project (ASR) – Construction of the ASR Well field pipeline construction is complete. The main transmission pipeline is now 95% complete and CPS has completed installation of electrical power to the project. The first phase of the ASR project will be operational by December 2003.
- Conservation – The SAWS Conservation Director Dr. Calvin Finch was appointed by the Texas Water Development Board to the Water Conservation Task Force created by SB 1094 to produce statewide water conservation goals.
- Carrizo Aquifer (Gonzales County) Project – The test well program initiated in March completed the drilling phase in late September. Pump testing and determination of aquifer characteristics will continue during the 4<sup>th</sup> quarter. Following completion of field activities, the aquifer model will be updated. The concept study for this project is scheduled for completion in February 2004. SAWS continues the dialogue with communities in Gonzales County to facilitate public relations regarding the project.
- Recharge Initiative - Local sponsors (SAWS, City of Corpus Christi, San Antonio River Authority (SARA), Edwards Aquifer Authority (EAA), Nueces River Authority (NRA), and Guadalupe Blanco River Authority (GBRA) have developed a cost share agreement for the feasibility study. The initial cost allocations for Phase I of the Nueces River Basin Feasibility Study (Nueces Study) is \$560,000 or 25.6% of the total. SAWS share includes cash and in-kind contributions (in-kind services are provided by the Edwards Aquifer Authority). The

Nueces Study Feasibility Cost Sharing Agreement (FCSA) was approved by the SAWS Board of Trustees on September 16, 2003.

- Lower Guadalupe Water Supply Project – Development of the Conceptual Delivery Study continues with the analysis of potential pipeline routes, treatment plant locations, storage locations, and diversion facility configurations. The preliminary groundwater availability report was presented to a joint board meeting between SAWS, the San Antonio River Authority, and the Guadalupe Blanco River Authority. The report was favorable and will be forwarded to the groundwater conservation districts in the area for comments. The Citizens Forum members were selected and the first meeting is scheduled in early October. The communications team has finalized the creation of a Technical Forum comprised of representatives of various stakeholder organizations to provide input into ongoing technical and environmental studies. The first Technical Forum meeting is planned in November. Approximately 70 environmental organizations/groups will be invited. Work continues on the amendment of the GBRA surface water permits and the acquisition of a new permit for unappropriated flows in the Guadalupe River.
- LCRA – SAWS Water Project - The LCRA and SAWS Boards approved a six-month extension of the study period in order to conduct a comprehensive review of the proposed study plan. To aid in the review and analysis of the draft Study Period Plan two separate investigations were completed. The first investigation focused on extending the length of the study period to improve the availability of study results for specific decision points in the project. A second investigation was an independent, external review of the approach, cost and detailed scope presented in the draft study period. The Project Team developed a memorandum defining changes that would be made to the Study Period Plan. Following discussion of the changes the Study Plan was modified and presented to the LCRA Board for approval. The LCRA Board submitted the Proposed Study Period Plan to SAWS on August 21, 2003.

#### **Significant Developments**

- SAWS President/CEO Eugene E. Habiger has named John Waugh to manage the Recharge and Recirculation project. The EAA has primary responsibility for study of the project and SAWS will provide technical support.

#### **Setbacks**

- None during the third quarter.

