

### **Annual Operating and Capital Budget**

Fiscal Year Ending December 31, 2013 San Antonio, Texas



### ANNUAL OPERATING AND CAPITAL BUDGET, AS AMENDED

### FISCAL YEAR ENDING DECEMBER 31, 2013

DOUGLAS P. EVANSON
SENIOR VICE PRESIDENT/CHIEF FINANCIAL OFFICER

MARY E. BAILEY, CONTROLLER

PREPARED BY:

FINANCIAL PLANNING DEPARTMENT

DAN CROWLEY, DIRECTOR
PATRICIA ARRIOLA
MARSELLA GONZALEZ
LOUIS LENDMAN
CARLOS MENDOZA
STEPHEN TURNER
ROBERT WALKER
TREVOR WAITE, INTERN

This page intentionally left blank



The Government Finance Officers Association of the United States and Canada (GFOA) presented a Distinguished Budget Presentation Award to **San Antonio Water System, Texas** for its annual budget for the fiscal year beginning **January 1, 2012**. In order to receive this award, a governmental unit must publish a budget document that meets program criteria as a policy document, as an operations guide, as a financial plan and as a communications device.

This award is valid for a period of one year only. We believe our current budget continues to conform to program requirements, and we are submitting it to GFOA to determine its eligibility for another award.

This page intentionally left blank

### **Table of Contents**

MAYOR AND CITY COUNCIL	9
BOARD OF TRUSTEES	11
ORGANIZATIONAL CHART	13
MISSION-VISION-VALUES	15
TRANSMITTAL LETTER	17
BUDGET SUMMARY	23
Annual Operating Budget	
COMMUNITY PROFILE	29
LOCATION  CLIMATE  POPULATION  EDUCATION  ECONOMY  EMPLOYMENT	
SAN ANTONIO WATER SYSTEM PROFILE	35
HISTORY  BEXARMET  BACKGROUND  SERVICE AREAS  WATER SUPPLY	
FINANCIAL POLICIES	51
FINANCIAL PLANNING PROCESS	59
Strategic Plan	60 
LONG RANGE FINANCIAL PLAN	69
MEDIUM TERM FIVE YEAR FORECAST	69
ANNUAL OPERATING BUDGET	
FINANCIAL PLAN SUMMARY FINANCIAL PLAN SUMMARY BY CORE BUSINESS SOURCES OF FUNDS USES OF FUNDS DEBT SERVICE	
ORGANIZATION AND STAFFING	106
OPERATION AND MAINTENANCE EXPENSE SUMMARY BY DEPARTMENT	

CAPITAL IMPROVEMENT PROGRAM	139
CAPITAL IMPROVEMENT PROGRAM PLANNING PROCESS	140
SOURCES OF FUNDS - CAPITAL IMPROVEMENT PROGRAM FUNDING	
CAPITAL IMPROVEMENT PROGRAM BY CORE BUSINESS	141
SIGNIFICANT NON-ROUTINE CAPITAL EXPENDITURES	144
ESTIMATED OPERATIONS AND MAINTENANCE COSTS FROM CAPITAL EXPENDITURES	145
2013 CAPITAL IMPROVEMENT PROGRAM SUMMARY	
CIP Project Data	149
SUPPLEMENTAL INFORMATION	225
STATISTICAL SECTION	
Water and Sewer Rate Schedules	
GLOSSARY	235
GLOSSARY OF ABBREVIATIONS	239

# CITY OF SAN ANTONIO MAYOR AND CITY COUNCIL



Julián Castro Mayor



Diego M. Bernal

District 1



Ivy R. Taylor District 2



Leticia Ozuna District 3



Rey Saldaña District 4



David Medina, Jr. District 5



Ray Lopez District 6



Cris Medina District 7



W. Reed Williams District 8



Elisa Chan District 9



Carlton Soules District 10

This page intentionally left blank

# SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES



Berto Guerra Jr. Chairman







Willie A. Mitchell Vice Chairman

Elizabeth M. Provencio





Roberto Anguiano Secretary

Louis E. Rowe



2013 Annual Budget

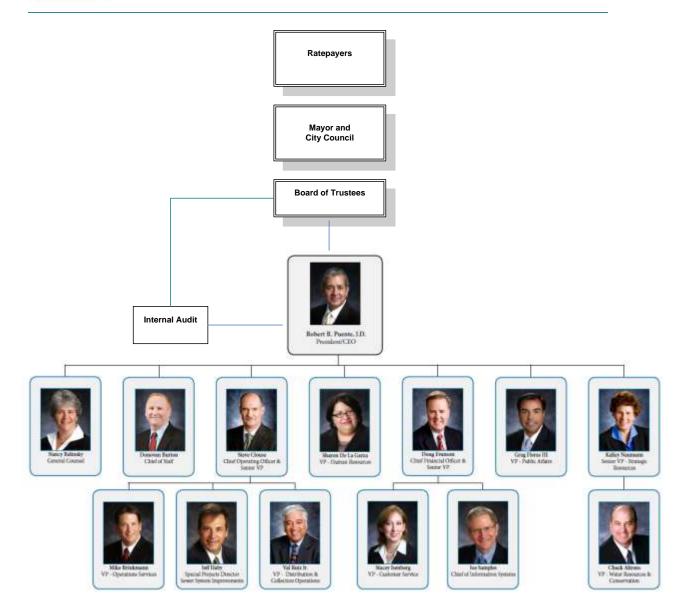


Mayor Julián Castro, ex Officio

This page intentionally left blank



#### **ORGANIZATIONAL CHART**



This page intentionally left blank



## **Refreshing Ideas**

Sustainable Affordable Water Services

To Be Leaders in Delivering Responsible Water Services for Life

Excellence, Integrity, and Respect

The mission and vision statements, combined with the SAWS' intrinsic core values, provide the compass which serves to guide the activities, goals and objectives of SAWS' leadership team and workforce through 2015.

SAWS' mission of sustainable, affordable water services defines its purpose in serving the ratepayers.

The vision statement – to be leaders in delivering responsible water services for life – along with the values of excellence, integrity and respect, make up SAWS' core philosophy, describing what we as an organization believe, where we stand today, and where we wish to be in the future.

This page intentionally left blank

#### TRANSMITTAL LETTER

#### February 8, 2013

Mr. Berto Guerra, Jr., Chairman
Mr. Willie A. Mitchell, Vice Chairman
Mr. Roberto Anguiano, Secretary
Mr. Samuel E. Luna, Jr., Assistant Secretary
Ms. Elizabeth M. Provencio, Trustee
Mr. Louis E. Rowe, Trustee
Honorable Julián Castro, Mayor

#### Honorable Mayor and Trustees:

I am pleased to present the 2013 Annual Operating and Capital Budget of the San Antonio Water System (SAWS), which has been prepared in accordance with requirements of City Ordinance No. 75686.

As we have undertaken the budget process for fiscal year 2013, a number of operational and financial challenges have presented themselves in 2012 that require additional resources to be addressed effectively to the benefit of the community. These challenges include the maintenance and replacement of aging sewer infrastructure, the reduction of Sanitary Sewer Overflows (SSO's) to comply with federal law, and the continued acquisition of diverse water supplies to meet community growth. To provide the resources necessary to meet these issues, the 2013 Budget reflects an 8.4% adjustment in SAWS water and sewer rates for the average customer.

- Sanitary Sewer Overflow (SSO) Reduction Capital Program (\$34.9 million)
  - Sewer Pipe Rehabilitation (\$32.1 million). Sewer system management includes the rehabilitation of sewer pipelines and manholes that contribute to SSOs due to compromised structural condition.
  - Sewer System Capacity Program (\$2.8 million). The regular assessment of sewer system flows identifies the need to replace or construct new sewer pipelines to alleviate capacity constraints that contribute to SSOs.
- Aging Sewer Infrastructure Rehabilitation (\$80.4 million)
  - Sewer Infrastructure Renewal and Rehabilitation (\$43.1 million). Ongoing annual renewal and rehabilitation of sewer infrastructure occurs as required under various conditions such as in situations of emergency and compromised integrity. The work is performed by SAWS crews or contractors, and can require external engineering design services.
  - Major Sewer Replacement Projects (\$33.8 million). Design and/or construction will be performed in 2013 on four specific major sewer replacement projects identified by the SAWS Wastewater Master Plan to address capacity deficiencies and/or conditional defects thereby serving to reduce SSO's.
  - Lift Station Elimination (\$3.5 million). At times, wastewater flow must be forced uphill by a lift station, but the preference is for wastewater to flow through sewer mains via gravity. The 2013 budget includes funding for the elimination of 2 lift stations, which will be replaced with gravity sewer mains.

- Additional Wastewater Capital Improvements (\$44.4 million)
  - Governmental Sewer System Projects (\$18.7 million). SAWS coordinates with other governmental agencies to relocate, replace or rehabilitate sewer infrastructure as part of non-SAWS infrastructure projects planned by other agencies. Required work can include maintenance or capital improvement projects performed by the Texas Department of Transportation, Bexar County, San Antonio River Authority, and City of San Antonio's Bond Program.
  - Water Recycling Center Improvements (\$16.9 million). Upgrades and improvements to equipment, systems and facilities at the Dos Rios, Leon Creek and Medio Creek water recycling centers.
  - Other Improvements (\$8.8 million)
    - Information Systems Support includes plans for a Wastewater CIP Management Software System, Customer Information Software System, and an IBM mainframe upgrade.
    - Service Crew Dispatch Center improved efficiencies for sewer maintenance and response.
- Expanded SSO Reduction Program (Operating Requirements)

Expanded and aggressive evaluation of the sewer system on a continuing basis is essential to minimizing future SSO occurrences. The budget includes \$13.8 million in operating expenditures for the following programs:

- Cleaning, Televising and Assessment (\$9.8 million). The televising of sewer lines throughout the city will be expanded with technology that identifies grease and debris blockages as well as compromised structural integrity that can lead to SSO's. The funding includes work by SAWS crews and contractors to address issues in large and small mains, force mains, siphons and manholes identified by the televising efforts.
- Capacity Assessment (\$1.7 million). This program calls for expanded flow metering, field investigations and hydraulic modeling of sewer main capacity.
- o Program Manager and Data Management (\$2.3 million). External technical expertise and administrative support in the form of an SSO program manager and robust data management are best practices utilized by the top-performing utilities across the nation.
- Water Supply Program (Capital Investments)

To implement the water supply development steps to be undertaken in the coming year as set out in the 2012 Water Management Plan, the 2013 budget includes \$116.2 million in the following capital improvements:

- o Groundwater Desalination Plant Construction (\$98.2 million). SAWS already has wells in the ground for the region's first-ever groundwater desalination project. Construction of Phase 1 will be completed in 2016, providing 12,210 acre-feet of water from the state-of-the-art reverse osmosis plant in southern Bexar County. Phase II is expected to begin in 2017 and Phase III in 2024. The facility will reach its full production capacity of 30,425 acre-feet per year by 2026. Unlike San Antonio's Edwards Aquifer supply, the salty water in the Wilcox Aquifer is not subject to pumping restrictions during drought.
- Edwards Aquifer Rights Acquisition (\$11 million). An amount of 10,900 acre-feet of additional Edwards Aquifer water rights has been identified as available for purchase over the next five years, for a total estimated cost of \$55.2 million. The permitted supplies already contain environmental protections for the endangered species habitats in the Comal and San Marcos Springs. Securing additional Edwards permits from willing sellers helps ensure a solid foundation for San Antonio's diversified water portfolio.
- Integration Pipeline (\$5.8 million). As new water supplies are brought on line, foundational infrastructure must be built to transport that water throughout San Antonio. Acquiring right-of-way is a critical step to ensure the delivery system is in place when needed. The new pipeline will be

- capable of simultaneously moving water from the desalination plant and the local Carrizo Aquifer to high growth areas in western San Antonio.
- o Regional Carrizo Well Mitigation (\$1.1 million). This project will supply SAWS ratepayers with the largest non-Edwards Aquifer water supply to date through an innovative and cost-saving infrastructure-sharing arrangement. By the end of 2013, up to 17,200 acre-feet per year of Carrizo Aquifer water will be piped to San Antonio in cooperation with the Schertz-Seguin Local Governmental Corporation and the Gonzales Water Supply Corporation. This pipeline project will enable SAWS to connect to the existing Schertz-Seguin system in northeast San Antonio.

In summary, the 2013 Annual Budget:

- Balances revenue requirements with available revenues and other funding sources
- Requires a rate adjustment for Water Supply Fee and Wastewater rates
  - O Water Supply Fee: 2.5% rate adjustment
  - O Wastewater rates: 16.5% rate adjustment
- Assumes 2013 billed water usage of 55.2 billion gallons based on normal weather conditions
- Assumes 2013 customer growth of 1.4% for water customers and 1.8% for wastewater customers of the system
- The total Sources of Funds are comprised of:
  - Operating revenues totaling \$458.7 million
    - Includes \$22.6 million in additional revenue during 2013 from rate adjustments to the Water Supply Fee and wastewater rates
  - Non-Operating revenues totaling \$6.4 million
  - Capital recovery fees of \$36.0 million
- Provides for funding of \$243.9 million in net operations costs
- Assumes funding for \$350.2 million of capital improvement projects
  - o \$65.2 million in Water Delivery projects
  - \$159.9 million in Wastewater projects
  - \$118.9 million in Water Supply projects (including Recycled Water projects)
  - \$6.2 million in Chilled Water and Steam projects
- Provides for \$8.5 million funding for vehicles, equipment, and computer related capital
- Provides for \$164.1 million in funding for debt service and expenses
- Plans for senior lien debt coverage of 1.86 times
- Includes a transfer of \$11.7 million to the City of San Antonio

It must be noted that the budget presented here reflects 2013 operational and capital expenses for SAWS only and does not include any costs related to the District Special Project (DSP) formerly known as the Bexar Metropolitan Water District or BexarMet. On November 8, 2011, the ratepayers of the former BexarMet voted to incorporate the District into SAWS. In January 2012, the final state and federal clearances were obtained, and SAWS assumed responsibility for all aspects of BexarMet.

In accordance with state law and city ordinance, in order to minimize the immediate impact upon the existing SAWS' ratepayers, when control of the BexarMet system was assumed in January 2012, SAWS began to operate it separately as "the District Special Project" (DSP). In further compliance with the law, SAWS will continue to operate the system separately as the DSP for up to five years. As a consequence, separate operating and capital budgets for the DSP have been prepared for SAWS Board of Trustees consideration.

The annual budget process is an effort to strike the appropriate balance between ensuring that rates remain affordable for SAWS' customers and ensuring the ongoing operational and financial integrity of the organization. The 2013 Annual Operating and Capital Budget will allow the San Antonio Water System to continue providing high quality water, wastewater, recycled water and heating and cooling services at reasonable costs, while also maintaining a healthy financial position.

Respectfully submitted,

Douglas P. Evanson

Senior Vice President/Chief Financial Officer



This page intentionally left blank

#### **BUDGET SUMMARY**

City of San Antonio Ordinance No. 75686 mandates budgeting in accordance with prescribed funds flow requirements. The budget is designed to present a comprehensive projection of SAWS operations from January 1, 2013 through December 31, 2013.

This document incorporates amendments to the original 2013 budget which was adopted by the SAWS Board on December 4, 2012. Specifically, the amended budget reflects additional revenues from an 8.4% adjustment in water and sewer rates adopted by the SAWS Board of Trustees and the San Antonio City Council subsequent to the adoption of the original budget.

City Ordinance No. 75686 further requires that the SAWS Board of Trustees adopt a budget prior to the start of a new fiscal year. Ordinance No. 75686 also states that all rate adjustments require the approval of the City Council in addition to the approval of the Board of Trustees. Since the City Council had expressed its intent to take action on proposed 2013 rate adjustments only after the beginning of 2013, the Board of Trustees adopted the original 2013 budget in December 2012 which did not reflect any rate adjustments.

The City Council adopted an 8.4% rate adjustment in water and sewer rates on February 7, 2013, and the SAWS Board subsequently adopted the amended budget for 2013 on February 8, 2013. The differences between the original adopted 2013 budget and the amended 2013 budget are provided in the table below.

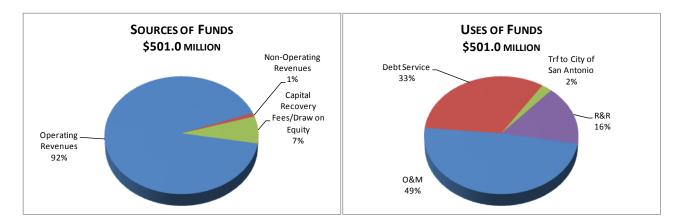
	Millions \$					
	A	2013 dopted sudget	An	2013 nended udget	Diff	erence
Sources of Funds						
Operating Revenues	\$	433.8	\$	458.7	\$	24.9
Non-Operating Revenues		5.0		6.3		1.3
Capital Recovery Fees		22.0		36.0		14.0
Total	\$	460.8	\$	501.0	\$	40.2
Uses of Funds						
Operations and Maintenance		228.6	\$	243.9	\$	15.3
Debt Service and Expenses		158.4		164.1		5.7
Transfer to City of San Antonio		11.0		11.7		0.7
Available for Renewal and Replacement - Restricted 22.0 36.0			14.0			
Available for Renewal and Replacement - Unestricted		40.8		45.3		4.5
Total	\$	460.8	\$	501.0	\$	40.2

The 2013 Annual Budget presents a financial plan designed to continue SAWS mission to provide sustainable, affordable water services. The budget balances revenue requirements with available revenues and other funding sources in order to provide for:

- Operation and maintenance of existing water production, water distribution, wastewater collection, wastewater treatment facilities, and heating and cooling systems
- Implementation of new and expanded programs designed to further reduce sanitary sewer overflows (SSO's)
- Development of additional water resources, and
- Implementation of capital projects that support Water Supply, Water Delivery, Wastewater, and Chilled Water and Steam core business infrastructure needs

The amended 2013 Annual Budget is comprised of the operating budget, which totals \$501.0 million, and the capital budget, which totals \$350.2 million. These amounts both exceed the corresponding 2012 budget levels of \$459.5 million and \$215.5 million, respectively, with the increases stemming largely from the additional programs targeted to reduce SSO's as well as the development of alternative sources of water supply.

#### **ANNUAL OPERATING BUDGET**



#### **Sources of Funds**

SAWS' total sources of funds are projected to be \$501.0 million, an increase of 9.0% over the 2012 budget of \$459.5 million. Operating revenues for 2013 are projected to grow by 6.1% from 2012 budget levels to \$458.7 million, which represents 91.5% of total receipts. The revenue increase is primarily a result of the water supply and sewer rate adjustments approved for 2013 by the City Council in February 2013 which are expected to generate an additional \$24.8 million in revenues.

Non-operating revenues and draw on equity, combined, are projected to increase by \$1.0 million in 2013 as a result of recognizing the annual payment from a legal settlement with the Lower Colorado River Authority (LCRA) as a source of funds. Improving local economic conditions also allow for a forecasted \$14 million increase in capital recovery fees to be paid by developers in 2013.

#### **USES OF FUNDS**

The 2013 operating budget of \$501.0 million projects a \$41.5 million increase in total disposition of funds. This increase is attributable primarily to \$13.6 million in increased budgeted operation and maintenance costs, a \$14.0 million increase in restricted renewal and replacement contribution stemming from increased capital recovery fee revenue, and an \$8.1 million increase in bonded debt service requirements.

Gross operation and maintenance costs for 2013 are projected to increase to \$283.5 million with \$34.3 million related to capitalized charges and \$5.3 million in costs allocated to the District Special Project (DSP). Net operation and maintenance costs of \$243.9 million reflect an increase of \$13.6 million or 5.9% over 2012 budget levels. This increase is driven exclusively by new and expanded programs associated with reducing SSO's. Excluding the incremental \$13.8 million in operating costs associated with these programs, SAWS net O&M charges in 2013 actually decline by \$200,000 or 0.1% when compared to 2012.

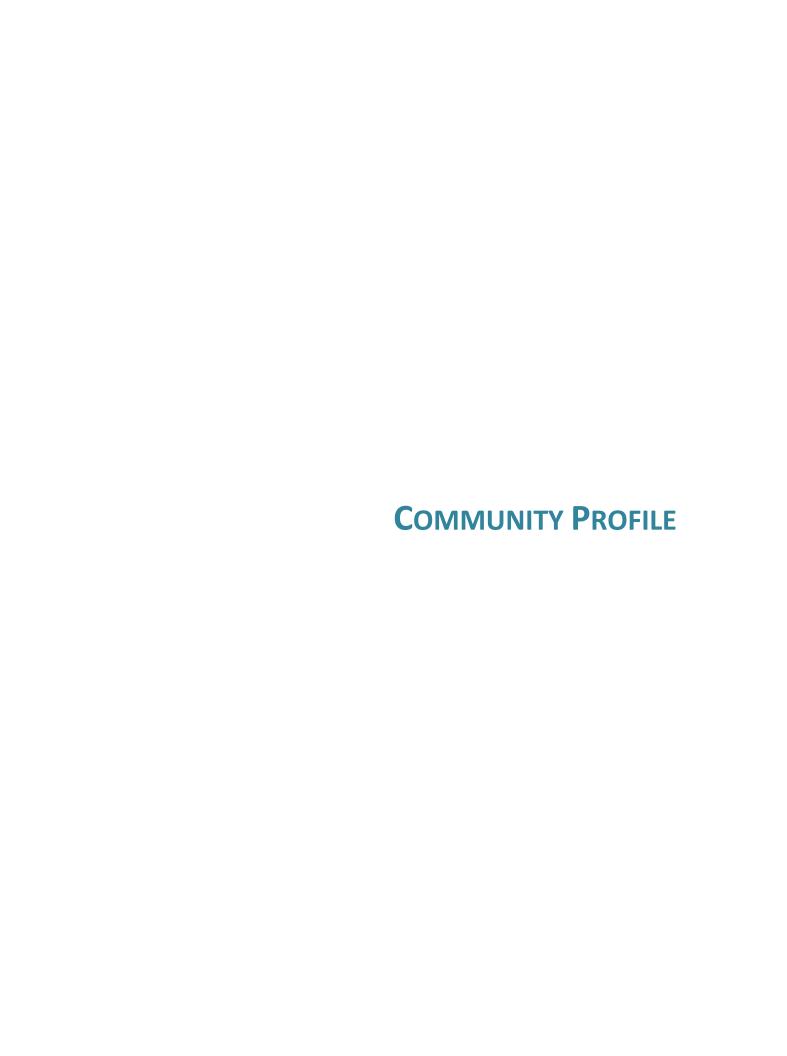
The 2013 operating budget also provides for funding of \$8.5 million in capital outlay which will allow SAWS to continue to replace fleet vehicles and equipment which have reached or exceeded their useful life as well as to replace computers and other equipment.

#### **ANNUAL CAPITAL BUDGET**

The 2013 Capital Improvement Program (CIP) is projected to fund \$350.2 million for projects that support Water Supply, Water Delivery, Wastewater and Chilled Water and Steam infrastructure needs in the SAWS service area. The 2013 capital budget reflects a \$134.7 million (62.5%) increase over the 2012 budget of \$215.5 million due largely to an acceleration of SAWS' sanitary sewer overflow reduction program and the completion of phase 1 of SAWS brackish desalination plant.

Funding for the entire \$350.2 million capital program is projected to be accomplished through a combination of revenues, bonds, and impact fees.

This page intentionally left blank



This page intentionally left blank

#### **COMMUNITY PROFILE**







Beyond its use as a population and business center for the state of Texas, San Antonio possesses a deep history that dates back to the 1700's. In 1718, Spanish monks built a mission named San Antonio de Valero on the site of a Coahuiltecan Indian village. Eventually, this mission would be named the Alamo, where Texan forces fought Mexican soldiers to the death during the Texas revolution. This battle has made the Alamo a symbol of Texas' liberty and prosperity. Following the revolution, Texas was annexed into the United States and San Antonio served as a place of cultural convergence that has shaped it into the city that it is today.

#### LOCATION

San Antonio, which is the county seat of Bexar County, is located in south central Texas and is:

- 80 miles south of Austin (state Capitol)
- 280 miles from Dallas
- 200 miles from Houston
- 140 miles northwest of the Gulf of Mexico
- 150 miles northeast of the city of Laredo on the Mexican border

San Antonio is located primarily in Bexar County, Texas but its city limits now extend into Comal and Medina Counties, Texas.