#### **Other Highlights**

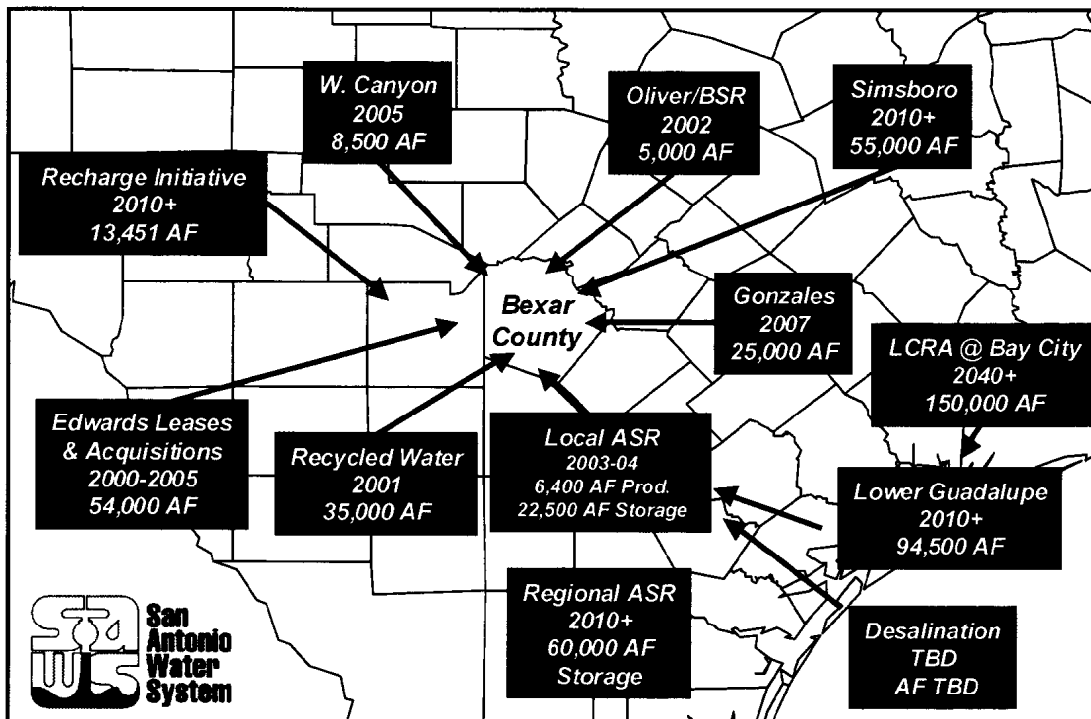
The goal of SAWS is to become the best water and wastewater utility in the U.S. by 2006. To accomplish this, many change initiatives are in place throughout the organization. Significant initiatives during the third quarter are listed below.

#### **Energy Smart**

Being a city-owned water utility, San Antonio Water System (SAWS) is encouraged under Texas Senate Bill 5 to reduce energy usage by 25 percent by 2006 (5 % a year for 5 years, beginning in January 1, 2002). SAWS is taking the first steps in meeting this challenge in energy management, using energy-efficient lighting and providing energy education to its employees. Efforts will reduce SAWS electrical usage by approximately 595,000-kilowatt hours (kwh) per year and overall usage by 2.6 percent. In addition, SAWS will implement other measures to conserve energy such as Demand Side Management and automatic energy control devices.

## Existing Water Resources Projects

The San Antonio Water System is securing the water future for this community in numerous ways, beginning with conservation and water use efficiency. Aggressive conservation has yielded significant results. As a community, water use has been reduced from 213 gallons per capita per day (gpcd) in 1984 to approximately 126 gpcd in 2002 (most of the 17-gallon reduction between 2001 and 2002 was due to weather during July 2002). Conservation alone will not meet the demands of a growing population over time. SAWS 50-year plan is in concert with the regional water plan, and underscores the need for a multi-faceted strategy to acquire necessary resources to meet future water demands. Provided below are a map and listing that indicates the location and status of SAWS water supply projects. Section 2 of this report provides detailed progress summaries for each water resource project.



### Project

Edwards Leases & Acquisitions  
 Recycled Water  
 Oliver Ranch/BSR  
 Local ASR  
 Western Canyon  
 Gonzales (Carrizo Aquifer)  
 Recharge Initiative  
 Lower Guadalupe Water Supply  
 Simsboro  
 LCRA @ Bay City  
 Desalination  
 Edwards Optimization Tech. Studies

### Status

Operational  
 Operational  
 Phase I operational, Phase II -operational  
 Phase I construction  
 Under design, financing proceeding  
 Test Drilling, feasibility study through Feb.2004  
 Feasibility study through 2008  
 Feasibility study through 2007  
 Feasibility study through 2005  
 Feasibility study through 2009  
 Initial Study & Reconnaissance  
 Feasibility Study through 2007