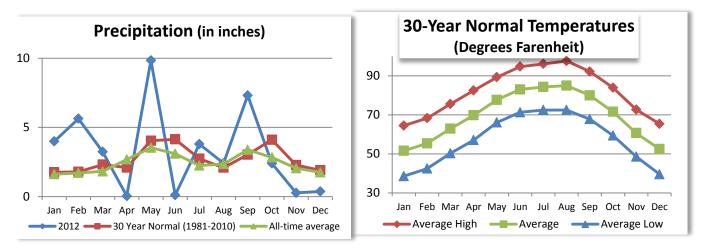
#### **CLIMATE**

With its location on the northwest edge of Texas' Gulf Coastal Plain, San Antonio experiences a modified subtropical climate.



Average temperatures range from 50 degrees in January to the mid-90s in July and August. While the summer is hot, with daily temperatures above 90 degrees over 80% of the time, extremely high temperatures (100 degrees and higher) are relatively uncommon. Mild weather prevails during the winter months, with temperatures below freezing occurring on an average of about 20 days per year.

Rainfall variations can be extreme, with some years coming in near 10 to 20 inches of rain, and other years producing near 50 inches of rain. Average yearly long-term rainfall is near 29 inches. The extremes vary from 10.11 inches in 1917 to 52.28 inches in 1973.



Source: National Weather Service

#### **POPULATION**

According to the 2010 census, San Antonio is the seventh most populous city in the United States and the second most populous in Texas. The San Antonio Metropolitan Statistical Area (MSA) has consisted of Atascosa, Bandera, Bexar, Comal, Guadalupe, Kendall, Medina, and Wilson counties. Before the 2010 census, the city of New Braunfels was added to the MSA. The new San Antonio-New Braunfels MSA is now projected to contain 2.2 million people in the year 2011. San Antonio's MSA ranks twenty-fourth among national MSA's and third among those in Texas.

The following table provides the population of the City, Bexar County, and the San Antonio-New Braunfels MSA<sup>1</sup> for the years shown:

Year	City of San Antonio	Bexar County	San Antonio- New Braunfels MSA	
2011				
(Estimated)	1,359,758	1,756,153	2,196,152	
2010	1,327,407	1,714,773	2,142,508	2
2000	1,144,646	1,392,931	1,711,703	1
1990	935,933	1,185,394	1,407,745	
1980	785,880	988,800	1,154,648	
1970	654,153	830,460	951,876	
1960	587,718	687,151	796,792	
1950	408,442	500,460	603,775	
1940	253,854	338,176	437,854	
1930	231,542	292,533	389,445	
1920	161.379	202.096	289.089	

- As of June 2003, the U.S. Office of Management and Budget redefined the MSA by increasing the number of counties from four to eight: Atascosa, Bandera, Kendall, and Medina Counties were added to Bexar, Comal, Guadalupe, and Wilson Counties. (The 2000 figure reflects the new 2003 redefined eight-county area.) As of December 2009, New Braunfels, Texas qualified as a new principal city of the San Antonio MSA, and the MSA was retitled San Antonio-New Braunfels MSA.
- 2 Provide by the American Community Survey.

Sources: U.S. Census Bureau; Texas Association of Counties – County Information Project; City of San Antonio, Department of Planning and Community Development. San Antonio Economic Development Foundation

#### **EDUCATION**

There are 14 colleges in the San Antonio-New Braunfels that offer degrees in all major fields of study. Together, these universities educate over 121,000 students. The following table contains the number of students at each of these 14 institutions.

San Antonio-New Braunfels MSA Universities				
Institution	2012 Headcount			
University of Texas at San Antonio	30,607			
San Antonio College	23,282			
Northwest Vista College	16,141			
St. Philip's College	10,511			
Palo Alto College	8,771			
University of the Incarnate Word	8,442			
St. Mary's University	3,988			
The University of Texas Health Science Center				
at San Antonio	3,294			
Our Lady of the Lake University	2,766			
Trinity University	2,525			
Texas A&M University San Antonio	4,133			
Wayland Baptist University	4,538			
Texas Lutheran Univeristy	1,317			
Northeast Lakeview College	935			

Source: San Antonio Economic Development Foundation

#### **ECONOMY**

San Antonio boasts a favorable business environment and a widely diversified economy. This diversification can be seen by the large variety of industries that have major operations in the city, including the aerospace, bioscience, environmental/green technology, financial services, information security, and manufacturing industries along with the military. All of these industries are supported by the city's government that aims to strengthen infrastructure, development, and the city's workforce. The San Antonio Economic Foundation, a private, nonprofit organization that assists business and industry relocating or expanding into the San Antonio area, is the source of the following information on local industry.

#### **AEROSPACE/AVIATION**

In San Antonio, the local aerospace industry includes activities like manufacturing of aircraft parts, servicing aircraft, and flight training. Facilities like Port San Antonio, the Kelly Aviation Center, Brooks City-Base, and two active air force bases support these activities. The industry employs approximately 8,500 civilians and approximately 13,600 people when the military workforce is included. Moreover, aerospace and aviation provides one of the best paying industries in the area with an average salary of \$58,729 and creates an economic impact of \$5.4 billion.



#### **BIOSCIENCE/HEALTHCARE**

San Antonio's bioscience and healthcare sector has a large economic impact on the city, projected at more than \$424.5 billion. This field employs around 141,000 people in the area, with total wages of approximately \$6.5 billion. San Antonio has recently attracted industry giants like Medtronic to the region, adding 33,000 of these jobs over the course of the past decade.

#### **ENVIRONMENTAL TECHNOLOGY/GREEN INDUSTRIES**

San Antonio's government actively supports the

growing green economy. A primary means of this support is Mission Verde, an initiative that promotes the creation of green jobs and the pursuit of environmentally sustainable operations. CPS Energy, the community-owned energy utility, has not only sought out renewable energy resources, but also furthering the development of and educating the public about these resources with their pledge to Texas A&M University San Antonio to help fund a sustainable energy research institute.

#### **FINANCIAL SERVICES**

A wide variety of financial service entities are present in San Antonio including Frost National Bank and United Services Automobile Association (USAA). The financial services sector, including banking and credit, investment activities, insurance, funds, trusts and other financial vehicles, and accounting and bookkeeping employed over 70,400 people in 2012. This sector also reported increases in revenues in a difficult climate, proving its position as one of the city's most stable business sectors.

#### IT/CYBER SECURITY

With a strong military presence, San Antonio has become a national leader in the field of information security. However, the importance and impact of IT business does not stop there. The city contains offices of many notable technology firms like Rackspace and Startech. Together, this industry generates a \$10 billion economic impact.



#### **M**ANUFACTURING

The manufacturing sector, with approximately 47,200 jobs, is able to produce a large variety of goods ranging from transportation products to materials. Trinity University determined that manufacturing has an economic impact of \$14.4 billion to the region while paying annual salaries 13% above the San Antonio average.

#### MILITARY/DEFENSE

The military has an extremely strong presence in San Antonio with two air-force bases, one army base, and one former air-force base (now Brooks City-Base). The economic impact of the military is expected to grow as more jobs are relocated to San Antonio through the Base Realignment and Closure (BRAC) activity. The military has also brought other benefits to those who do not serve the country, like high-end medical care.

#### **EMPLOYMENT**

Employment in the MSA has grown quickly over time and has remained somewhat stable even as many job markets in other cities and states have experienced negative growth. In fact, San Antonio's annual unemployment rate has not exceeded 7.4% in the past 20 years. Additionally, this unemployment rate has also remained under the Texas state annual unemployment rate.

A summary of San Antonio's nonagricultural employment by industry for the preceding ten years is as follows:

San Antonio MSA Non-Farm Employment by Industry										
as of December of each year	2012 *	2011	2010	2009	2008	2007	2006	2005	2004	2003
Natural Resources, Mining and Construction	47,000	43,500	44,700	48,100	55,200	55,800	50,600	49,300	46,100	44,600
Manufacturing	47,200	46,500	45,300	43,500	45,600	49,000	49,800	47,400	45,700	46,000
Trade, Transportation and Utilities	151,600	150,200	147,300	146,400	152,600	155,600	152,700	145,500	141,200	139,900
Information	17,900	18,100	18,100	18,300	20,600	21,500	21,900	21,100	21,000	22,500
Financial Activities	70,400	69,600	68,600	66,100	66,500	65,800	64,900	63,700	61,800	61,100
Professional and Business Services	102,600	100,100	101,200	102,700	104,400	107,300	104,000	101,100	89,400	88,400
Educational and Health Services	134,900	132,800	130,200	125,900	122,200	116,900	112,100	110,200	105,600	101,800
Leisure and Hospitality	113,000	104,300	101,000	97,300	99,100	95,700	91,300	87,200	84,200	81,400
Other Services	32,300	31,700	31,800	30,900	30,700	30,200	28,500	26,900	26,900	27,700
Government	161,700	159,800	164,200	161,900	158,200	154,100	150,000	146,900	144,300	144,000
Total Non-Farm Employment	878,600	856,600	852,400	841,100	855,100	851,900	825,800	799,300	766,200	757,400
Source: U.S. Bureau of Labor Statistics										
* Preliminary										

In addition to the wide selection of employment and job opportunities, the cost of living in San Antonio is relatively low. The city is especially competitive in housing, groceries, and utilities. These economic benefits help to attract San Antonio's workforce, employers, and students to the city.

This page intentionally left blank

#### **SAN ANTONIO WATER SYSTEM PROFILE**

#### **HISTORY**

SAWS was created through the consolidation of three predecessor agencies: the City Water Board (the previous city-owned water supply utility); the City of San Antonio Wastewater Department (a department of the city government responsible for sewage collection and treatment); and the Alamo Water Conservation and Reuse District (an independent city agency created to develop a system for reuse of the city's treated wastewater). In addition, the water resources planning staff of the City Planning Department was realigned to the new agency to provide combined water related services for the San Antonio area.

In the consolidation, SAWS was also assigned the responsibility for complying with federal permit requirements for treatment of the city's stormwater runoff.

#### **BEXARMET**

On January 28, 2012, SAWS assumed the operational control and management of the Bexar Metropolitan Water District (BexarMet). BexarMet was created by the 49th Texas Legislature in 1945 to serve



anticipated growth in Bexar County. From an initial account base of 4,765 primarily residential accounts, it grew to more than 92,000 residential and commercial accounts served in 2011. Claims of alleged mismanagement, inadequate service and excessive rates resulted in the passage of Senate Bill 341 (SB 341) by the Texas Legislature in May, 2011. The primary component of SB 341 required an election by BexarMet ratepayers to vote on the dissolution of BexarMet and consolidation with SAWS. The election was held on November 8, 2011 and the BexarMet ratepayers voted in favor of dissolution. In preparation for this vote, on October 20, 2011, the City Council adopted an ordinance creating a "special project", as authorized by SB 341, where the assumed BexarMet would be treated as a component unit of the City of San Antonio, to be known as the San Antonio Water System District Special Project (DSP). In accordance with the ordinance and as allowed by SB 341, for financial statement purposes, the DSP remains a separate entity but will be fully integrated into SAWS within the timeframe specified by SB 341. As a result, unless otherwise stated, the activities of the DSP are not accounted for in this document. In 2012, SAWS' allocated \$6.3 million in shared operating costs to DSP. The 2013 budget assumes that \$5.3 million will be allocated to DSP.

#### **BACKGROUND**

San Antonio Water System is a public utility owned by the City of San Antonio. It is the largest municipally-owned water, wastewater, chilled water, steam, and recycled water utility in the San Antonio/Bexar County area. SAWS provides service to the majority of the population within the corporate limits of the City and Bexar County which totals approximately 1.8 million residents. The System employs over 1,600 personnel and maintains approximately 10,000 miles of water and sewer mains.

Complete management and control of SAWS is vested in a Board of Trustees consisting of the mayor and six members who are appointed by the San Antonio City Council, and serve staggered four-year terms. The mayor of San Antonio serves as an ex-officio voting member. The general operations of the utility are under the supervision of the President/Chief Executive Officer.

#### **SERVICE AREAS**

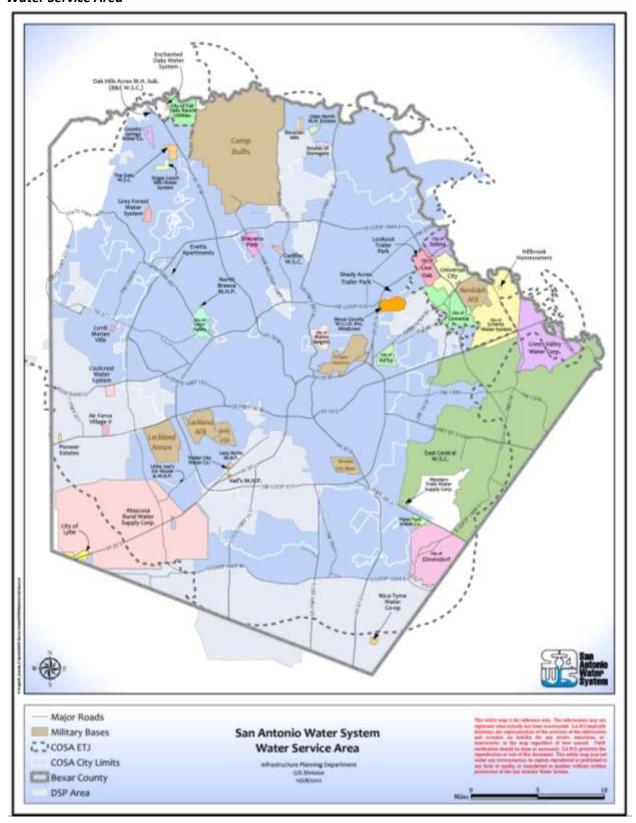
#### WATER DELIVERY AND WASTEWATER

San Antonio Water System serves 1.3 million people in the urbanized portions of Bexar County. This population includes more than 365,000 water connections and more than 412,000 wastewater connections.

SAWS service areas are established by its permits from state regulatory authorities. The service area for water delivery includes most of Bexar County, several suburban municipalities and parts of adjacent counties. In addition to serving its own retail customers, SAWS also provides wholesale water to a few smaller utility systems within this area.

A larger and somewhat different area, following natural watersheds, is defined for wastewater collection and treatment. SAWS is the largest wastewater treatment agency in the San Antonio area. SAWS also provides collection and treatment services by contract to developments outside its defined service area to avoid unnecessary proliferation of state wastewater discharge permits.

## Water Service Area



Key operating and capital indicators of the water system for years 2003-2012 are provided in the table below:

	Fiscal Year									
	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003
Rainfall (Inches)	39.40	17.58	37.39	30.69	13.76	47.25	21.34	16.45	45.34	28.45
Customers/Connections (a)	365,099	360,281	356,546	352,059	348,834	344,168	336,434	325,944	315,000	306,363
Water Pumpage (Million Gallons)										
Annual Water Pumped (d)	70,338	74,627	69,591	68,191	71,785	63,395	68,411	63,632	53,483	55,033
ASR Recharge (b) (d)	3,742	3,928	8,319	5,542	3,535	6,582	2,951	4,396	1,800	n/a
ASR Production (b) (d)	1,446	4,309	550	472	406	141	2,080	305	261	n/a
Annual Pumped for Usage (d)	66,596	70,699	61,272	62,649	67,523	55,043	63,388	58,990	51,231	55,039
Average Daily (d)	192.2	204.5	190.7	186.8	194.9	169.2	181.8	172.6	145.3	150.8
Maximum Daily (d)	264.0	265.6	314.0	273.8	299.0	225.6	280.4	279.3	343.1	304.8
Metered Usage (Million Gallons)	55,320	59,133	52,578	55,295	58,828	49,511	57,724	55,005	49,366	50,576
Available Water Supply (Million Gallons)										
Permitted Edwards Aquifer rights (e)	82,422	84,640	85,035	81,923	71,738	69,505	69,505	65,007	67,799	n/a
Non-Edwards supply (f)	7,431	6,098	6,132	6,256	6,256	4,171	4,171	1,140	1,140	n/a
Stored in ASR (d) (g)	30,952	28,655	29,244	21,832	16,772	13,092	6,534	5,667	1,602	n/a
Total water available for production	120,804	119,393	120,411	110,011	94,766	86,768	80,210	71,814	70,541	n/a
Number of Wells in Service	143	139	144	140	136	126	113	102	94	95
Overhead Storage Capacity (Million Gallons)	81.2	81.2	73.9	66.5	65.2	64.2	69.0	60.0	64.8	53.5
Total Storage Capacity (Million Gallons)	183.7	184.1	180.8	166.2	165.0	164.0	166.0	142.0	161.5	145.0
Miles of Water Main Installed	57	78	106	97	161	167	143	103	90	109
Miles of Water Main										
Replaced and Abandoned	22	26	36	34	32	19	22	23	17	20
Miles of Water Main in Place	5,022	4,988	4,936	4,866	4,802	4,673	4,525	4,404	4,324	4,251
Water Main Breaks (c)	2,128	3,397	1,475	3,212	2,594	1,392	3,073	2,577	1,305	1,480
New Services Installed	7,520	4,725	4,208	3,590	7,565	17,274	13,903	12,730	10,759	10,626
Fire Hydrants Installed										
(Net of Hydrants removed)	348	451	516	644	971	1,040	752	521	574	654
Fire Hydrants in Place	27,914	27,566	27,115	26,599	25,955	25,004	23,964	23,212	22,691	22,117

<sup>(</sup>a) Number of customers at end of fiscal year.

<sup>(</sup>b) SAWS opened its Aquifer Storage & Recovery (ASR) facility in 2004. Prior to this time, all water pumped was pumped for usage.

<sup>(</sup>c) Amount reported is for the calendar year.

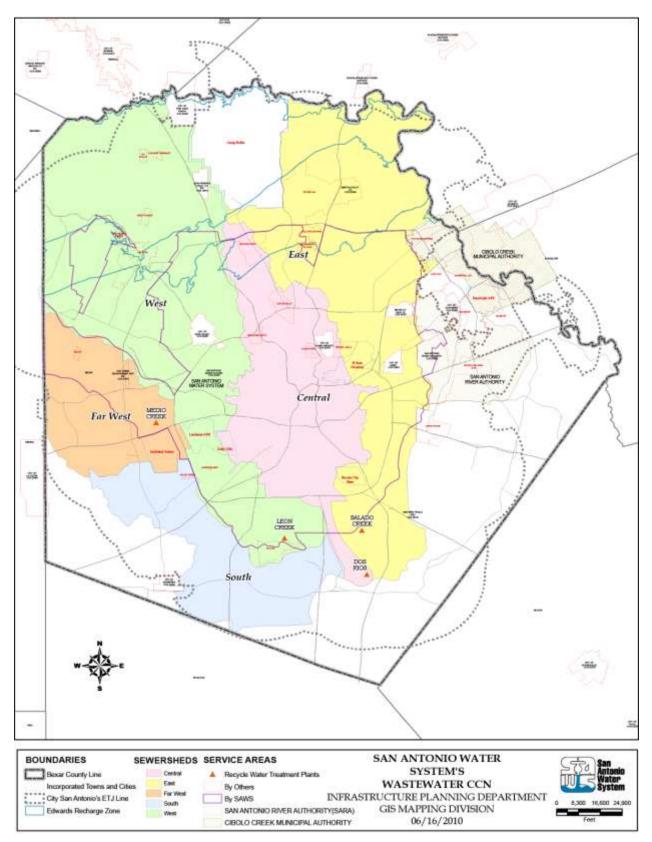
<sup>(</sup>d) Amounts have been revised from previously published data.

<sup>(</sup>e) Based on permitted rights authorized by the Edwards Aquifer Authority (EAA) as of December 31st. Authorized amounts prior to 2004 are not presereflect a high level of variability related to EAA's permitting process. Under current EAA rules, authorized amounts are subject to reductions of 20% to during drought conditions.

<sup>(</sup>f) Includes water from the Trinity Aquifer and Canyon Lake available under water purchase agreements and water from the Carrizo Aquifer based on grights associated with land owned by SAWS.

<sup>(</sup>g) Represents net amount stored in ASR (Recharge - Net production)

## Wastewater Service Area



Key operating and capital indicators of the wastewater system for years 2003 through 2012 are provided in the table below:

	Fiscal Year									
	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003
Customers/Connections (a)	412,275	405,119	400,096	395,161	389,894	379,962	368,401	354,878	342,813	330,072
Effluent Volumes For Major Facilities										
(million gallons per day)										
Dos Rios										
Permit Flow	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00
Average Annual Flow	79.04	74.97	86.47	74.37	76.53	93.34	64.00	59.58	61.16	56.53
Maximum Monthly Average Flow	87.01	76.63	103.66	89.36	81.43	131.98	74.37	73.98	78.74	65.65
Leon Creek										
Permit Flow	46.00	46.00	46.00	46.00	46.00	46.00	46.00	46.00	46.00	46.00
Average Annual Flow (two outfalls)	38.62	35.07	38.83	34.99	34.71	40.26	32.63	34.48	35.34	33.81
Maximum Monthly Average Flow										
(two outfalls)	43.77	36.46	45.30	64.74	38.62	55.49	34.28	41.79	42.40	36.18
Medio Creek										
Permit Flow	16.00	16.00	16.00	16.00	16.00	8.50	8.50	8.50	8.50	8.50
Average Annual Flow	7.29	6.83	7.53	6.32	5.87	6.94	5.13	5.21	5.60	5.53
Maximum Monthly Average Flow	8.14	6.97	8.71	7.45	6.57	10.51	5.63	6.58	6.63	7.09
Salado (b)										
Permit Flow	n/a	n/a	n/a	n/a	n/a	n/a	46.00	46.00	46.00	46.00
Average Annual Flow	n/a	n/a	n/a	n/a	n/a	n/a	11.38	33.80	35.86	33.24
Maximum Monthly Average Flow	n/a	n/a	n/a	n/a	n/a	n/a	21.11	40.40	44.00	36.39
Total										
Permit Flow	187.00	187.00	187.00	187.00	187.00	179.50	225.50	225.50	225.50	225.50
Average Annual Flow	124.95	116.87	132.83	115.68	117.11	140.54	113.14	133.07	137.96	129.11
Maximum Monthly Average Flow	138.92	120.06	157.67	161.55	126.62	197.98	135.39	162.75	171.77	145.31
Amount Treated Annually (millions of gallons)	49,055	49,918	48,151	51,987	50,347	49,218	53,268	49,287	49,593	49,669
Amount Treated Peak Day (millions of gallons)	199	160	258	194	174	294	169	212	297	201
Miles of Sewer Main Installed	38	45	33	84	125	137	132	74	76	122
Miles of Sewer Main In Place (c)	5,200	5,163	5,118	5,085	5,001	4,877	4,739	4,607	4,533	5,088
Number of Manholes Installed	856	1,080	659	1,514	2,922	2,775	2,661	1,538	1,504	1,686
Number of Manholes in Place	98,136	97,280	96,200	95,541	94,027	91,105	88,330	85,669	84,131	67,277
Number of Lift Stations	159	159	158	164	162	167	164	150	150	150

<sup>(</sup>a) Number of customers at end of fiscal year.

<sup>(</sup>b) The Salado treatment plant was closed in August 2006 and all wastewater flows diverted to the Dos Rios treatment facility.

<sup>(</sup>c) Prior to 2004, the miles of sewer main in place were estimated. Utilizing GPS tracking, more accurate data was obtained and maintained starting in 200

#### Sewer Management Plan

SAWS is currently engaged in negotiations with the U.S. Environmental Protection Agency (EPA) concerning the terms of a potential consent decree that, if approved and adopted, will require SAWS to expand its programs to reduce the occurrence of sanitary sewer overflows (SSO's).

The 2013 SAWS budget includes funding for Sewer Management Program that includes expanded programs that are recognized as best industry practices to reduce the number of SSO's in other cities. Specifically, the 2013 budget includes \$13.8 million in added operating costs and \$115.47 million in added capital project investments for a total of \$129.27 million to identify and address SSO's, and to rehabilitate aging sewer infrastructure to minimize future SSO occurrence.

The \$115.47 million in capital improvement projects for 2013 associated with SSO reduction are described in the Capital Improvements Program section of this document beginning on page 139.

The \$13.8 million in additional operating costs for 2013 are designed to expand evaluation and cleaning of the sewer system on a continuing basis to minimize future SSO occurrences. The related programs in the 2013 operating budget include:

- Cleaning, Televising and Assessment (\$9.8 million). The televising of sewer lines throughout the city will be expanded with technology that identifies grease and debris blockages as well as compromised structural integrity that can lead to SSO's. The funding includes work by SAWS crews and contractors to address issues in large mains, force mains, siphons and manholes identified by the televising efforts. For 2013, SAWS projects that approximately 550 miles of video monitoring will be conducted and that approximately 1,500 miles of sewer line will be cleaned.
- Capacity Assessment (\$1.7 million). This program calls for expanded flow metering, field investigations and hydraulic modeling of sewer main capacity.
- Program Manager and Data Management (\$2.3 million). External technical expertise and administrative support in the form of an SSO program manager and robust data management are best practices utilized by the top-performing utilities across the nation.

Because negotiations with the EPA continue, the scope of future SSO remediation costs by SAWS in the years after 2013 may change, but the emphasis on applying best practices learned from the experience of other cities will continue.

## **CHILLED WATER AND STEAM**

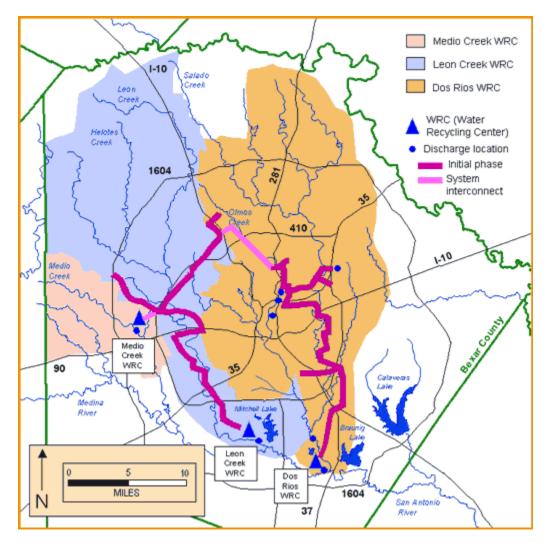
The San Antonio Water System owns, operates, and maintains five thermal energy facilities providing chilled water and steam services to governmental and private entities. Two of the facilities, located in the City's downtown area, provide chilled water and steam to 23 customers. Various City facilities that include the Henry B. Gonzalez Convention Center and Alamodome constitute a large percentage of the downtown system's chilled water and steam annual production requirements. In addition to City facilities, the two central plants also provide chilled water and/or steam service to a number of major hotels in the downtown area, including the Grand Hyatt, Marriott and Hilton Palacio Del Rio. The other three thermal facilities, owned and operated by SAWS, are located at the Port of San Antonio industrial area and provide chilled water to large industrial customers that include Lockheed Martin and Boeing Aerospace. SAWS' chilled water producing capacity places it as one of the largest producers of chilled water in south Texas.

Due to the increasingly unsustainable costs of continuing to provide service from a central steam plant with fixed capacity to a steadily decreasing number of customers, SAWS is working to transition out of the centralized steam business completely by 2014. Specifically, current steam customers are being encouraged in the interim to invest in more cost-efficient, modular heating units to meet their heating needs. For those customers that are unable to make the necessary capital investments for modular units by the time centralized steam service is discontinued, SAWS is willing to install and operate modular heating units on an interim basis through five-year contracts with

the assessment of fees to recover the capital and operating costs associated with the provision of the interim service. The transition is not expected to have a significant impact on the 2013 budget.

### **RECYCLED WATER**

The San Antonio Water System is permitted to sell Type I (higher quality) recycled water from its wastewater treatment plants, and has been doing so since 2000. The water recycling program is designed to provide 35,000 acre-feet per year of recycled water to commercial and industrial businesses in the City. This water recycling system was originally comprised of two north/south transmission lines. In 2008, an interconnection of these two lines was constructed at the north end of the lines, providing additional flexibility with respect to this valuable water resource. Currently, approximately 130 miles of pipeline deliver highly treated effluent to over 52 customers consisting of golf courses, universities, parks, and commercial and industrial customers throughout the City. This water recycling system was also designed to provide baseflows in the upper San Antonio River and Salado Creek, and the result has been significant and lasting environmental improvements for the aquatic ecosystems in these streams.



## **WATER SUPPLY**

In December 2012, the SAWS Board of Trustees approved the 2012 Water Management Plan. The 2012 Plan represents a revision to the 2009 Water Management Plan Update to take into account the numerous developments that changed the elemental building blocks of the 2009 Update. The new plan is a comprehensive analysis of SAWS existing water supplies plus the supplies now made available from the assumption by SAWS in January 2012 of the operations of the former Bexar Metropolitan Water District. SAWS operates the former BexarMet utility separately as the District Special Project (DSP). The plan also includes a series of conservation and water resource strategies that will enable it to provide adequate water supplies, even during critical drought periods, for future San Antonio residents.

Except where otherwise indicated, this summary of the 2012 Water Management Plan will focus on the plan's impact on SAWS exclusive of DSP since it is a separate reporting unit.

- The 2012 Water Management Plan also addresses the impact of the Edwards Aquifer Recovery Implementation Program (EARIP). The EARIP process was a four year effort that culminated in the adoption of an Edwards Aquifer Habitat Conservation Plan (EAHCP) and supporting documents by the SAWS Board of Trustees, other Applicants, and a diverse set of stakeholders and interest group representatives from throughout the Edwards Aquifer region. The EAHCP is intended to protect Edwards Aquifer users as well as federally-listed threatened and endangered species during droughts. EAHCP impacts on SAWS include:
  - Operation by SAWS of the Aquifer & Storage Recovery (ASR) system in a prescribed-yet-flexible manner should record-breaking drought conditions afflict the Edwards Aquifer region during the term of the EAHCP and to store regionally-leased water in the ASR outside of droughts.
  - A change to the Demand Management/Critical Period Management regimen instituted by Texas'
     Senate Bill 3 (2007) through the addition of a fifth stage of critical period withdrawal reductions on all Edwards Aquifer users.
  - An initial commitment of Edwards Aquifer supply permits (8,000 acre-feet per year from SAWS current inventory) towards a Regional Conservation Program administered by the Edwards Aquifer Authority (EAA) and designed to assist municipalities and industries in implementing water conservation measures.
- The EAHCP is discussed in more detail in the following section.

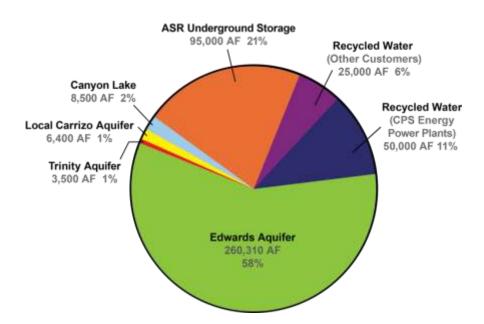
The 2012 Water Management Plan charts the path that SAWS plans to pursue in the short term that will contribute to positioning SAWS in combination with the resources of the DSP to meet the long-term needs of future San Antonio residents through 2070.

#### **CURRENT SOURCES OF WATER SUPPLY**

The table below provides a summary of the available sources of water supply under non-drought conditions for SAWS and DSP, separately and combined:

	4	Acre-Feet	
Source	SAWS	DSP	Total
Edwards Aquifer	260,310	35,585	295,895
Aquifer Storage & Recovery (ASR)	95,000	-	95,000
Recycled Water (CPS Energy Power Plants)	50,000	-	50,000
Recycled Water (Other Customers	25,000	-	25,000
Canyon Regional Water Authority	-	3,500	3,500
Medina Surface Water	-	13,000	13,000
Canyon Lake	8,500	-	8,500
Local Carrizo	6,400	1,000	7,400
Trinity Aquifer	3,500	12,050	15,550
Total	448.710	65.135	513.845

The following pie chart illustrates the available sources of water supply for SAWS (exclusive of DSP) as of December 2012 under non-drought conditions:



The largest amount of SAWS water holdings (exclusive of DSP) reside in the Edwards Aquifer. In 1993, the Texas Legislature created the Edwards Aquifer Authority (EAA) as a conservation and reclamation district. The EAA has broad powers to manage, conserve, preserve, and protect the Edwards Aquifer and to increase the recharge of, and prevent the waste or pollution of water in the aquifer. Among other charges, the EAA was directed to limit groundwater withdrawals from the Edwards Aquifer through a permitting system. The EAA was also directed by the Texas Legislature to ensure that, not later than December 31, 2012, the continuous minimum springflows of the Comal Springs (in New Braunfels) and the San Marcos Springs (in San Marcos) are maintained to protect endangered and threatened species. This requirement is being addressed by the Edwards Aquifer Recovery Implementation Program (EARIP) and the Edwards Aquifer Habitat Conservation Plan (EAHCP).

In 2007, the Texas Legislature passed Senate Bill 3, which established a new annual pumping limit, or 'cap,' and placed restrictions on supply availability during drought periods into State statute. Senate Bill 3 established this annual regional pumping cap at 572,000 acre-feet per year.

As of December 31, 2012, SAWS (exclusive of the DSP) holds 260,310 acre-feet per year of EAA-permitted groundwater withdrawal rights. Access to these permitted groundwater withdrawal rights is subject to varying levels of availability (cutbacks) depending on a management system using water levels at key index wells and springflows. These cutbacks in any given year may range from 0% to 44%.

### PLANNED WATER SUPPLY PROJECTS FOR 2012-2020

Development of the 2012 Water Management Plan included consideration of numerous projects to address future water supply needs for a growing city. A brief project abstract and project activity status is presented below for the projects that will be pursued during the Short Term (2012-2020).

## **Additional Edwards Aquifer Supplies**

SAWS will acquire 10,900 acre-feet of Edwards Aquifer permitted groundwater withdrawal rights. Examination of present distribution of permits indicates that this volume of water is available for acquisition through lease or purchase.

#### **Advanced Conservation**

Given changes in water usage patterns and recognizing the significant success of indoor (equipment-based) conservation, future conservation efforts will be focused toward reducing outdoor water use. Based on data collected from thousands of customer landscape consultations and interaction with tens of thousands of SAWS customers over almost 20 years, SAWS has determined that there is great opportunity for reduced peak water use through better landscape design and management strategies that will enhance the beauty and dry-year viability of San Antonio's landscapes.

### **Expanded Carrizo Production**

A potential new project is Expanded Carrizo Production in southeastern Bexar County. As described earlier, SAWS already has experience in designing, building, and operating projects that produce freshwater from the Carrizo Aquifer in southern Bexar County. Expanded Carrizo Production is a project to develop additional Carrizo Aquifer wells in southern Bexar County proximate to the ASR site. The project will be constructed in three phases starting in 2017 at 7,000 acre-feet with subsequent phases planned in 7,000 acre-feet increments scheduled for 2022 and 2026. Expanded Carrizo Production ultimately provides 21,000 acre-feet per year of supply for the purposes of the 2012 Water Management Plan.

#### **Brackish Groundwater Desalination Program**

On August 2, 2011, the SAWS Board of Trustees approved proceeding on the Brackish Groundwater Desalination (BGD) program. The BGD program involves the production of brackish water, water too salty to drink, from the Wilcox Aquifer in southern Bexar County and treatment to drinking water quality standards.

In January 2013, the SAWS Board of Trustees selected Black & Veatch as the program manager marking the program's transition from the feasibility phase into the design phase. Design is anticipated to be completed in late 2013. Construction on the treatment plant, pipelines, pump-stations, and other facilities is expected to begin in 2013, with the plant commissioning expected in late 2015 and full operation in late 2016, providing 12,210 acrefeet per year of drought-proof desalinated groundwater to San Antonio's taps. Future phases will bring the total supply from this Program to 30,525 acre-feet.

#### Request for Competitive Sealed Proposals (RFCSP)

In January 2011, in accordance with the 2009 Update, SAWS requested competitive sealed proposals for a water supply to supplement future water inventory. The RFCSP document specified that SAWS could accept up to 20,000 acre-feet of water per year in 2020 and might gradually increase the quantity by up to 1,500 acre-feet annually beginning in 2021. Nine proposals were received by the July 22, 2011 deadline. An exhaustive evaluation of nine separate proposals resulted in four of the projects being deemed responsive to the utility's request.

With the approval of the 2012 Water Management Plan, SAWS is proceeding with the final stage of the RFCSP. This stage will include recent critical factors such as the integration of DSP, the EAHCP, and 2010 Census data in making the final determination of the size and timing of the RFCSP. The 2012 Water Management Plan projects that up to 50,000 acre-feet per year could be requested in 2018 and additional water, if available, added as required.

### PLANNED WATER SUPPLY PROJECTS FOR THE MID TERM (2021-2039)

While the 2012 Water Management Plan expects the dry year consumption to remain at 135 GPCD beyond the year 2020, population is expected to continue to grow, resulting in an overall increase in total demand. For this reason, the Mid Term Program calls for SAWS to execute additional phases of the BGD Program and the Expanded Carrizo project.

The 2012 Water Management Plan outlines a water management strategy that maintains SAWS current supplies, successfully develops supplies in the Short Term, and builds on those supplies in the Mid Term:

- Conservation programming that maintains consumption at 135 GPCD.
- Phase II and III of the Brackish Groundwater Desalination Program (additional 12,210 acre-feet per year by the year 2021, followed by an additional 6,105 acre-feet per year by the year 2026) for a total yield of 30,525 acre-feet for the Program.
- Phase II and III of Expanded Carrizo (additional 7,000 acre-feet per year by the year 2022, followed by an additional 7,000 acre-feet per year by the year 2026).
- The completion of the water supplies identified in the Short and Mid Term Programs will ensure that SAWS has water security – even in a future repeat of drought of record-like conditions – through 2040 (see Figure 4).

It is important to note that the EAHCP has a term that will expire during this mid-term period; however, the necessity to balance the needs of the human users of the Edwards Aquifer and the Federally-listed threatened and endangered species associated with it will remain. Some form of Aquifer management for periods of record-breaking drought stress will be required to continue. While those future forms of Aquifer management cannot be predicted, SAWS will continue to represent the EAHCP commitment in water supply and demand projections beyond the expiration of the present HCP.

### **EDWARDS AQUIFER HABITAT CONSERVATION PROGRAM**

Among other charges, the Edwards Aquifer Authority (EAA) was also directed by the Texas legislature to ensure that, not later than December 31, 2012, the continuous minimum spring flows of the Comal Springs (in New Braunfels) and the San Marcos Springs (in San Marcos) are maintained to protect endangered and threatened species. In connection with this directive, the Edwards Aquifer Recovery Implementation Program (EARIP), as described earlier, was established in 2007. The Legislature called for the EARIP to be developed through a consensus-based process that involved input from the U.S. Fish and Wildlife Service (USFWS), other appropriate federal agencies, and all interested stakeholders in the Edwards region.

The primary parties to the EARIP included the EAA, SAWS, the City of New Braunfels, the City of San Marcos and Texas State University. These parties worked through this process along with USFWS and other stakeholders through an EARIP Steering Committee over a four year period to develop a Habitat Conservation Plan (HCP). The HCP will be used by the USFWS as the basis for issuing an Incidental Take Permit (ITP) which will protect San

Antonio and the region from the threat of future environmental lawsuits and federal control of the aquifer over a 15-year term. The EARIP Steering Committee approved the HCP along with the implementing and financing agreements in November 2011. The SAWS Board of Trustees also approved these documents in November 2011. Approval by all other parties culminated with EAA Board adoption of the program documents in December 2011. A notice of intent to issue the ITP and approve the HCP and supporting documents, collectively known as the Record of Decision, was published by the USFWS in the Federal *Register* on February 15' 2013. The ITP was issued by the USFWS on March 18, 2013.

A critical issue associated with the HCP has been funding. Annual HCP implementation costs have been estimated to average \$17.5 million annually over the 15 year term of the plan. The EARIP Steering Committee sought first to obtain authorization from the Texas Legislature in 2011 for a regional election to consider a sales tax to support the program, but this effort was unsuccessful. The next funding option was to ask the EAA to impose an additional fee on pumpers of Edwards Aquifer groundwater.

For 2012, the baseline EAA pumping fee for municipal and industrial pumpers supporting normal EAA operations was set at \$47 per acre-foot. To support projected EAHCP start-up costs in 2012, the EAA approved an additional \$37 per acre-foot fee in February 2012 bringing the total EAA pumping fee to \$84 per acre foot for municipal and industrial pumpers. The HCP portion of the EAA pumping fee became effective for SAWS customers in April 2012. To support the first full year of EARIP costs starting in 2013 the EAA Board elected to keep the HCP portion of the EAA fee at \$37 per acre-foot. It is anticipated that the EAA Board will continue to examine the adequacy of this rate each year to support the ongoing costs to implement the EAHCP throughout the term of the ITP.

This page intentionally left blank



This page intentionally left blank

## **FINANCIAL POLICIES**

#### **BASIS OF ACCOUNTING**

SAWS financial statements are prepared using the accrual basis of accounting with the economic resources measurement focus as prescribed by the Governmental Accounting Standards Board (GASB). SAWS presents its financial statements in accordance with the GASB Codification of Governmental Accounting and Financial Reporting Standards. Under this approach, all assets and liabilities are reported in the statement of net position, revenues are recorded when earned and expenses are recorded at the time liabilities are incurred.

#### **RECOGNITION OF REVENUES**

Revenues are recorded as services are provided. Customers' water meters are read and bills are prepared monthly based on billing cycles. SAWS uses historical information to estimate and record earned revenue not yet billed.

#### **REVENUE AND EXPENSE CLASSIFICATION**

Proprietary funds distinguish operating revenues and expenses from non-operating items. Operating revenues and expenses generally result from providing services in connection with a proprietary fund's principal ongoing operations. SAWS principal operating revenues are charges to customers for water supply, water delivery, wastewater, and chilled water and steam services. Operating expenses include costs of service, administrative expenses and depreciation on capital assets. All revenues and expenses not meeting this definition are reported as non-operating revenues and expenses.

#### **ANNUAL BUDGET**

Prior to the beginning of each fiscal year, SAWS presents and annual budget prepared on an accrual basis to serve as a tool in controlling and administering the management and operation of the organization. The annual budget reflects an estimate of gross revenues and disposition of these revenues in accordance with the flow of funds required by Ordinance No. 75686. The annual budget is submitted to City Council for review and consultation.

The annual budget should be a balanced budget that projects Gross Revenues sufficient to fund estimated financial requirements. The annual budget is prepared on a comprehensive basis and includes all water supply, water delivery, wastewater and chilled water and steam operations as well as a capital budget. The Board of Trustees may subsequently modify its approved budget by giving notice thereof to the City.

The basis of budgeting used is the same as the basis of accounting, with the exception of budgeting for employee benefits and capital asset impairment. Employee benefits are budgeted on a cash basis, rather that accrual basis. Periodically SAWS reviews its capital assets for possible impairment. Unfunded employee benefit expenses and capital assets write-offs do not meet the definition of operating and maintenance costs of SAWS in accordance with Ordinance No. 76586, as they do not require an outlay of cash.

Encumbrances are not formally recorded in the accounting system, however, SAWS monitors and controls spending by utilizing budget variance reports for each accounting unit, which are formally reviewed by the President/CEO.

#### **CORE BUSINESSES**

SAWS' operations are segregated into four core businesses as follows:

Water Delivery – the functions related to distributing water to the customer

Water Supply – the functions related to the development and provision of additional water resources

Wastewater – the functions related to collecting and treating wastewater from the user customer

Chilled Water and Steam – the functions related to providing chilled water and steam to specific SAWS customers

### **RESTRICTED RESOURCES**

SAWS policy is to use restricted resources first when an expenditure is made for purposes for which both restricted and unrestricted resources are available.

#### **CASH EQUIVALENTS**

SAWS considers investments with an original maturity of three months or less at the time of purchase and all bank certificates of deposit to be cash equivalents.

#### **INVESTMENTS**

City Ordinance No. 75686, SAWS' Investment Policy, and Texas state law allow SAWS to invest in direct obligations of the United States or its agencies and instrumentalities. Other allowable investments include direct obligations of the State of Texas or its agencies and instrumentalities; secured certificates of deposit issued by depository institutions that have their main office or a branch office in the State of Texas; defined bankers acceptance and commercial paper; collateralized direct repurchase agreements, reverse repurchase agreements; no-load money market mutual funds; investment pools; and other types of secured or guaranteed investments. These investments are subject to market risk, interest rate risk, and credit risk which may affect the value at which these investments are recorded. Investments other than money market investments are reported at fair value. Under the provisions of GASB Statement No. 31, money market investments, including Us Treasury and agency obligations, with remaining maturity at time of purchase of one year or less are reported at amortized cost.

#### **ACCOUNTS RECEIVABLE**

Accounts receivable are recorded at the invoiced amounts plus an estimate of unbilled revenue receivable. The allowance for uncollectible accounts is management's best estimate of the amount of probable credit losses based on account delinquencies and historical write-off experience. Account balances are written off against the allowance when it is probable the receivable will not be recovered.

#### **CAPITAL ASSETS**

Assets in service are capitalized when the unit cost is greater than or equal to \$5,000. Utility plant additions are recorded at cost, which includes materials, labor, overhead, and interest capitalized during construction. Included in capital assets are intangible assets, which consist of purchased water rights and land easements, costs associated with acquiring additional Certificates of Convenience and Necessity (CCN) related to new service areas and development costs for internally generated computer software. Overhead consists of internal costs that are clearly related to the acquisition of capital assets. Assets acquired through capital leases are recorded on the cost basis and included in utility plant in service. Assets acquired through contributions, such as those from developers, are recorded at estimated fair market value at date of donation. Maintenance, repairs, and minor renewals are charged to operating expense; major plant replacements are capitalized. Capital assets are depreciated and property under capital lease is amortized on the straight-line method. This method is applied to all individual assets except distribution mains and intangible assets. Groups of mains are depreciated on the straight-line method using rates estimated to fully depreciate the costs of the asset group over their estimated average useful lives. Intangible assets not considered to have indefinite useful lives are amortized over their estimated useful life. Capital assets are tested for impairment when a significant unexpected decline in its service utility occurs.

### **CAPITALIZED INTEREST**

Interest expense during the construction period is capitalized as part of the cost of capital assets.

## **CAPITAL CONTRIBUTIONS**

Capital contributions consist of plant contributions from developers, capital recovery fees, and grant proceeds received from governmental agencies for facility expansion. Capital contributions are recognized in the statement of revenues, expenses, and changes in net position, after non-operating revenues (expenses) when eligibility requirements are met.

Capital recovery fees are charged to customers to connect to the water or wastewater system and may be used only for additional infrastructure capacity. In certain instances, SAWS records the donated infrastructure as plant contributions and grants credits to the developer equal to the estimated fair market value of the excess capacity of the infrastructure contributed. These credits may only be used to offset future capital recovery fees owed by the developer.

#### **FUNDS FLOW**

In accordance with City of San Antonio, Texas Ordinance No. 75686 requirements, Gross Revenues shall be pledged and appropriated to the extent required for the following uses and in the order of priority shown to:

- 1. Pay maintenance and operating expenses, including a two-month Operating Reserve
- 2. Deposit into Debt Service fund the amount required for Senior Lien debt obligations
- 3. Deposit into Reserve Fund
- 4. Deposit into Debt Service Fund for Junior Lien debt obligations
- 5. Deposit into Debt Service Fund for Subordinate Lien debt obligations
- 6. Deposit into Debt Service Fund for Inferior Lien debt obligations
- 7. Equal payments to the City of San Antonio's General Fund and to SAWS Renewal and Replacement Fund

Gross Revenues are defined by Ordinance No. 75686 as all revenue of SAWS excluding capital contributions, payments received under the CPS Energy contract, interest earned on Project Fund investments, and Federal subsidies received related to Build America Bonds.

#### **PAYMENTS TO THE CITY'S GENERAL FUND**

In accordance with the City of San Antonio, Texas Ordinance No. 75686 requirements, SAWS will transfer to the City of San Antonio each month after making all other payments required by the Ordinance. The amount of the transfer is determined by City Council from time to time and cannot exceed 5%. Currently SAWS transfers 2.7% of Gross Revenues to the City. Transfers to the City are reported as non-operating expense in the financial statements.

#### **RATES AND CHARGES**

In accordance with City of San Antonio, Texas Ordinance No. 75686 requirements, SAWS must establish and maintain rates and charges to produce sufficient Gross Revenues in each fiscal year to:

- 1. Pay maintenance and operating expenses
- 2. Produce Net Revenues sufficient to pay:
  - a. 1.25 times the annual debt service requirements on senior lien obligations,
  - b. Principal and interest due on any junior lien, subordinate lien and inferior lien obligations and
  - c. Amounts required to be deposited in any reserve or contingency fund created for the payment and security of bond obligations

Net Revenues are defined Ordinance No. 75686 as Gross Revenues after deducting maintenance and operating expenses.

## **FUND STRUCTURE**

Within SAWS' enterprise fund accounts, separate self-balancing sub-funds are maintained to account for resources for various purposes, thereby distinguishing balances restricted by City Ordinance or other enabling legislation from unrestricted resources.