## **Affordability Programs**

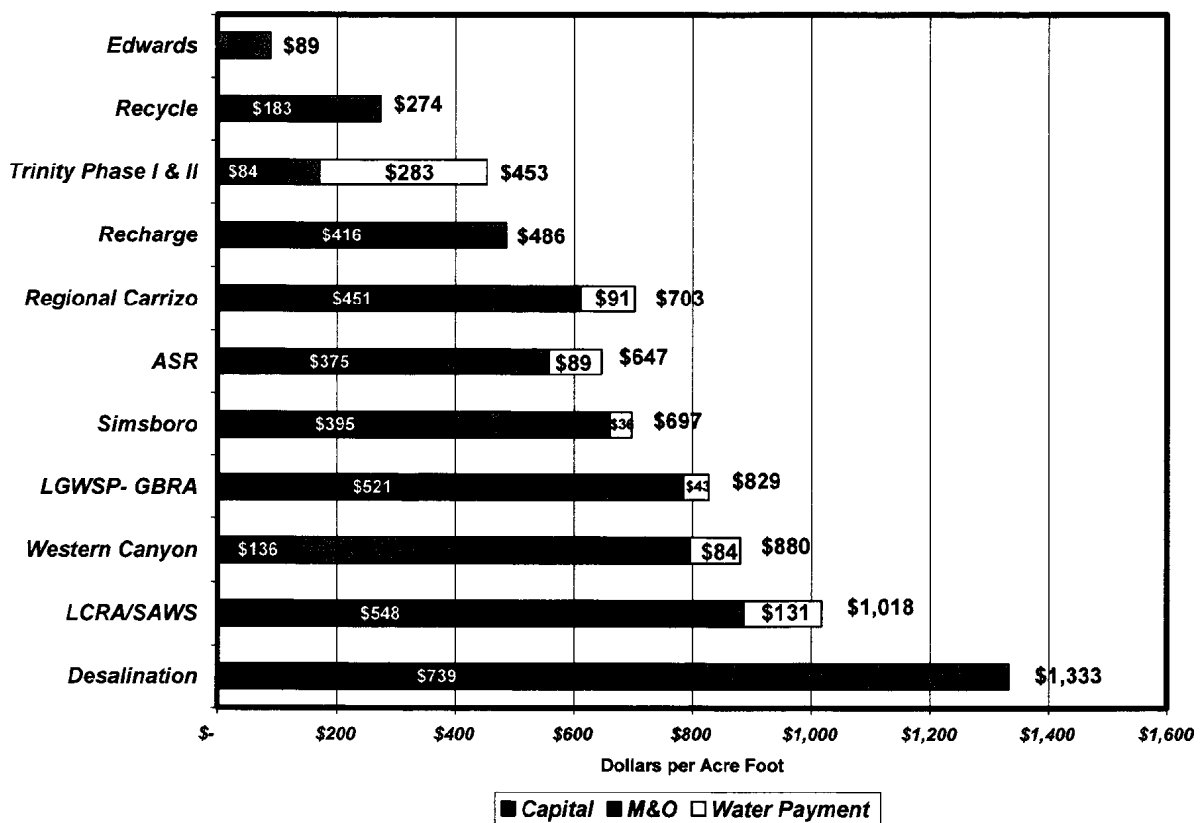
Several affordability programs were established to ease the burden of rising water costs for customers who meet criteria based on income and need. The City of San Antonio's Community Action Division is responsible to qualify customers eligible for these programs. A detailed description of all programs is contained in Section 3 of this report. Listed below is a brief summary of activities under these programs during the quarter.

- **Meter Discount Program** – A monthly meter fee of approximately \$5.00 is charged to all residential customers. At the end of the quarter, approximately 16,800 customers were qualified for the 50% meter discount offered by this program.
- **Project Agua** – Project Agua was established through voluntary contributions from our business community and SAWS to provide utility relief to needy SAWS ratepayers. Total donations to this program equal \$1,010,000. A total of 46 customers were serviced under this program during the third quarter, which is funded by interest earned by the donations.
- **Plumbers to People** – In 1996, SAWS established the Plumbers to People program to provide plumbing assistance to qualified low-income residential customers. This conservation program is designed to save water and meet the needs of low-income customers. The average cost of this program is \$243 per acre-foot. During the quarter, 150 customers were assisted.
- **Laterals to People** – SAWS began this program in 1999 to assist qualified low-income residential customers who require repair or clean out of their sewer lateral. The program was designed to assist needy customers while protecting their health and safety. The program is currently assisting customers on a “case by case” basis. SAWS is in the process of selecting a plumber and the program will be fully operational in the 4<sup>th</sup> quarter.
- **Senior Citizen Penalty Waiver Program** - SAWS offers residential customers who are over the age of sixty an additional 10 days beyond the due date to pay their bill without incurring any additional penalties. The normal due date will be extended ten days from the date of mailing of water and sewer bills for customers enrolled in this program. Approximately 14,200 customers are enrolled in the program.