#### FUNDS ESTABLISHED BY CITY ORDINANCE No. 75686 (ADOPTED APRIL 30, 1992)

- System Fund All Gross Revenues shall be credited to this fund upon receipt, unless otherwise provided
  in City Ordinance No. 75686. All current expenses of maintenance and operations shall be paid from this
  fund as a first charge against the gross revenues so credited. Before making any deposits to other funds
  required to be made from the System Fund, the Board of Trustees shall retain in the System Fund at all
  times an amount at least equal to two months of the amount budgeted for the current fiscal year for
  current maintenance and operation expenses.
- Debt Service Fund The sole purpose of this fund is for the payment of principal and interest on all bonds which are payable from pledged revenues.
- Reserve Fund The purpose of this fund is to accumulate and maintain 100% of the maximum annual debt service requirement on senior lien obligations. SAWS may provide Surety policies equal to the required reserve amount in lieu of depositing cash into the Reserve Fund. This fund shall be used to pay the principal and interest on any bonds when and to the extent the amounts in the Debt Service Fund are insufficient for such purpose, and may be used for the purpose of finally retiring the last of any bonds.

- Project Fund This fund shall be used to account for the proceeds of debt obligations and all earnings on Project Fund investments. Funds may only be used to pay for capital improvements in accordance with bond agreements and Internal Revenue Service regulations related to tax-exempt borrowings.
- Renewal and Replacement Fund This fund shall be used for the purpose of
  - 1. Paying the costs of improvements, enlargements, extensions, additions, replacements, or other capital expenditures, or
  - 2. Paying the costs of unexpected extraordinary repairs or replacements for which System Funds are not available
  - 3. Paying unexpected or extraordinary expenses of maintenance and operations for which System Funds are not otherwise available
  - 4. Depositing any funds received by SAWS pursuant to the CPS Energy contract
  - 5. Paying bonds or other SAWS' obligations for which other System revenues are not available
  - 6. Making up any shortfall in the Payment to the City of San Antonio General Fund as required by Section 17 of Ordinance 75686 and
  - 7. For any other lawful purpose

### **DEBT MANAGEMENT**

#### **Capital Planning**

A five-year Capital Improvement Plan is developed and updated annually, including anticipated funding sources. During the annual budgeting process, the current year's proposed capital improvement projects are reviewed and prioritized to ensure consistency with SAWS' goals and objectives.

### **Capital Financing**

Capital financing will typically include two types of funding - pay as you go and debt financing.

- 1. Pay as you go financing is an integral part of the overall capital-financing plan. Pay as you go financing is defined as all sources of funding other than debt issuance and includes unrestricted resources, developer contributions, investment earnings and certain grant proceeds.
- 2. The use of debt financing will be based, in part, on SAWS' long-term needs and the amount of funds available for pay as you go financing. The following criteria will be used to evaluate pay as you go versus debt financing:
  - Factors which favor pay as you go financing:
    - Current revenues and adequate liquidity are available
    - Debt levels would adversely affect SAWS' credit rating or market conditions are unstable or present difficulties in marketing debt.
  - Factors which favor debt financing include:
    - Revenues available for debt service are considered sufficient and reliable so that debt financing can be marketed with the appropriate credit rating
    - Market conditions present favorable interest rates and demand for municipal financings
    - Federal or State subsidized debt is available to finance specific capital improvements and current revenues and liquidity are insufficient to pay the cost of those improvements
    - The life of the capital improvements financed is five years or longer

### **DEBT LIMIT**

There is no statutory debt limitation on the issuance of revenue indebtedness by the San Antonio Water system, acting on behalf of the City of San Antonio, Texas. SAWS has established its own policies regarding the utilization of debt instruments.

The currently outstanding bond ordinances impose conditions precedent on the issuance of additional revenue bonds and require Net Revenues of 125% of maximum annual debt service in order to issue first lien revenue bonds and 100% of average annual debt service in order to issue junior lien revenue bonds in a public offering.

Financial Policies

#### **DEBT POLICY**

- Debt financing should only be used to fund capital improvements and should not be used for operating purposes.
- SAWS shall maintain rates and charges sufficient ensure that Net Revenues equal or exceed 1.25 times
  the Annual Debt Service Requirements for the current fiscal year on SAWS' outstanding Senior Lien
  Obligations as required by the bond indenture. SAWS target is to maintain Net Revenues equal to 2.00
  times Annual Senior Lien Debt Service and 1.50 times Annual Total Debt Service to ensure the required
  debt coverage in times of revenue fluctuations.
- SAWS shall analyze each new debt issue to ensure compliance with SAWS' debt policies and determine the impact of the new debt issue on SAWS' overall debt capacity.
- SAWS may maintain a variable rate component of debt of no more than 30% of its outstanding debt.
- SAWS shall employ an interest rate mitigation strategy to mitigate interest rate risk associated with variable rate debt.
- SAWS seeks to maintain or improve its current credit rating to ensure continued access to capital markets and minimize borrowing cost.
- The term of debt issued should not exceed the expected useful life of the capital improvements being financed.

#### **RESERVE POLICIES**

- An operating reserve shall be maintained in the SAWS System Fund consisting of a two-month reserve of
  the current year's budgeted maintenance and operation expenses. This reserve will provide sufficient
  expenditure flexibility during times of revenue fluctuations.
- The Debt Service Fund will be funded with revenues sufficient to pay the principal and interest of SAWS' bonded debt as it becomes payable.
- Deposits shall be made to the Renewal and Replacement Fund in amounts equal to the amount payable to the City of San Antonio pursuant to the bond indenture. These funds will typically be used to fund capital improvements.
- Deposits shall be made to the Reserve Fund pursuant to SAWS bond indentures. These deposits made with proceeds from bond issued or with unrestricted resources.

This page intentionally left blank



This page intentionally left blank

## **FINANCIAL PLANNING PROCESS**

#### STRATEGIC PLAN

San Antonio Water System continues its dedication to providing ratepayers with sustainable and affordable water services, through its commitment to the Refreshing Ideas 2015 Strategic Plan.

SAWS has framed six specific strategies that will provide employees with leadership and direction through 2015. Designed to transform our service to ratepayers, the strategies address:

### Community

SAWS' vision is to be leaders in delivering responsible water services for life

### **Growth Strategy**

- We will support the City Master Plan and related policies
- We will expand CCN to ETJ, seeking contiguous, cost effective expansion
- We will recover growth costs through impact fees
- We will acquire other systems cost effectively
- · We will work to ensure that growth is self-funding

## **Water Supply Strategy**

- We will ensure a sustainable, affordable water supply that fulfills the need
- We will continue to be national leaders
- We will fill the permitted supply gap
- We will actively pursue regulatory changes
- We will develop relationships
- We will ensure community and region understand conservation and diversification in water supply

### **Operational Strategy**

- PUBLIC HEALTH AND SAFETY: We will conduct services to fully protect the health and well being of our
  community, our employees and our environment
- SERVICE CONSISTENCY: We will provide customer service, operations and maintenance levels that are
  consistent across the community
- SYSTEM RELIABILITY: We will manage system asset maintenance to maximize life cycle costs and system reliability.
- ENVIRONMENTAL SUSTAINABILITY: We will develop energy and environmental policies that will guide SAWS in planning
- PARTNERSHIPS: We will establish partnerships for any service that does not jeopardize an essential function
  and that can be done by a partner at a lower overall cost
- EFFICIENCY: We will effectively utilize efficiencies and technologies to improve service and minimize staffing level growth

### Innovation and Technology Strategy

- We will be innovators and early adopters in water, wastewater manager and conservation.
- We will select technologies that are market proven and fall in the early adopter/early majority of the adoption curve.
- We will pursue innovation/technology partnering where there is mutual benefit, risk sharing and/or opportunities to enhance relationships with customers or communities of interest.

## Employee Engagement Strategy

- We will ensure UNDERSTANDING of SAWS' goals and values.
- We will MOTIVATE by establishing a culture of empowerment and accountability
- We will RECOGNIZE AND REWARD employees who display exemplary commitment to SAWS' success and exemplify SAWS' values; and
- We will improve employee SATISFACTION

## **Financial Strategy**

SUSTAINABILITY: We will make decisions that promote long-term stability as opposed to meeting short term objectives. We will establish annual budgets and five-year financial forecasts using a philosophy that is neither ultra-aggressive nor ultra-conservative, but somewhere in the middle.

FINANCIAL STRENGTH: We will maintain the overall financial strength and credit rating of the organization. ACCOUNTABILITY AND TRANSPARENCY: We will promote financial accountability in the operation and management of the System at all levels.

AFFORDABILITY: We will ensure that the rates and charges for our services are fair and equitable.

## **MULTI-YEAR FINANCIAL PLAN**

Financial Planning is critical for SAWS to accomplish its mission. In order to adequately plan for water sources and appropriate infrastructure, financial models have been developed to analyze the impacts of various growth and replacement scenarios on the company's financial position.

The multi-year financial plan serves as a foundation supporting SAWS' strategic and financial objectives. It provides long-term forecasts of revenues and expenditures for both operating and capital investment activities.

The overriding goal of financial planning, analysis, and strategy development is to increase our financial position and resources in order to meet the short term and long term operational and strategic objectives of SAWS, while providing the highest quality water and wastewater services at the lowest cost possible to our customers. A crucial component of the San Antonio Water System's financial management strategy is the Multi-Year Financial Plan (MYFP). The development of the MYFP incorporates a comprehensive 20-year financial model that provides management with timely information, analysis, and strategy on the planned uses of the financial, operational, and capital resources of the system.

A critical benefit of the MYFP is the ability of SAWS to perform scenario, simulation, and constraint analysis and modeling on the projected resources of the system to include financial forecasts of revenues, operations and maintenance expense, capital expenditures, capital financing including cash and debt financing, and rate requirements. Key financial statistics are reviewed during the budget process and incorporated into the MYFP for analysis. These financial statistics include: debt coverage ratios on all debt; percentage of capital financed with cash; and cash balances.

The fundamental structure of the MYFP is the calculation of the flow of funds and rate adjustment requirements based on the enabling ordinance of SAWS, Ordinance 75686 adopted in April 30, 1992. This ordinance outlines important financial requirements and calculations that SAWS uses in the MYFP to calculate rates and charges, flow of funds, pledged revenues toward debt service and rate requirements, minimum debt coverage ratios, and fund requirements. The MYFP incorporate forecasts and requirements by each core business of SAWS: Water Supply; Water Delivery; Wastewater; and Chilled Water and Steam.

The annual financial planning process begins with updating the financial plan. As a part of this process, Financial Planning Division staff review SAWS' financial activity, levels of service provided, customer growth and consumption patterns, weather trends and financial market trends. In addition to review and analysis of the various trends, the following are also evaluated:

- Available funding
- Financial risk
- Regulatory requirements
- Level of services that can be sustained
- Level at which capital investment can be made
- Future commitments and resource demands
- Possible variables that could cause a change in the level of revenue

In developing the financial plan, concerns of all stakeholders are considered. Various scenarios and potential risks are evaluated in reaching the optimum balance of limited resources with organizational needs and stakeholder concerns. Multiple scenarios are researched and exhaustive iterations are performed to develop an array of sound financial solutions.

Financial Planning staff and Executive Management review the resulting MYFP to ensure that forecasted revenues are sufficient to meet projected financial needs. In developing the MYFP, if it becomes evident that forecasted revenues are not sufficient to address operations, maintenance, infrastructure and water supply needs, then the Financial Planning staff evaluates rate scenarios to calculate the optimum rate adjustment that will balance affordable and competitive rates with the need to continue providing necessary services.

## **ANNUAL BUDGET PROCESS**

#### **OPERATION AND MAINTENANCE BUDGET PROCESS**

The 2013 budget process began with identifying the following budget goals:

- Enable continued development of alternative water supplies
- Improve/maintain existing infrastructure
- Ensure adequate funding for critical initiatives
- Attract and retain high performance employees
- Maintain affordability of rates while ensuring long-term financial stability
- Continue to improve SAWS' customer service

The budget development process involved the following phases:

- Operation and Maintenance (O&M) departmental budget targets were developed using 2012 budgets as a baseline and adjusted for known changes:
  - Current workforce
  - Employee benefits costs
  - Utility and fuel rates
- Budget objectives, general guidelines, and timelines were communicated to management at the June 2012 Leadership Team meeting
- Vice presidents/department directors reviewed current programs, activities and current levels of service provided to their customers. Additionally, they evaluated and prioritized future departmental needs.
- The executive management team (EMT) conducted a comprehensive review of O&M, Capital Outlay and CIP budget submittals. During this review, all requests for additional funding were prioritized and were approved or denied based on this prioritization. This review by Executive Management further ensured that departmental budgets were aligned with corporate goals and objectives.
- Financial Planning staff revised the MYFP to incorporate the final Operating and Maintenance budget and Capital Improvement Program budget.
- Several review sessions were held with the City of San Antonio Public Utilities office to discuss the budget inputs and assumptions.

#### **CAPITAL IMPROVEMENT BUDGET PROCESS**

The annual capital improvement program (CIP) budget process occurs concurrently with the O&M budget process.

### **CIP Process Objective**

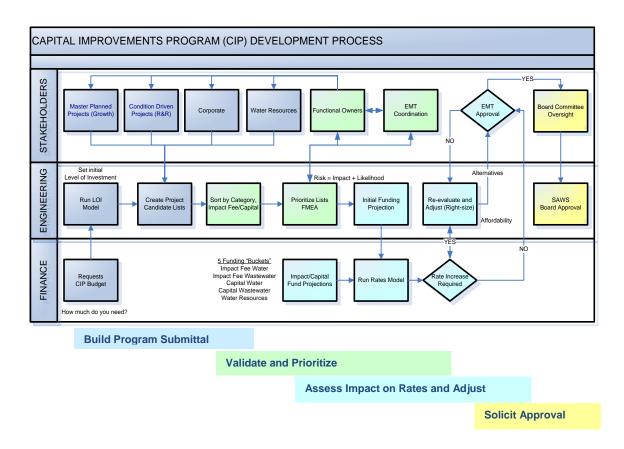
The CIP planning process objective is to deliver a sustainable Capital Improvements Program that supports the corporate vision of providing plentiful, quality, affordable water services. Delivering a sustainable capital improvement program ensures that the use of resources and the environment today does not damage prospects for future generations.

### CIP Development Goals

The program development goals are aligned with the performance measures in SAWS' corporate vision.

- Water Supply To maintain the infrastructure necessary to assure plentiful delivery of clear, pure water at the service connection.
- Water Services To sustain an infrastructure capable of assuring quality water and wastewater services
- Water Quality and Environmental Stewardship To sustain an infrastructure capable of ensuring water quality and the protection and preservation of our natural resources
- Affordability Avoid rate escalation by managing the risks to "right-size" capital projects and programs

The following flowchart depicts a cross functional program development process that involves all stakeholders, from operators and maintainers, to the executive management team.



There are four distinct phases to this process, from left to right:

- 1) Build program submittal Create the project candidate list with recommended risk ratings.
- 2) Validate and prioritize Using the Failure Modes and Effects Analysis (FMEA) methodology, process owners, managers, directors and executive management validate project risk ratings and prioritize accordingly.
- 3) Impact assessment and mitigation Financial analysis is done to assess the program impact on rates, and the program is adjusted for executive management concurrence.
- 4) Review and Approval Upon executive management concurrence, the program is presented to the Board of Trustees for review and approval.

### **EXECUTIVE MANAGEMENT TEAM REVIEW**

The Executive Management Team (EMT) then reviewed and prioritized all known requirements for the budget year to ensure the highest priority requirements were addressed in a timely and fiscally responsible manner.

The EMT conducted a comprehensive review of O&M, Capital Outlay and CIP budget submittals. During this review, all requests for additional funding were evaluated in relation to priorities identified by the Board of Trustees and Executive Management

This review by Executive Management further ensured that departmental budgets were aligned with corporate goals and objectives.

# **2013 BUDGET TIMELINE**

January - March 2012	Update the Multi-Year Financial Plan (MYFP)				
February - May 2012	Update Lawson Budgeting and Planning (LBP) software application				
	Review budget and rates plan with key stakeholders (CIP, IS, Fleet, Legal, Training, etc)				
March 2012	Review and update CIP needs				
	Develop communication plan for customers and elected officials				
April 2012	Review budget assumptions with CFO/CEO				
May 2012	Prepare budget instructions and develop budget targets				
	Budget kickoff at Leadership Team Meeting				
	Budget Process Training/ Briefing				
	Input due for budget sub-processes				
	Computer hardware and software needs submitted to Information Systems Dept				
	Vehicle needs submitted to Fleet Dept				
June 2012	Legal needs submitted to the Legal Dept (Jun 8)				
	Departmental training plans submitted to Corporate Training Dept (Jun 12)				
	Public relations needs sent to Public Affairs Dept				
	Laboratory analytical requests sent to Lab				
	O&M budget submission due to Financial Planning Dept				
	CIP Budget submission due to Financial Planning Dept				
	Operating budget review by the CFO and VP's				
July - August 2012	CIP budget review by the CFO and VP's				
	Budget meeting with the CEO and VPs(EMT) to finalize the 2013 budget				
August 2012	Final budget numbers compiled by Financial Planning Dept				
	SAWS Board Meeting - 2013 Budget Presentation				
September 2012	SAWS Policy and Planning Committee meeting - discuss 2013 Budget				
	Brief individual Board Members on 2013 budget and proposed rate adjustment				
	Distribute 2013 Proposed Budget document to Board Members				
	Meetings with Individual City Council Members to discuss 2013 budget and proposed rate adjustment				
October 2012	SAWS Board Meeting - briefing and deliberation regarding 2013 budget update				
	Begin public outreach regarding proposed 2013 Water/WW rate adjustment				
	Begin official customer notification process for proposed 2013 Water/WW rate adjustment				
November 2012 -	Public outreach meetings throughout city				
January 2013					
December 2012	City Council "B" session - Briefing on SAWS 2013 proposed rate adjustment				
December 4, 2012	SAWS Board Meeting - Approval of original 2013 Budget				
January 22, 2013	SAWS Policy and Planning Committee meeting - Approval of 2013 water/sewer rate adjustment				
February 7, 2013	City Council approval of water/sewer rate adjustment				
February 8, 2013	SAWS Board Meeting - Approval of the Amended 2013 Budget				
March 1,2013	Begin calculation of consumption under the new rates				
April 1, 2013	Begin billing new rates				

## **BUDGET AMENDMENT PROCESS**

City of San Antonio Ordinance No, 75686 mandates budgeting in accordance with prescribed funds flow requirements. The budget is designed to present a comprehensive projection of SAWS' operation from January 1, 2013 through December 31, 2013.

This document incorporates amendments to the original 2013 budget which was adopted by the SAWS Board on December 4, 2012. Specifically, the amended budget reflects additional revenues from an 8.4% adjustment in water and sewer rates adopted by the SAWS Board or Trustees and the San Antonio city council subsequent to the adoption of the original budget.

City Ordinance no. 75686 further requires that the SAWS Board of Trustees adopt a budget prior to the start of a new fiscal year. Ordinance No. 76686 also states that all rate adjustments require the approval of the City Council in addition to the approval of the Board of Trustees. Since the City Council had expressed its intent to take action on proposed 2013 rate adjustments only after the beginning of 2013, the Board of Trustees adopted the original 2013 budget in December 2012 which did not reflect any rate adjustments.

The City Council adopted an 8.4% rate adjustment in water and sewer rates on February 7, 2013, and the SAWS Board subsequently adopted the amended budget for 2013 on February 8, 2013.

This page intentionally left blank



This page intentionally left blank

## LONG RANGE FINANCIAL PLAN

Each year, the San Antonio Water System develops a 20-year MYFP as a critical tool to evaluate the operational and capital needs of the system, and to identify and appropriate the financial resources necessary to fund those needs. The MYFP includes annual forecasts for sources and uses of funds, revenue adjustments, and operations and capital funding in accordance with City Ordinance 75686, which established the founding of the San Antonio Water System.

The MYFP is organized into three distinct planning horizons in order to facilitate management of the system: Short Term, Medium Term, and Long Term. All three planning horizons play an important role in implementing the strategic plan and priorities of the system.

The Short Term planning horizon is the basis for implementing, through the formalized budget, short term goals and objectives in support of the strategic plan.

The Medium Term planning horizon is a five year forecast that sets the course of financial, operational, and capital resource allocation to fund the strategic priorities of the system. Major strategic priorities include, but are not limited to, water supply, system expansion, environmental sustainability, system reliability and service consistency, innovation and technology, financial strength, and human resource development. All priorities are planned through operational, capital, and financial resource assessment and allocation, with a projection of revenues and any required revenue adjustments to fund the strategic priorities.

The Long Term planning horizon focuses on the planning horizon after five years, and depending on the program, can be planned for as long as sixty years. Major strategic policy guidelines are emphasized such as long term water supply needs and infrastructure replacement goals.

### **MEDIUM TERM FIVE YEAR FORECAST**

For the Medium Term sources and uses of funds, 2013 – 2017, one of the primary drivers in uses of funds is debt service. The capital improvement program is primarily funded with debt, thus the principal and interest payment on the debt are a requirement for funding from the current revenue stream.

\$ in Millions	2012 Adopted	2013 Budget	2014 Forecast	2015 Forecast	2016 Forecast	2017 Forecast
Sources of Funds	Pro-	g. :				
Revenue, incl. prior adjustments	\$421.6	\$436.1	470.5	535.2	586.5	626.4
Rate Adjustment, incremental	0.0	22.6	58.2	44.1	31.3	39.3
Nonoperating Revenues	5.0	5.0	5.9	6.3	7.2	8.6
Draw on Equity	0.3	1.4	1.4	1.4	1.4	1.4
Capital Recovery Fees	22.0	36.0	36.0	36.0	36.0	36.0
<b>Total Sources of Funds</b>	\$448.9	\$501.0	\$572.0	\$623.1	\$662.4	\$711.7
Uses of Funds						
Operations and Maintenance	219.0	243.9	273.5	282.1	292.0	307.7
Debt Service & Expenses	156.1	164.1	187.5	212.4	230.2	248.3
Transfer to City of San Antonio	11.0	11.7	13.6	15.0	16.0	17.4
Available for R&R Restricted	22.1	36.1	36.2	36.2	36.3	36.5
Available for R&R Unrestricted	40.7	45.2	61.2	77.4	87.9	101.8
Total Uses of Funds	\$448.9	\$501.0	\$572.0	\$623.1	\$662.4	\$711.7

The growth in debt service is a reflection of the allocation of capital resources toward major strategic priorities of infrastructure replacement, system growth, and sustainability. The five year 2013 – 2017 capital improvement

program is projected at \$1.8 billion. A significant priority is wastewater capital replacement projects related to the wastewater Sewer Management Program.

CIP (millions)	2013	2014	2015	2016	2017	Total
Water Supply	\$ 118.9	\$ 142.8	\$ 116.5	\$ 51.9	\$ 60.1	\$ 490.2
Water Delivery	65.2	66.3	80.4	60.2	90.5	362.6
Wastewater	159.9	214.2	225.8	190.7	182.0	972.6
Chilled Water & Steam	6.2	2.9	0.5	2.3	6.6	18.5
Total	\$350.2	\$426.2	\$423.2	\$305.1	\$339.2	\$1,843.9

Projected funding for the five year capital improvement program is from renewal & replacement, impact fees, investment income, and bond funds. During the five year forecast, the percentage of the capital improvement cash funding is projected to be less than the target of 35% due to a higher growth in the program level than the projected growth in renewal and replacement cash generated from revenues.

Capital Improvement Program (CIP)					
	2013	2014	2015	2016	2017
CIP Budget	\$350.2	\$426.3	\$423.3	\$305.1	\$339.2

Capital Improvement Program Funding					
	2013	2014	2015	2016	2017
Revenue/Renewal & Replacement	8.1%	8.0%	12.8%	22.4%	23.0%
Impact Fees	4.1%	5.2%	5.2%	7.2%	6.5%
Investment Income	0.0%	0.0%	0.0%	0.1%	0.1%
Bonds/Commercial Paper	87.8%	86.8%	81.9%	70.3%	70.4%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Cash Funding	42.8	56.2	76.4	90.5	100.3
Debt Funding	307.4	370.1	346.9	214.6	238.9

Increases in operations and maintenance expenses through 2017 are driven by wastewater Sanitary Sewer Overflow Reduction Program operations costs and the operational implementation of new water supply programs. Water supply operations cost increases in the five year planning horizon include the anticipated full year start-up of the Regional Carrizo project in 2014, Brackish Water Desalination project in 2017, and the integration of the new supplies into the system.

Additional operations and maintenance drivers are general inflationary cost increases of the system and funding of salary and benefit costs to include increased OPEB annual contributions of \$2M per year beginning in 2014 until full funding of the annual required contribution is met.

The sources of funds mostly include revenues from metered customers, with anticipated adjustments to the metered revenues required to fund the projected operational and capital needs of the system. A discussion of the drivers of the revenues, growth in customers and changes in use per customer, are discussed in the revenue section of this book.

The 2013 – 2017 sources and uses of funds forecast demonstrates the need for additional revenues to support the planned operations and capital programs of the system. The 2013 budget requires an adjustment to rates sufficient to generate \$22.6 million in additional revenues in 2013. The percentage increase in Water Supply fee

and wastewater rates to support the 2013 proposed operating and capital budget is 2.5% and 16.5% respectfully. The combined increase is 8.4% for the average SAWS water and wastewater customer, assuming an average customer uses 7,788 gallons of water and discharges 6,178 gallons of wastewater per month. The pass-through rates, Edward Aquifer Authority Fee (EAA Fee) and TCEQ Fee decreased, thus lowering the customer impact to a rate adjustment of 7.0% on the bill for the average customer.

In the 2013 – 2017 period, additional revenue adjustments reaches its high in 2014 of \$58.2 million. The 2014 cost increase is mostly due to operational cost ramp up of the wastewater Sewer Management Program. Below is a summary of the projected metered rate adjustments by core business needed to generate the additional revenues to support the uses of funds.

% Rate Adjustment Needed	2013	2014	2015	2016	2017
Water Supply Fee	2.5%	26.2%	11.7%	5.3%	18.1%
Water Delivery	0.0%	4.7%	6.4%	4.7%	2.8%
Wastewater	16.5%	14.1%	9.4%	6.9%	3.2%
% Increase	8.4%	13.5%	9.0%	6.0%	6.2%
Pass-through Fees	-11.6%	0.0%	0.0%	0.0%	0.0%
% Total Increase	7.0%	12.7%	8.6%	<b>5.7%</b>	5.9%

This page intentionally left blank



This page intentionally left blank

## **ANNUAL OPERATING BUDGET**

## **FINANCIAL PLAN SUMMARY**

The San Antonio Water System comprises four core businesses, which are essentially four separate utilities. Each core business generates revenues that are designed to recover their respective cost of service. The core businesses are Water Supply, Water Delivery, Wastewater, and Chilled Water and Steam.

The following table summarizes the consolidated Sources and Uses of Funds for all core businesses.

	2010	2011	2012	2012	2013	2013
	Actual	Actual	Actual	Amended	Adopted	Amended
(dollars in thousands)				Budget	Budget	Budget
SOURCES OF FUNDS						
Operating Revenues						
Sewer Service Charges	\$ 127,767	\$ 145,676	\$ 163,782	\$ 161,183	\$ 161,688	\$ 184,43
Metered Water Sales	116,036	129,985	126,246	125,517	127,956	128,39
Water Supply Fee	82,987	97,582	91,929	91,567	90,441	92,10
EAA Fee	9,854	8,255	19,944	18,329	19,097	19,09
Chilled Water & Steam Sales	12,223	11,631	12,378	11,816	11,816	11,81
Conservation	7,275	10,384	9,939	9,830	9,314	9,41
Industrial Waste Surcharge	4,861	4,817	5,139	4,700	4,771	4,77
Stormwater	3,746	4,161	4,567	4,561	4,561	4,56
Recycled Water System	4,003	5,071	5,038	4,585	4,585	4,58
Recovery of TCEQ Fees	1,245	1,642	1,475	1,680	1,700	1,70
Reduction for Affordability Program	(1,217)	(1,335)		(1,600)	(2,090)	
Total Operating Revenues	368,780	417,869	438,529	432,168	433,839	458,68
Nonoperating Revenues	1,969	2,210	6,150	1,000	4,956	4,95
Build America Bonds Subsidy	1,772	3,970	-,	4,014	,	,
Total Revenues	372,521	424,049	444,679	437,182	438,795	463,63
Capital Recovery Fees	25,038	23,263	36,761	22,000	22,000	36,00
Draw on Equity	1,751	-	6,901	300	-	1,40
Total Sources of Funds	399,310	447,312	488,341	459,482	460,795	501,03
USES OF FUNDS						
Operations and Maintenance	195,916	193,254	233,919	230,336	228,552	243,93
Operating Reserve	(694)	1,272	3,163	1,593	1,588	5,66
Revenue Bond Debt Requirement	128,974	135,025	138,606	152,085	154,898	160,68
Other Debt Service Requirement	3,596	3,206	2,935	3,997	3,453	3,45
Transfer to the City of San Antonio	9,565	10,926	11,160	10,994	11,018	11,68
Balance Available for:	5,500	.5,520	,100	.5,501	,510	. 1,00
Renewal and Replacement Fund (Restricted)	25.527	23,412	36,761	22,100	22,000	36,00
Renewal and Replacement Fund (Unrestricted)	- , -	80,217			39,286	39,61
Total Uses of Funds	\$ 399,310					

# FINANCIAL PLAN SUMMARY BY CORE BUSINESS

The following schedule reflects the 2013 consolidating summary of Sources and Uses of Funds by core business:

	Water	Water	Wastewater	Chilled Water	Total
	Supply	Delivery		and Steam	
(dollars in thousands)					
SOURCES OF FUNDS					
Operating Revenues					
Sewer Service Charges	\$ -	\$ -	\$ 184,433	\$ -	\$ 184,433
Metered Water Sales		128,392			128,392
Water Supply Fee	92,107				92,107
EAA Fee	19,097				19,097
Chilled Water & Steam Sales				11,816	11,816
Conservation	9,419				9,419
Industrial Waste Surcharge			4,771		4,771
Stormwater	4,561				4,561
Recycled Water System	4,585				4,585
Recovery of TCEQ Fees		1,208	492		1,700
Reduction for Affordability Program	(602)	(602)	(997)		(2,201
Intercompany Reallocations	5,630	(5,630)			-
Total Operating Revenues	134,797	123,368	188,699	11,816	458,680
Nonoperating Revenues	281	187	462	20	950
Build America Bonds Subsidy	1,050	1,228	1,729	-	4,007
Total Revenues	136,128	124,783	190,890	11,836	463,637
Capital Recovery Fees	9,818	11,455	14,727	-	36,000
Draw on Equity	1,400	-	-	-	1,400
Total Sources of Funds	\$ 147,346	\$ 136,238	\$ 205,617	\$ 11,836	\$ 501,037
LIGEO OF FUNDO					
USES OF FUNDS Operations and Maintenance	\$ 79.960	\$ 60.309	\$ 94.272	\$ 9.396	\$ 243,937
•	.,			,	.,
Operating Reserve	1,288	(413)	· '	34	5,664
Revenue Bond Debt Requirement	44,753 487	43,641 974	69,651	2,638	160,683
Other Debt Service Requirement			1,981	11	3,453
Transfer to the City of San Antonio	2,927	3,336	5,106	320	11,689
Balance Available for:					
Renewal and Replacement Fund (Restricted)	9,818	11,455	14,727		36,000
Renewal and Replacement Fund (Unrestricted)		16,936		(563)	39,611
Total Uses of Funds	\$ 147,346	\$ 136,238	\$ 205,617	\$ 11,836	\$ 501,03

#### **WATER SUPPLY CORE BUSINESS**

The Water Supply core business is responsible for all functions related to the development and provision of additional water resources, including recycled water. In order to support the cost associated with these initiatives, SAWS implemented the Water Supply Fee, which is a separate funding mechanism for water supply development and water quality protection. The Water Supply core business also strives to extend SAWS' existing water supplies by promoting water conservation practices.

	2010	2011	2012	2012	2013	2013
	Actual	Actual	Actual	Amended	Adopted	Amended
(dollars in thousands)				Budget	Budget	Budget
SOURCES OF FUNDS						
Operating Revenues						
Water Supply Fee	82,987	97,582	91,929	91,567	90,441	92,107
Conservation	7,275	10,384	9,939	9,830	9,314	9,419
EAA Fee	9,854	8,255	19,944	18,329	19,097	19,097
Recycled Water System	4,003	5,071	5,038	4,585	4,585	4,585
Stormwater	3,746	4,161	4,567	4,561	4,561	4,561
Reduction for Affordability Program	(293)	(327)	(343)	(437)	(547)	(602
Intercompany Reallocations	9,830	5,630	5,630	5,630	5,630	5,630
Total Operating Revenues	117,402	130,756	136,704	134,065	133,081	134,79
Nonoperating Revenues	520	570	2,072	296	281	28
Build America Bonds Subsidy	684	1,045		1,051	1,050	1,050
Total Revenues	118,606	132,371	138,776	135,412	134,412	136,12
Capital Recovery Fees	6,686	6,384	9,645	6,000	6,000	9,81
Draw on Equity	1,751	-	1,660	100	-	1,40
Total Sources of Funds	\$ 127,043	\$ 138,755	\$ 150,081	\$ 141,512	\$ 140,412	\$ 147,346
JSES OF FUNDS						
Operations and Maintenance	58.697	37,531	78,564	81,978	79,680	79,960
Operating Reserve	(690)		2,457	466	1,692	1,28
Revenue Bond Debt Requirement	36,392	38,614	39,790	40,658	42,968	44,75
Other Debt Service Requirement	583	654	419	814	487	48
Transfer to the City of San Antonio	2,852	3,208	3,164	2,928	2,881	2,92
Balance Available for:						ŕ
Renewal and Replacement Fund (Restricted)	6,743	6,376	9,642	6,030	6,000	9,81
Renewal and Replacement Fund (Unrestricted)	22,466	52,278	16,045	8,638	6,704	8,11
Total Uses of Funds	\$ 127,043	\$ 138,755	\$ 150,081	\$ 141,512	\$ 140,412	\$ 147,34

## **WATER DELIVERY CORE BUSINESS**

The Water Delivery core business is responsible for the actual distribution of water from the source to the customers' premises. SAWS delivers potable water service to residential, commercial, multifamily, industrial and wholesale customers. Another primary function of this core business is the maintenance of the water system infrastructure.

	2010 Actual	2011 Actual	2012 Actual	2012 Amended	2013 Adopted	2013 Amended
(dollars in thousands)	Actual	Actual	Actual	Budget	Budget	Budget
SOURCES OF FUNDS						
Operating Revenues						
Metered Water Sales	116,036	129,985	126,246	125,517	127,956	128,392
Recovery of TCEQ Fees	964	1,178	1,064	1,194	1,208	1,208
Reduction for Affordability Program	(306)	(345)	(602)	(438)	(546)	(602
Intercompany Reallocations	(9,830)	(5,630)	(5,630)	(5,630)	(5,630)	(5,630
Total Operating Revenues	106,864	125,188	121,078	120,643	122,988	123,368
Nonoperating Revenues	311	407	1,538	197	187	187
Build America Bonds Subsidy	457	1,214	-	1,230	1,227	1,228
Total Revenues	107,632	126,809	122,616	122,070	124,402	124,783
Capital Recovery Fees	8,847	8,688	13,464	7,000	7,000	11,455
Draw on Equity	-	-	2,094	200	-	-
Total Sources of Funds	\$ 116,479	\$ 135,497	\$ 138,174	\$ 129,270	\$ 131,402	\$ 136,238
USES OF FUNDS						
Operations and Maintenance	57,888	69,249	62,702	62,150	60,023	60,309
Operating Reserve	101	521	76	504	(461)	(413
Revenue Bond Debt Requirement	33,735	35,699	37,541	42,181	43,642	43,641
Other Debt Service Requirement	1,471	947	785	955	974	974
Transfer to the City of San Antonio	2,789	3,316	3,099	3,262	3,325	3,336
Balance Available for:						
Renewal and Replacement Fund (Restricted)	8,963	8,756	13,472	7,020	7,000	11,455
Renewal and Replacement Fund (Unrestricted)	11,532	17,009	20,499	13,198	16,899	16,936
Total Uses of Funds	\$ 116,479	\$ 135,497	\$ 138,174	\$ 129,270	\$ 131,402	\$ 136,238

## **WASTEWATER CORE BUSINESS**

The Wastewater core business's primary function is the collection and treatment of wastewater. The functions also extend to monitoring wastewater discharged by large industries into the sewer collection system.

	2010 Actual	2011 Actual	2012 Actual	2012 Amended	2013 Adopted	2013 Amended
(dollars in thousands)	Actual	Actual	Actual	Budget	Budget	Budget
SOURCES OF FUNDS						
Operating Revenues						
Sewer Service Charges	127,767	145,676	163,782	161,183	161,688	184,433
Industrial Waste Surcharge	4,861	4,817	5,139	4,700	4,771	4,771
Recovery of TCEQ Fees	281	464	411	486	492	492
Reduction for Affordability Program	(618)	(662)	(963)	(725)	(997)	(997)
Total Operating Revenues	132,291	150,295	168,369	165,644	165,954	188,699
Nonoperating Revenues	959	1,035	2,390	486	462	462
Build America Bonds Subsidy	631	1,711	-	1,733	1,729	1,729
Total Revenues	133,881	153,041	170,759	167,863	168,145	190,890
Capital Recovery Fees	9,506	8,190	13,651	9,000	9,000	14,727
Draw on Equity	-	-	2,970	-	-	-
Total Sources of Funds	\$ 143,387	\$ 161,231	\$ 187,380	\$ 176,863	\$ 177,145	\$ 205,617
USES OF FUNDS						
Operations and Maintenance	69,721	76,685	82,984	77,010	79,516	94,272
Operating Reserve	(160)	646	673	578	334	4,755
Revenue Bond Debt Requirement	57,114	59,000	59,240	67,166	65,650	69,651
Other Debt Service Requirement	1,487	1,539	1,710	2,127	1,981	1,981
Transfer to the City of San Antonio	3,589	4,083	4,559	4,484	4,492	5,106
Balance Available for:						
Renewal and Replacement Fund (Restricted)	9,821	8,280	13,811	9,049	9,000	14,727
Renewal and Replacement Fund (Unrestricted)	1,815	10,998	24,403	16,449	16,172	15,125
Total Uses of Funds	\$ 143,387	\$ 161,231	\$ 187,380	\$ 176,863	\$ 177,145	\$ 205,617

#### **CHILLED WATER AND STEAM**

The Chilled Water and Steam core business provides heating and cooling to customers of the System, including various downtown hotels, City of San Antonio convention facilities, Hemisfair Plaza, the Alamodome, and Port Authority of San Antonio .

	2010	2011	2012	2012	2013	2013
(dollars in thousands)	Actual	Actual	Actual	Amended Budget	Adopted Budget	Amended Budget
(donars in triousarius)				Buager	Buager	Buager
SOURCES OF FUNDS						
Operating Revenues						
Chilled Water and Steam Sales	12,223	11,631	12,378	11,816	11,816	11,816
Total Operating Revenues	12,223	11,631	12,378	11,816	11,816	11,816
Nonoperating Revenues	180	198	150	21	20	20
Build America Bonds Subsidy	-	-	-	-	-	-
Total Revenues	12,403	11,829	12,528	11,837	11,836	11,836
Capital Recovery Fees	-	-	-	-	-	-
Draw on Equity	-	-	177	-	-	-
Total Sources of Funds	\$ 12,403	\$ 11,829	\$ 12,705	\$ 11,837	\$ 11,836	\$ 11,836
USES OF FUNDS						
Operations and Maintenance	9,611	9,789	9,669	9,198	9,333	9,396
Operating Reserve	55	11	(43)	46	23	34
Revenue Bond Debt Requirement	1,733	1,712	2,035	2,080	2,638	2,638
Other Debt Service Requirement	55	65	21	101	11	11
Transfer to the City of San Antonio	335	319	338	320	320	320
Balance Available for:						
Renewal and Replacement Fund (Restricted)	-	-	-	2	-	-
Renewal and Replacement Fund (Unrestricted)	614	(67)	685	90	(489)	(563)
Total Uses of Funds	\$ 12,403	\$ 11,829	\$ 12,705	\$ 11,837	\$ 11,836	\$ 11,836

## **CHANGE IN EQUITY (FUND BALANCE)**

Change in equity reflects the projected result of operations and capital investment. Equity, or fund balance, is the difference between the assets and liabilities as reflected on the balance sheet and is a key indicator of financial condition. It is the measure of financial resources available for future use after payment of all obligations.

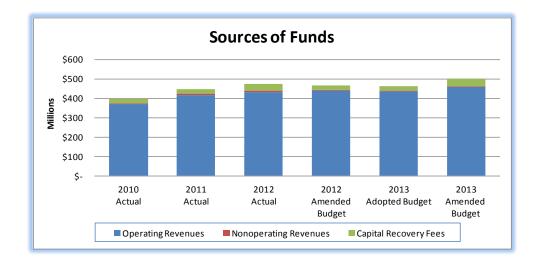
The following schedule reflects the projected change in equity for 2013.

	System Fund	Debt Service Fund	Debt Reserve Fund	Renewal and Replacement	Project Fund	Combined Total
(\$ in thousands)	runu	runu	runu	Fund	runu	Iotai
Equity, December 31, 2012	\$1,626,758	\$34,254	\$58,681	\$200,148	\$38,100	\$1,957,941
Change in Equity - 2013	111,689	(98,726)	-	67,047	95	80,105
Transfers in (out)	(160,683)	160,683	3,674	(3,674)	-	-
Proceeds from Bond Issue	(312,007)	-	-	-	312,007	-
Bond Issue Costs	4,675	-	-	-	(4,675)	-
Retirement of Bonds	56,538	(56,538)	-	-	-	-
Commercial paper retired	2,970	(2,970)	-	-	-	-
Expenditures for plant additions	350,152	-	-	(42,722)	(307,430)	-
Equity, December 31, 2013	\$1,680,092	\$36,703	\$62,355	\$220,799	\$38,097	\$2,038,046

## **Sources of Funds**

The following table summarizes the 2013 budgeted Sources of Funds for all core businesses.

		2010		2011	2012		2012		2013		2013	
		Actual		Actual	Actual	Α	mended		Adopted	Amended		
(dollars in thousands)	_		<u> </u>				Budget	_	Budget	ı	Budget	
SOURCES OF FUNDS												
Operating Revenues												
Sewer Service Charges	\$	127,767	\$	145,676	\$ 163,782	\$	161,183	\$	161,688	\$	184,433	
Metered Water Sales		116,036		129,985	126,246		125,517		127,956		128,392	
Water Supply Fee		82,987		97,582	91,929		91,567		90,441		92,107	
EAA Fee		9,854		8,255	19,944		18,329		19,097		19,097	
Chilled Water & Steam Sales		12,223		11,631	12,378		11,816		11,816		11,816	
Conservation		7,275		10,384	9,939		9,830		9,314		9,418	
Industrial Waste Surcharge		4,861		4,817	5,139		4,700		4,771		4,771	
Stormwater		3,746		4,161	4,567		4,561		4,561		4,561	
Recycled Water System		4,003		5,071	5,038		4,585		4,585		4,585	
Recovery of TCEQ Fees		1,245		1,642	1,475		1,680		1,700		1,700	
Reduction for Affordability Program		(1,217)		(1,335)	(1,910)		(1,600)		(2,091)		(2,200	
Total Operating Revenues		368,780		417,869	438,527		432,168		433,838		458,680	
Nonoperating Revenues		1,969		2,210	6,151		1,000		4,957		4,957	
Build America Bonds Subsidy		1,772		3,970	-		4,014		-			
Total Revenues		372,521		424,049	444,678		437,182		438,795		463,637	
Capital Recovery Fees		25,038		23,263	36,761		22,000		22,000		36,000	
Draw on Equity		1,751		-	6,900		300		-		1,400	
Total Sources of Funds		399,310		447,312	488,339		459,482		460,795		501,037	



#### REVENUES

Sources of funds consist of operating revenues, non-operating revenues, Build America Bonds subsidy, and capital recovery fees. Operating revenues include revenues from water (potable and recycled), water supply, and wastewater services accounted for through metered billings. Additional revenues include Special Services fees designed to recover costs associated with providing services that typically benefit a particular customer or type of service. These services include various permit, sampling or laboratory fees, and account services.

#### WATER AND WASTEWATER CUSTOMER AND USAGE TRENDS

Approximately 92.4% of operating revenues consist of the Water Supply Fee, Metered Water Sales, EAA Fee and Sewer Service Charges, all of which are highly dependent upon customers' metered water usage. Fluctuations in metered water usage is primarily the result of changes in:

- the number of customers
- the average use per customer

In the budget process, customer and usage data, statistics and trends are tracked by each rate block to generate multiple revenue forecast projections, including:

- each rate class of SAWS (residential, general, wholesale and irrigation)
- each rate block
- inside and outside city limit customers

Due to this systematic and comprehensive approach to forecasting the metered revenues, SAWS has been able to identify developing shifts in usage patterns and underlying trends in the uses of the water resources of the System. These customer and usage forecasts are aggregated to develop a comprehensive forecast for water, irrigation and wastewater revenues of the system.

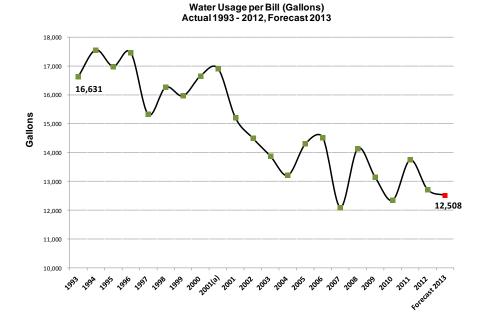
Over the last several years, the wastewater customer growth has exhibited slightly higher growth than that of the SAWS water service area. With this trend expected to continue, 2013 customer growth is forecasted at 1.6% with the following breakdown between water and wastewater:

- 1.4% for water customers
- 1.8% for wastewater customers

Average usage per customer is typically driven by weather, seasonal, cyclical, price elasticity, conservation, and drought restriction effects. Thus the modeling of the average usage per customer incorporates multivariate regression statistical forecasting to incorporate these variables.

As shown in the following Water Use per Bill chart, average water usage per customer exhibits:

- A significant, persistent downward trend: 1999 2010
- Usage peaks in dry or drought years: 2005-2006, 2008-2009, and 2011
- Lower usage in recent years of above average rain: 2004, 2007, 2010, and 2012
- Volatility around the trend since 2004 due to extreme weather variations
- Effects of conservation drought restrictions: 2008 dry without restrictions; 2009, 2011 with restrictions



With extreme weather fluctuations, from very rainy to dry drought conditions, and resulting drought restrictions expected to be factors in future water usage scenarios, usage profiles from 2007 and 2011 provide a proxy for the expected range of usage conditions in the future.

During 2007, rainfall fell for most of the year resulting in the lowest usage per bill from the historical sample horizon. As a result, 2007 provides a possible lower range of expected usage in the future. 2011 was extremely dry but also had drought restrictions for most of the year, unlike 2008 which was very dry without restrictions. Given the likelihood of drought restrictions during extremely dry periods, 2011 provides a possible upper range of expected usage in the future. Within this general usage range profile, planned conservation effects on usage can be incorporated into the forecast planning horizon.

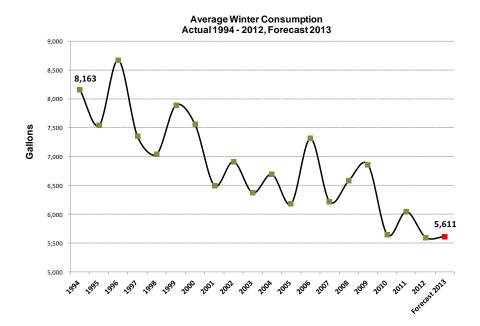
The 2013 use per customer forecast compared to the 2007 and 2011 range is an indication of the conservative nature and reduced revenue risk of the water revenue forecast. Details of the 2013 water usage forecast are as follows:

- Use per customer forecast of 12,508 gallons is at the 26th percentile of the 2007 and 2011 range
- Total adjusted water usage is forecasted at 54.4 billion gallons, slightly lower than 2012 billed gallons of 55.5 billion gallons

Metered wastewater volumetric revenues are based on contributed flow estimated through water usage. For the commercial class, water usage for irrigation (metered or assumed) is not subject to wastewater charges. For the residential class, the contributed flow is estimated through the average winter consumption (AWC), which is the average water usage for a 90 day period during three consecutive billing periods beginning after November 15 and ending on or about March 15 of each year.