## Water Supply Project Cost Comparison

A cost comparison of the various water supply projects under consideration by SAWS is shown in the figure below. The annual cost per acre-foot for each water project has been segregated into capital, operations and maintenance, and water payment components. Costs are based on the most recent engineering estimates from either SAWS staff or the South Texas Regional Water Planning Group (Region L) regional water plan. Costs will be updated as projects develop and additional information becomes available.

**Water Supply Project Cost Comparison**  
Cost per Acre Foot



A financial summary of the Water Resource activities is provided in Table ES1. Section 2 of this report provides more detailed project related financial information. A complete financial overview of SAWS core businesses is presented in Appendix 1.



**SAN ANTONIO WATER SYSTEM  
SUMMARY OF WATER RESOURCES PROJECT O&M AND CAPITAL COSTS  
TABLE - ES I**

Project	Type	2003 Estimate	Cumulative Original Estimate	Cumulative Current Estimate	Amount Authorized	Through 3rd Quarter 2003 Expended	% Expended	Notes
Recharge Initiative	O&M	\$ 122,000	\$ 879,167	\$ 701,167	\$ 413,913	\$ 119,434	17.0%	
	CIP	\$ 4,001,080	\$ 5,001,080	\$ 5,001,080	\$ -	\$ -	0.0%	
ASR - Outside Bexar County	O&M	\$ -	\$ 522,917	\$ 372,917	\$ -	\$ -	0.0%	
	CIP	\$ -	\$ 29,177,000	\$ -	\$ -	\$ -	0.0%	
ASR - Bexar County	O&M	\$ 2,670,334	\$ 3,217,834	\$ 2,870,334	\$ 222,449	\$ 222,449	7.7%	
	CIP	\$ 20,977,000	\$ 70,806,400	\$ 116,089,000	\$ 104,990,525	\$ 81,553,635	70.3%	
Western Canyon	O&M	\$ 366,000	\$ 12,054,845	\$ 1,964,636	\$ 672,722	\$ 672,722	34.2%	
	CIP	\$ -	\$ 7,220,000	\$ 7,220,000	\$ 743,495	\$ 565,142	7.8%	See pg 1-7
Gonzales County	O&M	\$ 1,678,000	\$ 1,195,834	\$ 2,367,834	\$ 1,595,404	\$ 1,595,404	67.4%	
	CIP	\$ 14,035,000	\$ 21,835,000	\$ 19,835,000	\$ 4,341,255	\$ 2,237,821	11.3%	See pg 1-7
Simsboro	O&M	\$ 636,372	\$ 2,057,863	\$ 2,468,323	\$ 1,941,861	\$ 1,941,861	78.7%	
	CIP	\$ -	\$ -	\$ -	\$ -	\$ -	0.0%	
Oliver Ranch	O&M	\$ 1,342,000	\$ 4,796,565	\$ 4,176,951	\$ 2,248,362	\$ 2,248,362	53.8%	
	CIP	\$ -	\$ 2,730,000	\$ 4,910,000	\$ 1,687,078	\$ 1,322,635	26.9%	See pg 1-7
BSR	O&M	\$ 375,000	\$ 826,138	\$ 942,781	\$ 407,209	\$ 407,209	43.2%	
	CIP	\$ -	\$ 2,030,000	\$ 2,510,000	\$ 2,140,708	\$ 830,649	33.1%	See pg 1-7
GBRA	O&M	\$ 1,501,700	\$ 1,366,350	\$ 3,375,950	\$ 3,138,391	\$ 3,138,391	93.0%	See pg 1-7
	CIP	\$ 480,000	\$ 1,440,000	\$ 1,440,000	\$ -	\$ -	0.0%	
Edwards Groundwater	O&M	\$ 3,322,626	\$ 10,730,876	\$ 10,143,214	\$ 6,082,158	\$ 6,082,158	60.0%	
	CIP	\$ 2,375,000	\$ 32,150,000	\$ 22,244,400	\$ 14,333,862	\$ 14,333,862	64.4%	
Additional Water Rights	O&M	\$ 2,628,417	\$ 9,041,667	\$ 8,276,803	\$ -	\$ -	0.0%	
	CIP	\$ -	\$ -	\$ -	\$ -	\$ -	0.0%	
Recycling Water Program	O&M	\$ 1,632,431	\$ 2,659,376	\$ 3,295,825	\$ 1,101,651	\$ 1,101,651	33.4%	
	CIP	\$ 8,668,300	\$ 22,968,300	\$ 22,968,300	\$ 34,745,760	\$ 24,936,739	108.6%	See pg 1-7
System Integration	O&M	\$ 398,192	\$ 3,579,467	\$ 1,927,359	\$ 942,355	\$ 942,355	48.9%	
	CIP	\$ 12,500,000	\$ 75,500,000	\$ 63,083,199	\$ 44,021,541	\$ 36,399,580	57.7%	
Sensitive Land Acquisition Program	O&M	\$ -	\$ -	\$ -	\$ -	\$ -	0.0%	
	CIP	\$ 3,000,000	\$ 6,000,000	\$ 6,000,000	\$ 1,518,000	\$ 721,913	12.0%	
Infrastructure Master Plan	O&M	\$ -	\$ -	\$ -	\$ -	\$ -	0.0%	
	CIP	\$ -	\$ 600,000	\$ 600,000	\$ 660,000	\$ 422,287	70.4%	
LCRA	O&M	\$ 2,000,000	\$ -	\$ 4,000,000	\$ 2,563,479	\$ 2,563,479	64.1%	
	CIP	\$ -	\$ -	\$ -	\$ -	\$ -	0.0%	
Enterprise Resource Planning	O&M	\$ -	\$ -	\$ -	\$ -	\$ -	0.0%	
	CIP	\$ 2,000,000	\$ -	\$ 5,556,801	\$ 3,092,870	\$ 2,129,117	38.3%	See pg 1-7
EAA Activities	O&M	\$ 917,804	\$ 824,396	\$ 917,804	\$ -	\$ 73,203	8.0%	
	CIP	\$ -	\$ -	\$ -	\$ -	\$ -	0.0%	
Operation/Production for Projects	O&M	\$ 5,393,694	\$ 8,825,541	\$ 6,558,966	\$ 616,233	\$ 616,233	9.4%	
	CIP	\$ -	\$ -	\$ -	\$ -	\$ -	0.0%	
Total Water Resources Project O&M Costs		\$ 19,590,876	\$ 53,753,285	\$ 47,801,698	\$ 21,946,187	\$ 21,724,911	45.4%	
Indirect Water Resources O&M Costs								
Indirect Water Resources			\$ 23,313,922	\$ 7,387,044	\$ -	\$ 12,423,753	168.2%	
System Support			\$ 21,391,093	\$ 13,979,316	\$ -	\$ 27,843,559	199.2%	

\*All information reflects the combined budgets, authorizations, and expenditures for the calendar years 2001 & 2002 & 2003

## Summary of Water Resources Project O&M and Capital Costs

### Notes

**General** – All columns on Table ES1 except “2003 Estimate” reflect combined budgets, authorizations, and expenditures for Calendar years 2001, 2002, and 2003.

#### **Cumulative Original Estimate Column**

Beginning with the 1<sup>st</sup> Qtr. 2002 report, a new column “Cumulative Original Estimate” has been added to Table ES1. A comparison of this column with the Cumulative Current Estimate column allows the reader to track funds that are re-directed due to changes in project scheduling or other priorities.

#### **Cumulative Current Estimate Column**

This column was also added to Table ES1 and the individual project descriptions (for water supply projects) are found in Section 2 of this report. This column reflects the budget carryover from previous years (funds not spent) and the current year budget.

#### **Authorizations Column**

A column was added to show SAWS Board of Trustees expenditure authorizations for each project. This column reflects the cumulative authorizations since the project was initiated.

**Oliver Ranch** – Costs have exceeded original projections. The cost of the tank and pumps was higher than estimated.

**Lower Guadalupe Water Supply Project** – The project budget for the GBRA (Lower Basin) project was estimated prior to completion of the contract. Listed below is the schedule of payments for calendar years (2001 – 2006) as outlined in the contract.

2001 - \$1,097,550	2002 - \$731,700	2003 - \$731,700	2004 - \$605,700
2005 - \$731,700	2006 - \$731,700		

**Recycled Water Project** – The higher CIP percentage expended for this project reflect expenses from years 1999 and 2000 that were transferred forward to 2003.