The AWC, as shown in the following chart, has declined dramatically over the last decade as a result of indoor conservation efforts and public awareness about the winter averaging method and measurement period. Per review of the most recent AWC values one can see that:

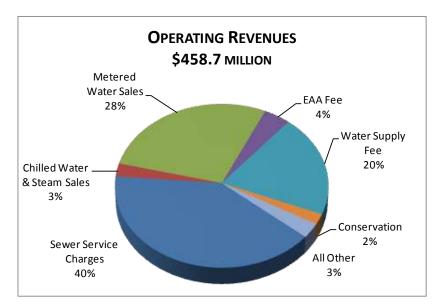
- 2010-2012 AWC levels were significantly lower than 2006-2009 values
- 2013 AWC budget of 5,611 gallons is just slightly higher than 5,596 gallons in 2012

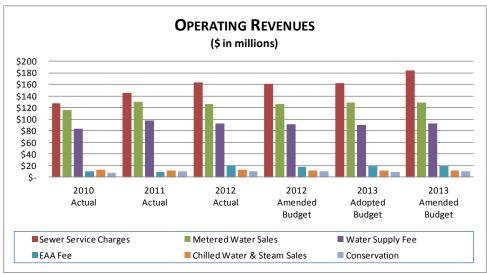


#### **OPERATING REVENUES**

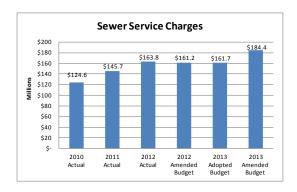
The 2013 revenue budget includes a rate adjustment of 7.0% on an average residential bill. Details of this proposed rate adjustment are as follows:

- 8.4% average residential bill increase due to Water Supply Fee and wastewater rate increases, effective for usage beginning March 1, 2013 (7,788 gallons water; 6,178 wastewater assumed)
- 2.5% Water Supply Fee and 16.5% wastewater rate adjustments
- 1.4% reduction in the average residential bill due to EAA Fee and TCEQ Fee rate reductions
- \$22.6M in additional metered Water Supply Fee and Wastewater revenues in 2013





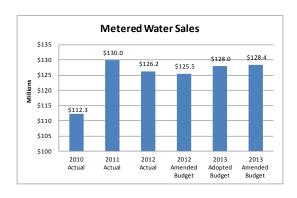
### Sewer Service Charges



Sewer service charges are fees for the collection and treatment of residential, commercial, and industrial sewage. As discussed previously, metered sewer revenues consist of residential revenues, which are assessed based upon a customer's average winter water consumption. For all other customers, actual monthly water usage, excluding any amount used for irrigation, is used to calculate contributed wastewater usage.

2013 wastewater revenues are forecast at \$184.4 million, excluding \$4.8 million of sewer surcharge revenues. Net metered wastewater revenues include a 16.5% rate adjustment forecast to generate \$21.2 million in additional wastewater revenue in 2013.

#### **Metered Water Sales**

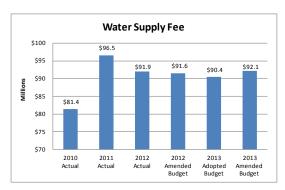


Water charges are designed to recover the costs associated with the production, transmission, and distribution of water to the customer. 2013 net metered water revenues are forecast at \$128.4 million with no rate adjustment assumed for water delivery fees.

The 2013 revenue forecast assumes that total water sales will increase slightly to 54.4 billion gallons from the 53.5 billion gallons forecasted for 2012. The assumed customer growth of 1.4% more than offsets the impact of the assumed reduction in use per bill.

From the metered water sales revenues, \$5.6 million is budgeted to be transferred to the Water Supply core business to account for a portion of the water delivery rate schedule that continues to fund those Water Supply programs implemented before the Water Supply Fee was developed.

### Water Supply Fee Revenues



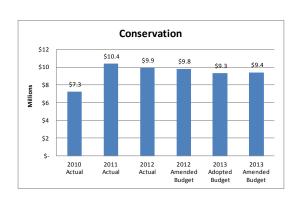
The Water Supply Fee was adopted in 2000 to support one of SAWS fundamental responsibilities: developing and procuring additional water supplies. In 2013, net metered water supply fee revenues are projected at \$92.1 million including a 2.5% Water Supply Fee rate adjustment forecast to generate \$1.4 million in additional revenue in 2013.

Consistent with Water Delivery, the revenue forecast is based on 54.4 billion gallons of billed water usage, with an additional \$5.6 million being transferred from the Water Delivery core business as previously discussed.

#### **Recycled Water Revenues**

Metered recycled water revenues are projected to account for \$4.6 million or 3.4% of Water Supply operating revenues. Recycled water sales and operations are considered to be a part of the Water Supply core business. Revenues of \$3.0 million from the CPS Energy contract contribute 65.0% of recycled water metered revenues.

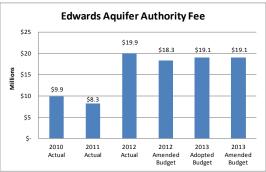
## **Conservation Revenues**



Conservation revenues are used to fund residential and commercial conservation programs. Revenues are derived from a portion of the residential revenues generated for monthly usage in excess of 17,205 gallons and irrigation rate usage over 17,205 gallons. Additionally a set portion of the monthly meter charge for non-residential customers is allocated for conservation.

For 2013, conservation revenues are budgeted at \$9.4 million or 7.0% of Water Supply operating revenues.

### **Edwards Aquifer Authority Fee**



The Edwards Aquifer Authority (EAA) is statutorily empowered to impose an annual permit fee on all parties permitted to pump water from the Edwards Aquifer. The annual permit fee charged to SAWS is based on the number of acre-feet per year that SAWS is allowed to pump from the Edwards Aquifer and is recovered by SAWS through the assessment of a pass-through volumetric charge to its customers; the EAA Fee.

The 2013 EAA Fee budget revenue is \$19.1 million, based on preliminary estimates for the permit fee to be charged by the Edwards Aquifer Authority (EAA) for the amount of acre feet held by SAWS and the price to be charged by the EAA. With the actual 2013 EAA permit fee received, the fee is charged on 252,102 acre feet at \$84 per acre foot, totaling \$21.2 million. For the EAA Fee to be collected from our water customers, EAA rebates received in 2012 of \$2.3 million and \$0.3 million in over recovery of EAA revenues in 2012 are subtracted from the EAA permit fee of \$21.2 million, resulting in \$18.6 million to be recovered in 2013 EAA Fee billings. Thus, the implementation of the 2013 EAA Fee is expected to recover \$18.6 million, slightly lower than the budget of \$19.1 million.

#### Stormwater Fee

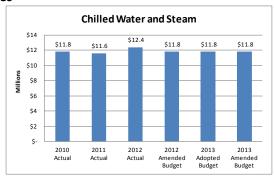
The San Antonio Water System bills stormwater charges and provides certain other services related to the City of San Antonio's Stormwater Program. The City provides a reimbursement to SAWS which substantially offsets the cost of providing those services. For 2013, \$4.6 million in stormwater expenses are budgeted to be recovered from revenues retained through the stormwater billings. 2013 stormwater costs are projected at \$5.1 million, comprised of \$4.9 million in operations and maintenance expenses and \$0.2 million in capital outlay expenses.

#### State-Imposed TCEQ Fee

The TCEQ Fee is a monthly pass-through fee charged by SAWS to its water and wastewater customers necessary to recover fees assessed to SAWS by the Texas Commission on Environmental Quality (TCEQ). The fee is expected to generate \$1.7 million in operating revenue in 2013.

The TCEQ Fee applies to all billed retail water and wastewater accounts of SAWS, excluding irrigation and recycled water only accounts. Additionally, the TCEQ Fee is structured so that SAWS is delegated the authority to administratively adjust such TCEQ Fee pass-through on an annual basis. For 2013, the water TCEQ Fee remains at \$0.17 per water customer per month, whereas the wastewater TCEQ Fee lowers from \$0.06 to \$0.05 per wastewater customer per month.

#### **Chilled Water and Steam Sales**



SAWS provides chilled water and steam for heating and cooling purposes primarily to commercial customers located in downtown San Antonio and the Port Authority of San Antonio. 2013 revenues are projected at \$11.8 million, or 2.6% of total operating revenues.

## **Affordability Program**

The San Antonio Water System provides a variety of assistance to low income customers through its Affordability Program. One type of assistance, the Affordability Discount, provides a sliding scale bill discount based on the income level of those certified under the affordability program. For 2013, \$2.2 million has been set aside for the discount, which is a \$0.6 million or 37.5% increase from the amount budgeted in 2012.

#### **NON-OPERATING REVENUES**

2013 non-operating revenues, budgeted at \$5.0 million, are comprised of \$1.0 million of interest earnings on investments and a \$4.0 million federal subsidy to be received on Build America Bonds. In total, non-operating revenues account for 1.0% of the total sources of funds for 2013.

For the 2013 budget, the average investment base is assumed to be \$475 million, while the interest earnings rate is estimated to be a 0.2% annual rate. The average investment yield continues to remain at approximately 0.2% with future expectations for the rate to remain low.

#### **DRAW ON EQUITY**

The 2013 Draw on Equity of \$1.4 million is based on projected annual payments from the Lower Colorado River Authority (LCRA). LCRA and SAWS settled a lawsuit in 2011 stipulating that LCRA pay \$1.4 million annually through 2019.

## **CAPITAL RECOVERY FEES**

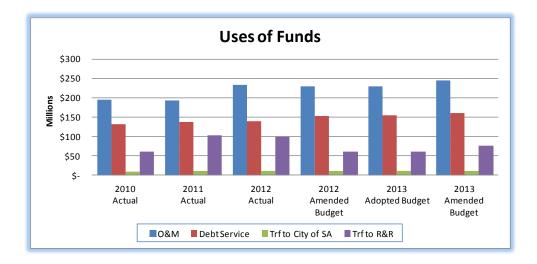
Capital recovery fees are codified in Chapter 395 of the Texas Local Government Code and provide for collection of fees to recover capital improvement costs necessary to serve new development. Through the city ordinances that formed SAWS, capital recovery fees are not considered to be included in Gross Revenues in the flow of funds. Instead, these fees are treated as capital contributions dedicated to fund eligible projects in the capital improvement program.

For 2013, capital recovery fees and grant revenues are projected at \$36.0 million, based solely from capital recovery fee revenue projections. The 2013 projection remains close to the 2012 capital recovery fee revenues of \$37 million and assumes no grant revenues. In total, capital recovery fees account for 7.2% of the total sources of funds for 2013.

## **USES OF FUNDS**

Uses of funds are summarized in the following table:

USES OF FUNDS						
(dollars in thousands)	2010 Actual	2011 Actual	2012 Actual	2012 Amended Budget	2013 Adopted Budget	2013 Amended Budget
(dental o m arousanas)				Daaget	Buaget	Buaget
USES OF FUNDS						
Operations and Maintenance	195,916	193,254	233,917	230,336	228,552	243,937
Operating Reserve	(694)	1,272	3,162	1,593	1,588	5,664
Revenue Bond Debt Requirement	128,974	135,025	138,606	152,085	154,898	160,683
Other Debt Service Requirement	3,596	3,206	2,934	3,997	3,452	3,452
Transfer to the City of San Antonio	9,565	10,926	11,161	10,994	11,017	11,688
Balance Available for:						
Renewal and Replacement Fund (Restricted)	25,527	23,412	36,761	22,100	22,000	36,000
Renewal and Replacement Fund (Unrestricted)	36,426	80,217	61,798	38,377	39,288	39,613
Total Uses of Funds	\$ 399,310	\$ 447,312	\$ 488,339	\$ 459,482	\$ 460,795	\$ 501,037

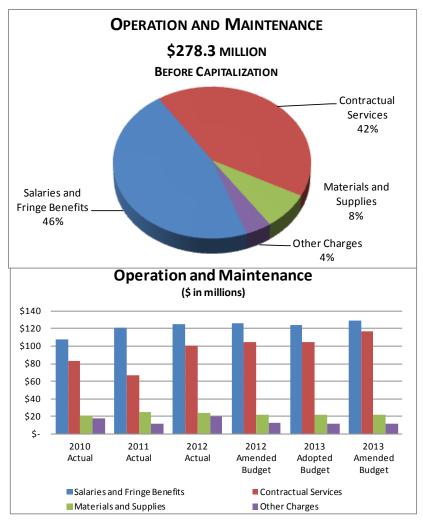


#### **OPERATION AND MAINTENANCE EXPENSE**

The cost to operate and maintain the System on a daily basis comprises the largest single requirement of SAWS' revenues. Approximately 50 cents of every dollar collected from customers goes to support ongoing operations and maintenance. The costs in the adopted budget are prudent and necessary for:

- Planning and development of water resources
- Production and delivery of quality drinking water
- Repair and maintenance of distribution mains and pumping facilities
- Collection and treatment of wastewater
- Implementation of new and expanded programs designed to further reduce sewer overflows
- Billing and collection of customer accounts
- Responding to customer inquiries
- Maintaining books and accounts of records
- Administrative and planning activities

SAWS operation and maintenance expenses are categorized into four major expenditure types: Salaries and Fringe Benefits, Contractual Services, Materials and Supplies, and Other Charges.



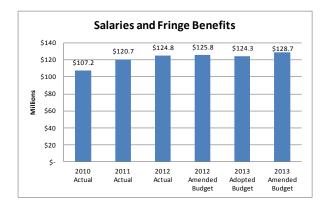
## **OPERATION AND MAINTENANCE BY EXPENSE CLASSIFICATION**

(\$ in thousands)	2010 Actual	2011 Actual	2012 Actual	2012 Amended Budget	2013 Adopted Budget	2013 Amended Budget
Salaries and Fringe Benefits						
511100 Salaries	79,363	79,872	80,769	81,152	80,335	82,734
511140 Overtime Pay	2,362	3,222	3,070	2,341	2,382	2,398
511150 On-Call Pay	387	333	405	323	340	340
511160 Employee Insurance	6,572	15,450	14,358	15,495	14,206	14,677
511162 Retirement	17,598	19,439	20,074	20,182	21,594	22,181
511164 Unused Sick Leave Bonus	28	29	33	75	75	35
511164 Unused Sick Leave Buyback	823	851	874	850	887	887
511166 Personal Leave Buyback	(193)	1,176	876	1,119	169	1,169
511170 Incentive Pay	288	319	287	248	296	296
511175 Other Post Employment Benefits	-	-	4,033	4,000	4,000	4,000
Salaries and Fringe Benefits Total	107,229	120,690	124,779	125,785	124,285	128,718
Contractual Services	4.070	4.054	0.000	4.040	4 005	4 000
511210 Operating Expense	1,970	1,951	2,092	1,948	1,865	1,808
511211 Rental of Facilities	228	336	255	300	237	237
511212 Alarm and Security	1,587	1,838	1,606	1,545	1,576	1,576
511213 Collection Expense	210	189	160	217	82	82
511214 Uniforms and Shoe Allowance	67	62	88	93	256	258
511216 Catering Svcs & Luncheons	88	113	89	126	92	92
511219 Program Rebates	842	400	404	1,004	935	935
511220 Maintenance Expense	8,407	10,141	9,395	8,776	9,317	9,317
511221 Street Cut Permit Admin Fee	796	692	602	886	886	886
511222 St Pave/Repair Fee	821	4,652	986	2,198	1,002	1,002
511223 Preventive Maintenance	53	61	65	67	67	67
511224 Corrective Maintenance	966	1,120	1,283	1,025	1,050	1,050
511225 Damage Repair	135	227	133	100	175	175
511230 Equipment Rental Charges	452	535	540	358	340	340
511240 Travel	79	184	172	176	238	165
511245 Training	573	639	614	661	542	542
511247 Conferences	23	55	40	87	93	44
511250 Memberships and Subscriptions	283	416	395	410	345	346
511260 Utilities	22,456	24,930	23,319	23,192	24,368	24,368
511261 Water Options	14,770	15,069	15,406	15,651	16,789	16,789
511265 Ground Water District Pay	7,708	7,261	19,471	21,732	21,351	21,351
511270 Mail and Parcel Post	1,884	2,000	1,990	1,838	2,082	2,082
511280 Telemetering Charges	47	46	45	50	50	50
511309 Educational Assist-Books	15	15	8	15	15	15
511310 Educational Assistance	216	207	140	200	210	210
511312 Contractual Prof Svcs 511313 Inspect & Assessment Fees	10,952 1,489	(14,644) 1,466	10,886 1,497	12,493	12,381 1,646	22,983 1,646

# **OPERATION AND MAINTENANCE BY EXPENSE CLASSIFICATION (Continued)**

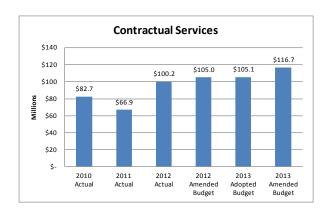
280 1,555 1,001 2,755 82,711 505 18 2,245 85 5,666 31	614 2,162 1,014 3,145 66,900 850 19 3,071 80 6,314	799 3,310 963 3,413 100,165  716 10 2,734 44	554 3,192 1,231 3,235 104,965  519 24 2,307	468 1,987 1,238 3,434 105,118 578 25	468 3,287 1,138 3,434 116,743 578
1,555 1,001 2,755 <b>82,711</b> 505 18 2,245 85 5,666 31	2,162 1,014 3,145 <b>66,900</b> 850 19 3,071 80 6,314	3,310 963 3,413 100,165 716 10 2,734	3,192 1,231 3,235 <b>104,965</b> 519	1,987 1,238 3,434 105,118 578 25	3,287 1,138 3,434 116,743
1,555 1,001 2,755 <b>82,711</b> 505 18 2,245 85 5,666 31	2,162 1,014 3,145 <b>66,900</b> 850 19 3,071 80 6,314	3,310 963 3,413 100,165 716 10 2,734	3,192 1,231 3,235 <b>104,965</b> 519	1,987 1,238 3,434 105,118 578 25	3,287 1,138 3,434 116,743
1,001 2,755 <b>82,711</b> 505 18 2,245 85 5,666	1,014 3,145 <b>66,900</b> 850 19 3,071 80 6,314	963 3,413 100,165 716 10 2,734	1,231 3,235 104,965 519 24	1,238 3,434 105,118 578 25	1,138 3,434 <b>116,743</b> 578
2,755 <b>82,711</b> 505  18  2,245  85  5,666  31	3,145 66,900 850 19 3,071 80 6,314	3,413 100,165 716 10 2,734	3,235 104,965 519 24	3,434 105,118 578 25	3,434 116,743 578
505 18 2,245 85 5,666 31	850 19 3,071 80 6,314	716 10 10 2,734	104,965 519 24	105,118 578 25	<b>116,743</b> 578
505 18 2,245 85 5,666 31	850 19 3,071 80 6,314	716 10 2,734	519 24	578 25	578
18 2,245 85 5,666 31	19 3,071 80 6,314	10 2,734	24	25	
18 2,245 85 5,666 31	19 3,071 80 6,314	10 2,734	24	25	
18 2,245 85 5,666 31	19 3,071 80 6,314	10 2,734	24	25	
85 5,666 31	80 6,314		2,307		
5,666 31	6,314	44		2,465	2,466
31			77	77	77
	·····	6,602	6,329	6,479	6,479
10	34	50	25	25	25
10	34	33	214	120	120
1,618	1,620	1,333	1,572	863	864
6,315	7,834	7,354	6,070	6,344	6,344
697	914	728	741	746	748
(20)	(8)	5	20	19	19
454	572	652	416	501	501
2,694	3,534	3,705	3,045	3,204	3,204
20,317	24,868	23,966	21,359	21,446	21,450
GEE	COE	2 420	474	621	621
					482
					830
					270
					6,824
					1,414
					42
					600
				-	-
				250	250
					30
17,694	11,159	19,580	12,463	11,588	11,363
227,951	223,616	268,490	264,572	262,436	278,274
(32,036)	(30,362)	(33,414)	(34,236)	(33,884)	(34,337)
1	- }		-	-	\$ 243,937
	10 1,618 6,315 697 (20) 454 2,694 20,317  655 677 829 285 12,723 1,155 23 585 407 305 48 17,694  227,951 (32,036) 1	10 34 1,618 1,620 6,315 7,834 697 914 (20) (8) 454 572 2,694 3,534 20,317 24,868  655 685 677 492 829 830 285 310 12,723 6,840 1,155 1,147 23 50 585 813 407 (288) 305 253 48 27 17,694 11,159  227,951 223,616 (32,036) (30,362)	10         34         33           1,618         1,620         1,333           6,315         7,834         7,354           697         914         728           (20)         (8)         5           454         572         652           2,694         3,534         3,705           20,317         24,868         23,966           655         685         2,439           677         492         (292)           829         830         881           285         310         271           12,723         6,840         14,721           1,155         1,147         1,218           23         50         75           585         813         479           407         (288)         (309)           305         253         62           48         27         35           17,694         11,159         19,580           227,951         223,616         268,490           (32,036)         (30,362)         (33,414)           1         -         (1,160)	10       34       33       214         1,618       1,620       1,333       1,572         6,315       7,834       7,354       6,070         697       914       728       741         (20)       (8)       5       20         454       572       652       416         2,694       3,534       3,705       3,045         20,317       24,868       23,966       21,359         655       685       2,439       474         677       492       (292)       500         829       830       881       979         285       310       271       280         12,723       6,840       14,721       7,901         1,155       1,147       1,218       1,250         23       50       75       42         585       813       479       600         407       (288)       (309)       120         305       253       62       276         48       27       35       40         17,694       11,159       19,580       12,463         227,951       223,616       268,490 </td <td>10         34         33         214         120           1,618         1,620         1,333         1,572         863           6,315         7,834         7,354         6,070         6,344           697         914         728         741         746           (20)         (8)         5         20         19           454         572         652         416         501           2,694         3,534         3,705         3,045         3,204           20,317         24,868         23,966         21,359         21,446           655         685         2,439         474         621           677         492         (292)         500         482           829         830         881         979         830           285         310         271         280         295           12,723         6,840         14,721         7,901         6,824           1,155         1,147         1,218         1,250         1,414           23         50         75         42         42           585         813         479         600         800</td>	10         34         33         214         120           1,618         1,620         1,333         1,572         863           6,315         7,834         7,354         6,070         6,344           697         914         728         741         746           (20)         (8)         5         20         19           454         572         652         416         501           2,694         3,534         3,705         3,045         3,204           20,317         24,868         23,966         21,359         21,446           655         685         2,439         474         621           677         492         (292)         500         482           829         830         881         979         830           285         310         271         280         295           12,723         6,840         14,721         7,901         6,824           1,155         1,147         1,218         1,250         1,414           23         50         75         42         42           585         813         479         600         800

### Salaries and Fringe Benefits



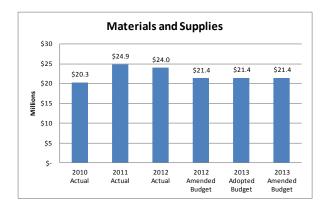
Salaries and fringe benefits are the single largest operating and maintenance expense. This category includes full time and part time salaries, overtime, on-call pay, employees' insurance and retirement benefits, and contributions to a trust established to ultimately provide other post-employment benefits (OPEB). Total salary and fringe benefit costs for 2013 are estimated at \$128.7 million, or 46.3% of gross operation and maintenance expenditures, and reflect a 2.3% increase over the prior year budget. The two primary drivers behind this increase are budgeted salary increases totaling 2.5% in aggregate and a \$1.5 million increase in the budgeted level of SAWS defined benefit plan contribution. The defined benefit plan contribution increase stems in large part to a reduction in the plan's assumed discount rate from 7.5% to 7.0%. This assumption change should reduce some of the volatility in the level of required contributions going forward and is more in line with current long-term investment return projections for similar plans.

#### **Contractual Services**



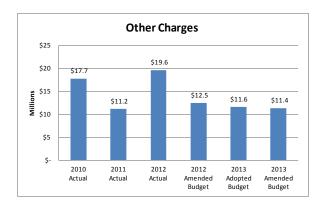
Contractual services costs are generally expenditures for services that are obtained by express or implied contract. Total Contractual Services for 2013 are budgeted at \$116.7 million, which is 42.0% of the gross operation and maintenance expenditures and reflects an 11.2% increase from the 2012 budget. The bulk of this increase is to begin funding the operational aspects of SAWS' accelerated SSO reduction program. Specifically, these amounts will fund additional sewer line cleaning and televising as well as the engagement of a program manager with external technical expertise to ensure the SSO reduction program meets agreed upon objectives and milestones. The additional funding will also expand the current flow meter program, field investigations and hydraulic modeling to further assist SAWS' SSO reduction efforts. Other increases are attributed to a projected \$1.2 million increase in utility costs associated with the transportation of water from SAWS Regional Carrizo Water Supply project as well as a \$1.1 million increase in Water Options related to water to be obtained by SAWS under the Water Exploration Co. (WECO) agreement inherited with the assumption of the District Special Project.

### **Materials and Supplies**



The Materials and Supplies budget of \$21.4 million (7.7% of gross operation and maintenance expenditures) has increased minimally as compared to the prior year budget. This slight increase is attributable to slight inflationary increases in Operating Materials, Chemicals, Maintenance Materials, and Motor Fuel offset by a reduction in Conservation Program Materials. The reduction in Program Materials reflects a reduction in the budget for high efficiency toilets with these dollars being redirected to other Conservation initiatives.

## **Other Charges**



Other Charges, totaling \$11.4 million, consist of costs associated with liability, property, and workers' compensation risk exposures. Also budgeted in this category are bank charges and retirees' health insurance costs. The 8.8% decrease in this expense category reflects primarily the decrease in the projected cost of medical benefits for SAWS' retirees in 2013.

#### **Capitalized Costs**

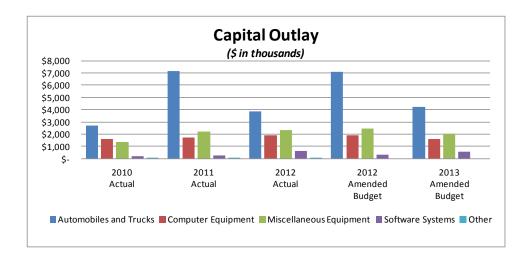
Operating and maintenance costs that support functions directly related to capital acquisitions are reflected as reductions to the gross Operations and Maintenance costs and are funded as part of SAWS Capital Improvement Program. In 2013, Capitalized Costs are estimated at \$34.3 million, which is an increase of 0.3% from 2012.

#### **CAPITAL OUTLAY**

Capital Outlay expenditures are expenditures for certain capital assets not included in SAWS Capital Improvement Program. These assets have an individual cost of \$5,000 or more and a useful life greater than one year but less than fifteen years. This includes machinery and equipment, computer hardware, software systems, laboratory equipment, vehicles, heavy equipment, communication equipment, and miscellaneous equipment. The Capital Outlay budget is based on priorities established by executive management. The 2013 capital outlay budget will fund \$8.5 million of capital expenditures meeting the above criteria

The table below summarizes the planned 2013 expenditures for the capital outlay program. The proposed expenditure level represents a decrease of \$3.3 million from the prior-year level.

	2010 Actual	2011 Actual	2012 Actual	2012 Amended	2013 Amended
(\$ in thousands)				Budget	Budget
Automobiles and Trucks	\$ 2,689	\$ 7,162	\$ 3,878	\$ 7,089	\$ 4,230
Communications Equipment	28	48	-	-	281
Computer Equipment	1,634	1,725	1,941	1,890	1,600
Heavy Equipment	123	1,235	1,266		
Lab Equipment	-	-	69		242
Light Equipment	28	104	-	-	94
Machinery and Equipment	-	-	-	250	210
Miscellaneous Equipment	997	759	907	2,145	486
Office Furniture and Equipment	-	-	46	42	-
Pumping Equipment	181	69	61		739
Software Systems	187	239	630	337	590
Structures and Improvements	51	25	45	-	-
Total	\$ 5,918	\$ 11,366	\$ 8,843	\$ 11,753	\$ 8,472



#### **OTHER USES OF FUNDS**

## **Operating Reserve**

The operating reserve requirement reflects compliance with Ordinance No. 75686, which dictates that SAWS maintain a "two month reserve amount based upon the budgeted amount of operations and maintenance expenses for the current fiscal year". In 2013, the projected operating reserve requirement is \$5.7 million as a result of the budgeted increase in operating and maintenance expenditures between 2013 and 2014.

### Transfer to the City of San Antonio

Pursuant to City Ordinance No. 75686, SAWS is required to transfer to the General Fund of the City an amount of money (as determined by City Council) up to 5% of the Gross Revenues. Since the inception of SAWS in 1992, the percentage of the transfer amount to the City has been set at 2.7% of non-exempt total revenues. Assuming this same level of transfer, SAWS has budgeted the amount of this transfer at \$11.7 million for 2013.

### Balance Available for Transfer to Renewal and Replacement Fund

After meeting all other requirements of system revenues including operations and maintenance, operating reserve, debt service, and transfer to the City's General Fund, \$75.6 million is estimated to be available for transfer to the Renewal and Replacement Fund (R&R). The Renewal and Replacement Fund is used for the purpose of funding improvements, extensions, additions, replacements, or other capital expenditures related to the System and for any other lawful purpose. At a minimum, SAWS is required to transfer to this fund an amount equal to the amount transferred to the City's General Fund.

The Renewal and Replacement Fund also pays for capital outlay expenditures, as discussed previously.

After funding of \$8.5 million for 2013 capital outlay expenditures, \$72.8 million is expected to be added to the Renewal and Replacement Fund. These funds are expected to be utilized to provide pay-as-you-go funding to support the 2014 Capital Improvement Program.

## **DEBT SERVICE**

San Antonio Water System utilizes both long-term and short-term debt to finance the Capital Improvements Program (CIP). SAWS currently outstanding revenue bonds consist entirely of fixed-rate obligations. Commercial paper provides SAWS with flexibility and efficiency in the timing and amount of debt issued, as well as providing some level of variable rate debt obligations to partially offset the variable rate nature of its investment portfolio.

#### **REVENUE BONDS**

SAWS currently has Senior Lien Water System Revenue Bonds and Junior Lien Water System Revenue Bonds outstanding.

- Senior Lien Water System Revenue Bonds comprised of Series 2004, Series 2005, Series 2007, Series 2009, Series 2009A, Series 2009B, Series 2010B, Series 2011, Series 2011A, Series 2012, and Series 2012A outstanding in the amount of \$1,605,165,000 as of December 31, 2012, are collateralized by a senior lien and pledge of the gross revenues of the System after deducting and paying the current expenses of operation and maintenance of the System and maintaining an operating reserve for operating and maintenance expenses.
- Junior Lien Water System Revenue Bonds comprised of Series 2003, Series 2004, Series 2004-A, Series 2007, Series 2007A, Series 2008, Series 2008A, Series 2009, Series 2009A, Series 2010, Series 2010A, Series 2011, Series 2011A, Series 2012 (NO RESERVE), and Series 2012 outstanding in the amount of \$382,645,000 as of December 31, 2012, are collateralized by a junior lien and pledge of the gross revenues of the System after deducting and paying the current expenses of operation and maintenance of the System, maintaining an operating reserve for operating and maintenance expenses, and the debt service on senior lien debt.
- Subordinate Lien Revenue and Refunding Bonds Interest Rate Hedge Agreement (Swap) In March 2003, \$122.5 million of "City of San Antonio, Texas Water System Subordinate Lien Revenue and Refunding Bonds, Series 2003-A and 2003-B" (the "Subordinate Lien Obligations") were issued in a weekly interest rate mode. To hedge against changes in interest expenses, the City of San Antonio, through SAWS, entered into an interest rate hedge agreement (the "Swap Agreement") under which SAWS must pay a fixed rate of 4.18% and receive a variable rate which corresponds to the Municipal Swap Index published by The Securities Industry and Financial Markets Association. The rates are applied to a specified notional amount which matches the amortization schedule of the principal amount of the Subordinate Lien Obligations. The payments under this obligation are collateralized by a subordinate lien and pledge of the gross revenues of the System after deducting and paying the current expenses of operation and maintenance of the system, maintaining an operating reserve for operating and maintenance expenses, and debt service on senior lien and junior lien debt.

On August 7, 2008, SAWS issued a Notice of Partial Redemption for \$110.6 million of the Subordinate Lien Obligations due to unfavorable market conditions relating to variable rate demand obligations, resulting in the related interest rate hedge agreement not providing an effective hedge against short term interest rate movements applicable to the related obligations. The Subordinate Lien Obligations were redeemed with commercial paper notes. \$100,970,000 of the commercial paper notes outstanding at December 31, 2012 are hedged by the Swap Agreement.

SAWS still considers the Swap Agreement to be a valuable variable rate management tool within its debt portfolio. The obligation to pay the fixed rate of 4.18% on the notional amount outstanding remains and is included in the 2013 budgeted debt service requirements of SAWS at the original principal amortization of the Subordinate Lien Obligations.

#### **Bond and Commercial Paper Ratings**

In April 2010, Fitch Ratings (Fitch) and Moody's Investors Services, Inc. (Moody's) completed a recalibration of certain long-term U.S. Municipal credit ratings. The recalibration was completed to ensure a greater degree of comparability of credit ratings across all sectors of the market. Based on the recalibration, SAWS' senior lien and junior lien ratings were adjusted upward by both Fitch and Moody's. The high quality ratings are based on SAWS' large, diverse and growing service area; sound financial performance, long term planning in water supply and infrastructure needs, and competitive water and sewer rates.

	Senior Lien	Junior Lien	TECP Series A/TECP Series B
Fitch Ratings	AA+	AA	F1/F1+
Moody's Investors Service	Aa1	Aa2	P-1/P-1
Standard & Poor's	AA+	AA	A-1+/A-1+

## Annual Revenue Bond Debt Service Requirement

The bonded debt service requirement is comprised of bond interest costs and the retirement of a certain portion of bond principal. This requirement is projected based on maturity schedules or ordinance formula. The debt service schedules assume the issuance of approximately \$330.3 million of bonds in 2013. The amount necessary to fulfill total bonded debt service requirements in 2013 is projected to be \$164.1 million.

#### Reserve Fund Requirement

SAWS' bond ordinance requires the maintenance of a reserve fund for the payment of senior lien and junior lien debt obligations in an amount equal to 100% of the maximum annual debt service requirement for the senior lien obligations and 100% of the average annual debt service requirement for the junior lien obligations. The ordinance provides for the use of cash, debt, and surety policies or a combination thereof, to satisfy the reserve fund requirement. The debt service schedules for the 2013 bonds anticipated to be issued assumes the funding of the reserve fund from bond proceeds.

## **Debt Coverage**

SAWS is required by ordinance to maintain a debt coverage ratio of 1.25 times the annual debt service on outstanding senior lien debt. The 2013 Operating Budget projects an estimated annual Senior Lien Debt Coverage ratio of 1.86 times, which exceeds the ordinance requirement of 1.25 times.

DEBT COVERAGE CALCULATION		
Total Sources of Funds	\$501,037,066	
Less Revenues from: City Public Service contract	2,982,500	
Interest on CPS contract Capital Recovery Fees Transfer from Renewal & Replacement Fund	36,000,000 1,400,000	
Interest on Project Funds	 95,000	-
Gross Revenues as defined by Ordinance No. 75686	\$ 460,559,566	
Less: Operations & Maintenance	243,936,987	*
Pledged Revenues as defined by Ordinance No. 75686	\$ 216,622,579	
Annual Senior Lien Debt Service Requirement Annual Senior Lien Debt Coverage Ratio	\$ 116,366,527 <b>1.86</b>	=
Maximum Annual Senior Lien Debt Service Requirement (Year 2027)  Maximum Annual Senior Lien Debt Coverage Ratio	\$ 130,113,370 <b>1.66</b>	=
Annual Combined Debt Service Requirement  Annual Combined Debt Coverage Ratio	\$ 160,683,161 <b>1.35</b>	=
Maximum Annual Combined Bonded Debt Service Requirement (Year 2017)  Maximum Annual Combined Bonded Debt Coverage Ratio	\$ 166,139,553 <b>1.30</b>	=

<sup>\*</sup> This amount does not include non-cash expenses associated with post-retirement obligations.

# **Budgeted Revenue and Refunding Bonds Debt Service Schedules**

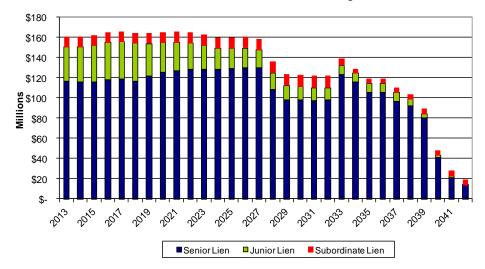
Fiscal Year			s	enior Lien			l F	Junior Lien				
December 31,		Principal		Interest		Total		Principal		Interest	De	ebt Service
2013	\$	31,949,366	\$	84,417,161	\$	116,366,527		\$ 22,714,167	\$	11,613,700	\$	34,327,867
2014		33,151,124		82,935,701		116,086,825		23,208,333		11,078,090		34,286,423
2015		34,580,134		81,319,970		115,900,104		25,361,666		10,896,704		36,258,370
2016		38,043,767		79,774,062		117,817,829		26,686,667		10,474,809		37,161,476
2017		40,725,545		77,998,333		118,723,878		27,411,666		9,734,121		37,145,787
2018		40,440,284		76,106,610		116,546,894		28,820,000		8,913,494		37,733,494
2019		47,641,315		74,262,520		121,903,835		24,061,667		8,034,007		32,095,674
2020		53,695,307		72,059,035		125,754,342		21,831,667		7,329,828		29,161,495
2021		57,712,259		69,481,897		127,194,156		21,075,000		6,704,959		27,779,959
2022		61,643,650		66,678,216		128,321,866		19,745,000		6,089,691		25,834,691
2023		65,068,187		63,651,088		128,719,275		17,823,334		5,530,872		23,354,206
2024		68,333,830		60,447,014		128,780,844		15,243,333		5,140,383		20,383,716
2025		72,509,101		57,070,336		129,579,437		14,595,000		4,717,329		19,312,329
2026		76,510,663		53,466,776		129,977,439		15,003,333		4,319,326		19,322,659
2027		80,443,332		49,670,038		130,113,370		13,481,667		3,897,953		17,379,620
2028		62,832,106		45,919,398		108,751,504		12,895,000		3,514,471		16,409,471
2029		55,010,323		42,930,679		97,941,002		11,290,000		3,147,200		14,437,200
2030		57,596,496		40,253,226		97,849,722		10,631,667		2,813,473		13,445,140
2031		60,285,258		37,438,578		97,723,836		10,013,333		2,496,399		12,509,732
2032		63,588,457		34,535,132		98,123,589		9,841,666		2,183,784		12,025,450
2033		92,102,761		31,518,090		123,620,851		6,915,000		1,901,489		8,816,489
2034		88,664,842		26,977,091		115,641,933		7,186,667		1,639,102		8,825,769
2035		82,701,172		23,143,214		105,844,386		7,470,000		1,363,859		8,833,859
2036		86,671,758		19,042,463		105,714,221		7,761,666		1,076,107		8,837,773
2037		81,718,260		14,791,913		96,510,173		8,070,000		776,053		8,846,053
2038		81,114,017		10,738,844		91,852,861		6,331,667		461,492		6,793,159
2039		73,699,212		6,672,332		80,371,544		3,483,334		216,128		3,699,462
2040		37,993,287		2,965,270		40,958,557		1,983,334		93,828		2,077,162
2041		20,326,800		1,115,792		21,442,592		1,105,000		33,818		1,138,818
2042		12,983,820		352,224		13,336,044		266,667		5,550		272,217
	\$1	,759,736,433	\$1	,387,733,003	\$3	3,147,469,436		\$ 422,307,501	\$	136,198,019	\$	558,505,520

Budgeted Revenue and Refunding Bonds Debt Service Schedules

Fiscal Year	Interest Rate Hedge (Swap)									
December 31,	Principal		Interest		Total					
2013	\$ 4,844,916	\$	5,143,851	\$	9,988,767					
2014	5,055,536		4,997,734		10,053,270					
2015	5,278,196		4,845,089		10,123,285					
2016	5,511,229		4,685,541		10,196,770					
2017	5,751,116		4,518,772		10,269,888					
2018	6,003,045		4,344,553		10,347,598					
2019	6,265,346		4,162,496		10,427,842					
2020	6,539,686		3,972,286		10,511,972					
2021	6,827,734		3,773,536		10,601,270					
2022	7,131,345		3,565,781		10,697,126					
2023	7,443,474		3,348,571		10,792,045					
2024	7,769,497		3,121,585		10,891,082					
2025	8,112,561		2,884,429		10,996,990					
2026	8,464,331		2,636,512		11,100,843					
2027	8,834,995		2,377,576		11,212,571					
2028	9,224,552		2,107,012		11,331,564					
2029	9,629,671		1,824,198		11,453,869					
2030	10,051,829		1,528,678		11,580,507					
2031	10,493,069		1,219,836		11,712,905					
2032	10,953,202		897,120		11,850,322					
2033	6,387,229		559,917		6,947,146					
2034	4,135,150		418,493		4,553,643					
2035	4,303,818		376,298		4,680,116					
2036	4,479,900		332,381		4,812,281					
2037	4,663,396		286,664		4,950,060					
2038	4,854,307		237,230		5,091,537					
2039	5,050,777		189,568		5,240,345					
2040	5,258,369		138,022		5,396,391					
2041	5,471,521		84,373		5,555,894					
2042	5,699,500		30,363		5,729,863					
	\$ 200,489,297	\$	68,608,465	\$	269,097,762					

	Total	Βo	nded Debt Se	rvi	20
	Principal		Interest	, I V I	Total
\$	59,508,449	\$	101,174,712	\$	160,683,161
Ψ	61,414,993	Ψ	99,011,525	Ψ	160,426,518
	65,219,996		97,061,763		162,281,759
	70,241,663		94,934,412		165,176,075
	73,888,327		92,251,226		166,139,553
	75,263,329		89,364,657		164,627,986
	77,968,328		86,459,023		164,427,351
	82,066,660		83,361,149		165,427,809
	85,614,993		79,960,392		165,575,385
	88,519,995		76,333,688		164,853,683
	90,334,995		72,530,531		162,865,526
	91,346,660		68,708,982		160,055,642
	95,216,662		64,672,094		159,888,756
	99,978,327		60,422,614		160,400,941
	102,759,994		55,945,567		158,705,561
	84,951,658		51,540,881		136,492,539
	75,929,994		47,902,077		123,832,071
	78,279,992		44,595,377		122,875,369
	80,791,660		41,154,813		121,946,473
	84,383,325		37,616,036		121,999,361
	105,404,990		33,979,496		139,384,486
	99,986,659		29,034,686		129,021,345
	94,474,990		24,883,371		119,358,361
	98,913,324		20,450,951		119,364,275
	94,451,656		15,854,630		110,306,286
	92,299,991		11,437,566		103,737,557
	82,233,323		7,078,028		89,311,351
	45,234,990		3,197,120		48,432,110
	26,903,321		1,233,983		28,137,304
	18,949,987		388,137		19,338,124
\$2	2,382,533,231	\$1	,592,539,487	\$3	,975,072,718

#### Total Senior Lien, Junior Lien, and Interest Rate Hedge Debt Service



### **OTHER DEBT SERVICE REQUIREMENTS**

## Tax Exempt Commercial Paper (TECP)

SAWS also maintains a commercial paper program that is used to provide funds for the interim financing of a portion of the capital improvements program. City Council of the City of San Antonio has authorized a commercial paper program of up to \$500 million. The TECP program is supported by two revolving credit agreements, one with Bank of Tokyo-Mitsubishi UFJ, Ltd., and the other with Wells Fargo Bank, N.A (the "Agreements"). Bank of Tokyo-Mitsubishi UFJ, Ltd. currently supports a \$250 million program of Series A TECP notes, and Wells Fargo Bank, N.A. currently supports a \$150 million program of Series B TECP notes. The current Agreements extend to October 5, 2015. Pursuant to the Agreements, the revolving line of credit currently totals \$400 million.

The 2013 Budget assumes \$250 million of commercial paper will be outstanding to fund ongoing capital improvement projects through 2013. As stated in the "Interest Rate Hedge Agreement (Swap)" section herein, \$101.0 million of the commercial paper program is attributable to the redemption of the Subordinate Lien Obligations. The 2013 Budget assumes that the interest to be paid on the \$101.0 million of TECP attributable to the redemption of the Subordinate Lien Obligations will be offset in its entirety by the amount to be received under the variable rate leg of the Swap, and this amount has been subtracted from the projected average commercial paper balance in calculating the projected commercial paper interest expense. SAWS' capital financing plan provides for the refunding of commercial paper as the outstanding balance trends toward the upper limit of the Agreement to ensure the outstanding balance does not exceed the revolving line of credit amount.

#### Other Debt Expense

SAWS expects to pay approximately \$2.8 million in debt related expenses in 2013. These expenses include remarketing agent fees, credit liquidity facility fees, rating agency fees, and paying agent fees. Remarketing agents are investment-banking firms responsible for the marketing and remarketing of variable rate obligations to investors as they mature. The credit liquidity facility provider commits to purchasing the maturing variable rate obligations should the remarketing agent be unable to remarket the variable rate obligations.

This page intentionally left blank



# **OPERATION AND MAINTENANCE EXPENSE SUMMARY BY DEPARTMENT**

(\$ in thousands)	2010 Actual	2011 Actual	2012 Actual	2012 Amended Budget	2013 Adopted Budget	2013 Amended Budget
Board of Trustees and Pres/CEO Group	<u> </u>		1			
Office of the President-CEO	\$ 908	\$ 990	\$ 919	\$ 990	\$ 912	\$ 909
Board of Trustees	56	49	59	63	62	57
Board of Trustees Support	367	397	375	386	353	353
Internal Audit Dept	431	476	382	521	405	403
Board of Trustees and Pres/CEO Group Total	1,761	1,912	1,735	1,960	1,732	1,722
Engineering and Construction Group						
Office of the VP - Strategic Resources	429	329	363	406	631	629
Collection and Distribution Department	1,284	1,426	1,519	1,347	1,493	1,489
Governmental Engineering Department						
0 0 1	1,982	1,917	2,216	1,963	2,220	2,220
Infrastructure Planning Department	4,462	4,454	4,814	4,535	5,060	5,057
Pipeline Inspections Department	3,946	4,169	4,343	4,098	4,468	4,468
Production, Recycle, Treatment Engineering Department	3,080	3,156	3,378	3,075	3,452	3,446
Operations and Maintenance Eng.  Engineering and Construction Group Total	812 <b>15,995</b>	792 <b>16,243</b>	816 <b>17,450</b>	734 <b>16,158</b>	785 <b>18,108</b>	785 <b>18,095</b>
Engineering and constitution group rotal	13,333	10,243	17,430	10,130	10,100	10,033
Water Resources and Conservation Group						
VP - Water Resources	230	253	226	231	216	215
Conservation Department	5,079	5,068	4,481	5,140	4,854	4,850
Water Resources Department	24,802	(2,885)	37,230	39,900	40,577	40,571
Regional Initiatives and Special Projects	275	320	206	401	-	-
Water Resources and Conservation Group Total	30,385	2,757	42,143	45,672	45,647	45,636
Operations Group		<u> </u>		<u> </u>	<u> </u>	
Environmental Services	4,832	5,431	5,554	5,727	5,587	5,585
Sewer System Improvements	1,096	1,047	1,249	1,023	1,284	13,667
Ofc of Chief Operating Officer	558	543	525	1,155	405	396
Safety and Environmental Health	1,081	1,023	1,089	1,080	1,195	1,166
Operations Group Total	7,567	8,044	8,417	8,985	8,471	20,814
Distribution and Collection Operations Group						
Office of the VP - Distribution and Collection	310	326	318	401	284	278
Construction and Maintenance	9,351	12,455	12,193	11,848	12,348	12,348
Distribution and Collection Support Services	730	696	743	677	711	711
Dos Rios Service Center	-	-	-	-	622	622
Eastern Service Centers	11,776	14,352	11,426	10,868	10,301	10,301
Fleet Management	7,367	8,885	9,388	7,830	8,290	8,288
Medio Creek Service Center	-	-	-	-	652	652
Western Service Centers	10,037	13,063	10,095	9,692	7,887	7,887
Distribution and Collection Operations Group Total	39,571	49,776	44,163	41,316	41,097	41,088
Operations Services Group						
Office of VP - Operations Services	392	411	262	391	334	333
Corporate Real Estate Department	846	878	775	955	731	730
Facilities Maintenance	2,340	3,036	3,603	3,118	3,398	3,397
Facilities Management Heating and Cooling Department	1,980 7,903	2,058 7,642	2,008 7,728	1,965 7,435	1,801 7,787	1,801 7,787
Laboratory Technical Services Department	1,886	1,908	1,649	2,131	1,707	1,712
Dopartino.	.,550	.,030	.,510	_,.51	.,. 10	.,. 12
Resource Protection & Compliance Div	4,989	5,498	5,698	6,281	5,715	5,710
Security	2,245	2,904	2,519	2,541	2,572	2,571
Service Center Facility Plan	93	106	112	105	108	107
Operations Services Group Total	22,673	24,442	24,354	24,923	24,161	24,147

# OPERATION AND MAINTENANCE EXPENSE SUMMARY BY DEPARTMENT (continued)

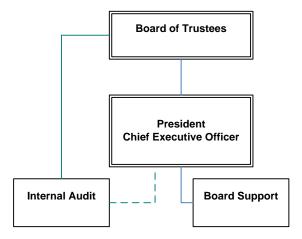
	2010	2011	2012	2012	2013	2013
(\$ in thousands)	Actual	Actual	Actual	Amended Budget	Adopted Budget	Amended Budget
Production and Treatment Operations						
Office of the VP - Production and Treatment	43	100	108	30	30	30
Production Department	24,919	27,333	25,432	26,694	27,686	27,684
Treatment Maintenance Management	8,789	9,285	10,165	8,057	8,855	8,851
Treatment Operations Management	15,859	15,870	16,908	15,436	17,358	17,356
Predictive Maintenance	765	790	908	839	865	865
Production and Treatment Operations Total	50,376	53,378	53,521	51,057	54,795	54,786
Legal Group						
Contracting Department	1,377	1,527	1,669	1,475	1,876	1,874
Legal Department	4,783	5,086	6,510	6,487	5,569	6,866
Legal Group Total	6,160	6,612	8,180	7,962	7,444	8,740
Human Resources Group						
Office of the VP - Human Resources	735	631	645	701	582	580
Corporate Training	1,378	1,478	1,388	1,473	1,152	1,151
Human Resources Div	2,055	2,009	1,887	2,200	2,380	2,327
Human Resources Group Total	4,169	4,118	3,920	4,374	4,114	4,058
Financial Services Group						
Office of the CFO	317	333	335	335	309	308
Accounting	2,221	2,332	2,255	2,420	2,349	2,349
Treasury	347	342	333	411	374	372
Financial Planning	718	648	597	688	633	632
Purchasing	634	633	539	636	506	505
Financial Services Group Total	4,237	4,288	4,060	4,488	4,172	4,167
Information Systems						
Application Services Section	1,740	2,420	2,515	2,530	2,576	2,571
Information Technology	8,373	8,820	8,576	8,510	9,218	9,113
Program Management and Administration	1,260	956	850	1,086	1,079	1,076
Information Systems Total	11,373	12,196	11,941	12,125	12,872	12,761
Customer Service Administration						
Customer Care	4,709	4,905	4,514	4,976	4,854	4,847
Field Operations	6,184	6,647	6,862	6,265	6,694	6,687
Quality and Training	405	477	440	541	714	714
Customer Service Total	11,549	12,303	12,245	12,034	12,780	12,764
Public Affairs Administration						
Communications	1,460	1,708	1,841	2,048	1,793	1,517
External Relations	2,141	2,173	2,086	2,187	2,149	2,133
Public Affairs Total	4,055	4,245	4,259	4,633	4,319	4,026
Other Requirements	18,080	23,301	32,103	28,883	22,723	25,469
Total Operations and Maintenance						
Before Capitalized Costs	227,951	223,616	268,490	264,572	262,436	278,274
Capitalized Cost	(32,036)	(30,362)	(33,414)	(34,236)	(33,884)	(34,337)
Intercenter Transfers	1	-	(1,160)	-	-	
Grand Total	\$ 195,916	\$ 193,254	233,916	\$ 230,336	\$ 228,552	\$ 243,937

107

## **BOARD OF TRUSTEES AND PRESIDENT/CEO**

SAWS is governed by the San Antonio Water System Board of Trustees. The Board consists of the Mayor and six members appointed by the City Council. The Board of Trustees is responsible for overall policy and guidance of the system.

The President/CEO is responsible and accountable for overall leadership and management of the San Antonio Water System. Following the guidance and direction of the Board of Trustees and City Council, the President/CEO implements policy, directs and works alongside employees to achieve SAWS' mission and goals.

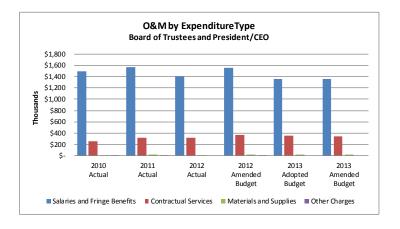


# BOARD OF TRUSTEES AND PRESIDENT/CEO (Continued)

EXPENDITURES BY TYPE	2010 Actual	2011 Actual	2012 Actual	 2012 mended Budget	1	2013 Adopted Budget	;	2013 mended Budget
O&M Before Capitalized Cost								
Salaries and Fringe Benefits	\$ 1,487.8	\$ 1,570.5	\$ 1,404.9	\$ 1,557.1	\$	1,360.2	\$	1,360.2
Contractual Services	255.1	317.1	316.3	371.3		355.4		344.7
Materials and Supplies	15.8	18.5	14.0	22.2		16.7		16.7
Other Charges	2.8	6.0	-	9.3		-		-
Total O&M Before Capitalized Cost	1,761.5	1,912.2	1,735.2	1,959.9		1,732.3		1,721.6
Capitalized Cost	-	-	-	-		-		-
Intercenter Transfers	-	-	-	-		-		-
Net Change in Equity Total	\$ 1,761.5	\$ 1,912.2	\$ 1,735.2	\$ 1,959.9	\$	1,732.3	\$	1,721.6
Capital Outlay	\$ -	\$ -	\$ -	\$ -	\$	-	\$	-

EXPENDITURES BY DEPARTMENT	2010 Actual	2011 Actual	2012 Actual	2012 Amended Budget	2013 Adopted Budget	2013 Amended Budget
Office of the President-CEO	907.8	989.9	919.3	990.5	912.0	908.7
Board of Trustees	55.5	49.1	58.8	62.6	62.4	57.0
Board of Trustees Support	366.7	397.2	375.4	386.2	352.5	352.5
Internal Audit Dept	431.5	476.0	381.7	520.7	405.4	403.4
O&M Before Capitalized Cost Total	1,761.5	1,912.2	1,735.2	1,959.9	1,732.3	1,721.6
Capitalized Cost	-	-	-	-	-	-
Intercenter Transfers	0.1	-	-	-	-	-
Net Change in Equity Total	\$ 1,761.5	\$ 1,912.2	\$ 1,735.2	\$ 1,959.9	\$ 1,732.3	\$ 1,721.6

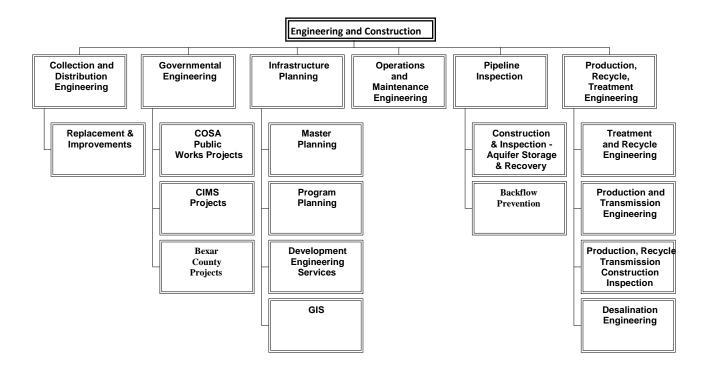
AUTHORIZED POSITIONS BY DEPARTMENT	2010 Adopted Budget	2011 Adopted Budget	2012 Amended Budget	2013 Adopted Budget	2013 Amended Budget
Office of the President-CEO	6	6	6	6	6
Board of Trustees	-	-	-	-	-
Board of Trustees Support	2	2	2	2	2
Internal Audit Dept	5	5	5	5	5
Total Authorized Positions	13	13	13	13	13



#### **ENGINEERING AND CONSTRUCTION**

Engineering and Construction coordinates the development and execution of the annual Capital Improvements Program. The group performs engineering analysis of existing facilities and plans new infrastructure to meet the increasing water and wastewater demands of the growing community. The group also designs and manages the construction of new and replacement water and wastewater infrastructure. The Engineering and Construction group is comprised of the following departments:

- Collection and Distribution Engineering Plans and designs water distribution and the wastewater collection systems.
- **Governmental Engineering** Plans and designs water distribution and wastewater collection systems that support intergovernmental capital projects.
- Infrastructure Planning Manages SAWS' impact fee program, maintains infrastructure maps and GIS databases, tracks population growth, and develops the water and wastewater master plans.
- **Operations and Maintenance Engineering** Provides operational and maintenance engineering support for Production and Treatment, and Distribution and Collection.
- **Pipeline Inspections** Inspects pipeline construction projects and water supply projects, and manages the backflow prevention program.
- Production, Recycle, Treatment Engineering Handles planning, design and construction management of water production facilities, recycled water infrastructure, and wastewater treatment facilities.

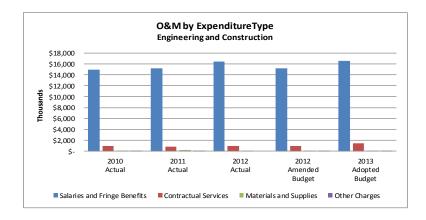


# **ENGINEERING AND CONSTRUCTION (Continued)**

EXPENDITURES BY TYPE	2010 Actual		2011 Actual	2012 Actual	2012 Amended Budget	:	2013 Adopted Budget
O&M Before Capitalized Cost							
Salaries and Fringe Benefits	\$ 14,949.9	\$	15,184.7	\$ 16,448.1	\$ 15,132.6	\$	16,570.8
Contractual Services	934.7		873.9	920.5	939.4		1,455.7
Materials and Supplies	110.3		184.7	81.7	85.9		81.3
Other Charges	0.4	}	0.2	-	0.1		0.2
Total O&M Before Capitalized Cost	15,995.3		16,243.5	17,450.3	16,158.0		18,108.0
Capitalized Cost	(14,526.1)		(14,895.9)	(16,002.6)	(14,858.7)		(16,542.3)
Intercenter Transfers	4.8		0.6	1.5	-		-
Net Change in Equity Total	\$ 1,474.0	\$	1,348.2	\$ 1,449.2	\$ 1,299.3	\$	1,565.7
Capital Outlay	\$ -	\$	11.4	\$ 19.8	\$ 26.0	\$	16.0

EXPENDITURES BY DEPARTMENT	2010 Actual	2011 Actual	2012 Actual	2012 Amended Budget	2013 Adopted Budget
Office of the VP - Strategic Resources	429.0	329.2	363.3	406.1	630.7
Collection and Distribution Department	1,284.4	1,426.1	1,519.3	1,346.6	1,492.6
Governmental Engineering Department	1,982.2	1,916.8	2,215.9	1,963.1	2,219.6
Infrastructure Planning Department	4,461.7	4,454.5	4,814.4	4,534.9	5,059.6
Operations and Maintenance Eng.	811.6	792.3	816.1	734.4	785.1
Pipeline Inspections Department	3,946.5	4,169.1	4,343.4	4,098.1	4,468.2
Production, Recycle, Treatment Engineering	3,079.9	3,155.6	3,378.0	3,074.9	3,452.2
O&M Before Capitalized Cost Total	15,995.3	16,243.5	17,450.3	16,158.0	18,108.0
Capitalized Cost	(14,526.1)	(14,895.9)	(16,002.6)	(14,858.7)	(16,542.3)
Intercenter Transfers	4.8	0.6	1.5	-	-
Net Change in Equity Total	\$ 1,474.0	\$ 1,348.2	\$ 1,449.2	\$ 1,299.3	\$ 1,565.7

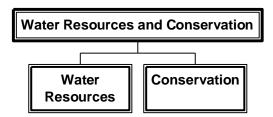
	2010	2011	2012	2013
AUTHORIZED POSITIONS BY DEPARTMENT	Adopted	Adopted	Amended	Adopted
	Budget	Budget	Budget	Budget
Office of the VP - Strategic Resources	4	3	3	7
Collection and Distribution Department	15	16	17	17
Governmental Engineering Department	26	26	25	26
Infrastructure Planning Department	67	62	59	59
Operations and Maintenance Eng.	11	10	9	9
Pipeline Inspections Department	62	60	62	64
Production, Recycle, Treatment Engineering Department	35	33	34	36
				1
Total Authorized Positions	220	210	209	218



#### WATER RESOURCES AND CONSERVATION

The Water Resources and Conservation group is responsible for the development, management and conservation of water supplies, as well as drought management and water rights acquisitions. SAWS' proven conservation programs have become a cornerstone of the community's long-term water management strategy. The group consists of the following two departments:

- Water Resources Develops and implements long-term, sustainable water projects while
  proactively managing existing supplies. SAWS has already successfully developed projects from
  Canyon Lake, the Trinity Aquifer and the Carrizo Aquifer to supplement our foundational
  Edwards Aquifer supply. Potential future supplies include supply from the Carrizo Aquifer in
  Western Gonzales County and groundwater desalination. Other proven innovations, such as
  SAWS' 100-mile recycled water system and underground storage reservoir, leverage technology
  to secure San Antonio's water future.
- Conservation Delivers national recognized programs that achieve cost-effective water savings
  while enhancing quality of life. San Antonio's cheapest source of water is conservation water
  we don't use. To help keep rates affordable, SAWS aggressively promotes more efficient
  landscape water use through education, outreach, drought ordinance rules, and inverted block
  structure pricing, while continuing to encourage indoor conservation via high-efficiency fixtures
  for homes and businesses.



112

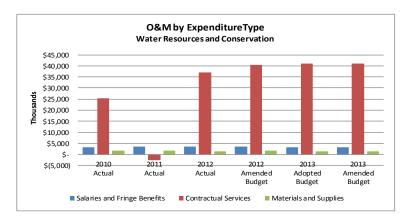
# WATER RESOURCES AND CONSERVATION (continued)

(\$ in thousands)

EXPENDITURES BY TYPE		2010 Actual		2011 Actual		2012 Actual	,	2012 Amended Budget	•	2013 Adopted Budget	:	2013 mended Budget
O&M Before Capitalized Cost	_		⊢				-	buuget	$\vdash$	buuget	-	buugei
Salaries and Fringe Benefits	\$	3,189.3	\$	3,528.5	\$	3,557.1	\$	3,471.3	\$	3,264.6	\$	3,264.6
Contractual Services		25,529.4		(2,585.4)	Ċ	37,163.2		40,524.2		41,105.6		41,094.1
Materials and Supplies		1,666.6		1,813.5		1,422.8		1,676.9		1,277.1		1,277.1
Other Charges		-		-		-		· -		-		
Total O&M Before Capitalized Cost		30,385.4		2,756.6		42,143.1		45,672.5		45,647.3		45,635.8
Capitalized Cost		(876.1)		(87.5)		(169.9)		(166.8)		(167.5)		(166.8)
Intercenter Transfers		-		0.2		(2.0)		-		-		- '
Net Change in Equity Total	\$	29,509.2	\$	2,669.3	\$	41,971.3	\$	45,505.7	\$	45,479.8	\$	45,469.0
		•		·		·		•		•		
Capital Outlay	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-

EXPENDITURES BY DEPARTMENT	2010 Actual	2011 Actual	2012 Actual	2012 Amended Budget	2013 Adopted Budget	2013 Amended Budget
VP - Water Resources	230.2	252.9	225.9	231.0	216.2	214.9
Conservation Department	5,078.6	5,068.3	4,481.2	5,139.9	4,853.8	4,850.0
Regional Initiatives and Special Projects	274.6	320.1	206.2	401.5	-	-
Water Resources Department	24,802.0	(2,884.6)	37,229.7	39,900.1	40,577.4	40,570.9
O&M Before Capitalized Cost Total	30,385.4	2,756.6	42,143.1	45,672.5	45,647.3	45,635.8
Capitalized Cost	(876.1)	, , ,	` '	, , ,	(167.5)	(166.8)
Intercenter Transfers	-	0.2	(2.0)		-	-
Net Change in Equity Total	\$ 29,509.2	\$ 2,669.3	\$ 41,971.3	\$ 45,505.7	\$ 45,479.8	\$ 45,469.0

	2010	2011	2012	2013	2013
AUTHORIZED POSITIONS BY DEPARTMENT	Adopted	Adopted	Amended	Adopted	Amended
	Budget	Budget	Budget	Budget	Budget
VP - Water Resources	2	2	2	2	2
Conservation Department	28	27	27	46	46
Regional Initiatives and Special Projects	3	2	2	-	-
Water Resources Department	18	18	18	20	20
Total Authorized Positions	51	49	49	68	68

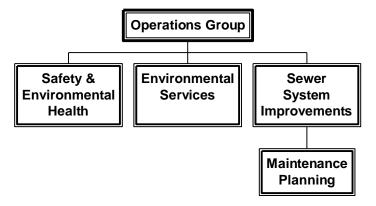


113

#### **OPERATIONS GROUP**

The Operations Group over sees the overall Production & Treatment Group, Distribution & Collection and Operations Services Groups. Housing the Chief Operating Office, the area is responsible for overseeing the Wastewater infrastructure and ensuring the integrity of the system.

- Safety –Safety coordinates all SAWS safety activities and ensures a safe environment for all SAWS employees.
- **Environmental Services** supports engineering services, handles regulatory permitting and manages external contracts. Also manages the Emergency Operations center.
- Maintenance Planning The Maintenance Planning Department oversees work order data, plans
  maintenance schedules, and provides overall data management and reporting pertaining to field
  and plant operations. In addition, the department is responsible for performing predictive
  maintenance and failure analysis on identified critical equipment for these systems.
- Sewer System Improvements Sewer System Improvements is a program of capital investments and operating requirements that will help the system meet the endorsed levels of service goals for regulatory permit compliance, system reliability and functionality, and sustainable operations of the System's sewer system. SSI capital investments include the rehabilitation of sewer pipelines and manholes that contribute to SSOs due to compromised structural conditions. SSI operating requirements include expanding the efforts to televise sewer lines throughout the system and identify and prevent structural integrity of the system.

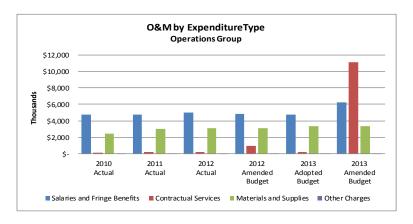


# **OPERATIONS GROUP** (Continued)

EXPENDITURES BY TYPE	2010 Actual		2011 Actual	2012 Actual	ı	2012 Amended Budget	•	2013 Adopted Budget	9	2013 Imended Budget
O&M Before Capitalized Cost		$\vdash$			$\vdash$				$\vdash$	aagot
Salaries and Fringe Benefits	\$ 4,796.3	\$	4,739.2	\$ 4,971.8	\$	4,821.5	\$	4,772.9	\$	6,266.8
Contractual Services	188.3		196.4	237.3	1	975.7		263.9		11,133.7
Materials and Supplies	2,479.0		3,007.4	3,118.0		3,097.6		3,337.6		3,341.7
Other Charges	103.2		101.1	89.7		90.0		97.0		72.0
Total O&M Before Capitalized Cost	7,566.8		8,044.2	8,416.8		8,984.7		8,471.4		20,814.2
Capitalized Cost	(558.0)		(311.6)	(336.8)		(435.0)		(399.2)		(667.4)
Intercenter Transfers	202.4		132.1	89.4		-		-		-
Net Change in Equity Total	\$ 7,211.2	\$	7,864.7	\$ 8,169.3	\$	8,549.7	\$	8,072.2	\$	20,146.8
Capital Outlay	\$ -	\$	-	\$ 177.1	\$	200.0	\$	-	\$	-

EXPENDITURES BY DEPARTMENT	2010 ctual	2011 Actual	2012 Actual	2012 Amended Budget	2013 Adopted Budget	2013 Amended Budget
Ofc of Chief Operating Officer	558.1	543.2	525.4	1,154.9	404.8	396.3
Environmental Services	4,831.8	5,430.9	5,554.0	5,726.7	5,587.2	5,585.1
Safety and Environmental Health	1,080.9	1,022.8	1,088.7	1,079.8	1,195.2	1,166.2
Sewer System Improvements	1,096.1	1,047.2	1,248.8	1,023.4	1,284.2	13,666.6
O&M Before Capitalized Cost Total	7,566.8	8,044.2	8,416.8	8,984.7	8,471.4	20,814.2
Capitalized Cost	(558.0)	(311.6	(336.8)	(435.0)	(399.2)	(667.4)
Intercenter Transfers	202.4	132.1	89.4	-	-	-
Net Change in Equity Total	\$ 7,211.2	\$ 7,864.7	\$ 8,169.3	\$ 8,549.7	\$ 8,072.2	\$ 20,146.8

AUTHORIZED POSITIONS BY DEPARTMENT	2010 Adopted Budget	2011 Adopted Budget	2012 Amended Budget	2013 Adopted Budget	2013 Amended Budget
Ofc of Chief Operating Officer	4	4	3	3	3
Environmental Services	34	34	41	37	37
Safety and Environmental Health	12	12	12	14	14
Sewer System Improvements	16	16	16	17	38
Total Authorized Positions	66	66	72	71	92



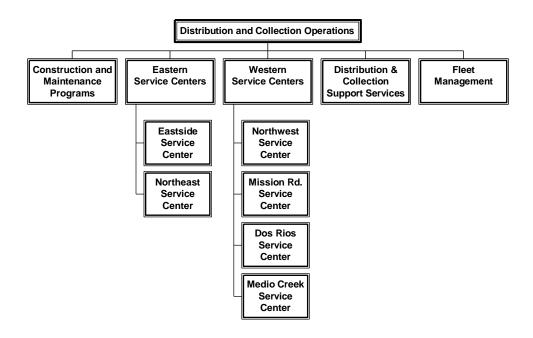
#### **DISTRIBUTION AND COLLECTION OPERATIONS**

The Distribution and Collection Operations Group operates, maintains and repairs the water distribution and wastewater collection systems ensuring our customers receive uninterrupted, quality potable water and associated wastewater services.

This is accomplished by providing:

- Emergency Response Provides critical support to SAWS customers and crews 24/7.
- **Preventative Maintenance Programs** Ensures the integrity of water and wastewater infrastructure.
- **Construction Crews** Offers in-house construction expertise, including asphalt and concrete services, to improve service restoration and increase customer satisfaction.
- **Sewer Televising Programs** Equips management to make informed decisions while helping protect the quality of the Edwards Aquifer.
- Sewer Line Cleaning Reduces potential for back-ups due to debris and grease.
- Leak Detection Program Ensures water leaks are identified, reducing water loss.
- **Fleet** Provides vehicles, equipment and maintenance service, and fuel for company employees; maintains corporate vehicle pool program; ensures that vehicles and heavy equipment are properly maintained and in good working condition.

SAWS distribution and collection crews are mobilized from six strategically located service centers throughout the city: Eastside, Mission Road (south central), Northeast and Northwest. Medio Creek and Dos Rios have recently been added as part of the integration of the DSP infrastructure.

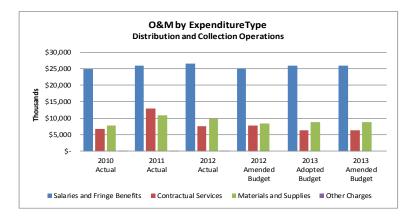


## **DISTRIBUTION AND COLLECTION OPERATIONS (Continued)**

EXPENDITURES BY TYPE	Actual Actual Amended Ac				2013 Adopted Budget		3	2013 mended Budget		
O&M Before Capitalized Cost										
Salaries and Fringe Benefits	\$ 24,894.1	\$	25,857.4	\$	26,592.6	\$ 25,041.5	\$	25,920.0	\$	25,920.0
Contractual Services	6,857.0		12,939.0		7,631.2	7,846.4		6,443.9		6,435.6
Materials and Supplies	7,817.7		10,970.9		9,923.0	8,428.2		8,732.7		8,732.7
Other Charges	2.3		8.8		15.8	-		-		-
Total O&M Before Capitalized Cost	39,571.1		49,776.1		44,162.6	41,316.2		41,096.5		41,088.2
Capitalized Cost	(5,992.9)		(5,051.9)		(5,519.9)	(4,713.6)		(4,773.4)		(4,765.5)
Intercenter Transfers	(125.6)		(107.2)		(944.9)	-		-		-
Net Change in Equity Total	\$ 33,452.5	\$	44,617.0	\$	37,697.7	\$ 36,602.6	\$	36,323.1	\$	36,322.7
Capital Outlay	\$ 2,839.7	\$	8,958.0	\$	5,146.5	\$ 7,304.0	\$	3,165.0	\$	6,330.1

	2010	2011	2012	2012	2013	2013
EXPENDITURES BY DEPARTMENT	Actual	Actual	Actual	Amended	Adopted	Amended
				Budget	Budget	Budget
Office of the VP - Distribution and Collection	310.4	325.8	318.1	401.4	284.3	278.0
Construction and Maintenance	9,351.1	12,454.6	12,192.7	11,847.6	12,348.5	12,348.5
Distribution and Collection Support Services	730.1	696.1	743.0	677.1	710.8	710.8
Dos Rios Service Center	-	-	-	-	622.2	622.2
Eastern Service Centers	11,775.9	14,351.7	11,426.2	10,868.4	10,301.1	10,301.1
Fleet Management	7,367.0	8,885.2	9,388.0	7,829.9	8,290.4	8,288.5
Medio Creek Service Center	-	-	-	-	652.0	652.0
Western Service Centers	10,036.6	13,062.6	10,094.6	9,691.8	7,887.3	7,887.3
O&M Before Capitalized Cost Total	39,571.1	49,776.1	44,162.6	41,316.2	41,096.5	41,088.2
Capitalized Cost	(5,992.9)	(5,051.9)	(5,519.9)	(4,713.6)	(4,773.4)	(4,765.5)
Intercenter Transfers	(125.6)	(107.2)	(944.9)	-	-	-
Net Change in Equity Total	\$ 33,452.5	\$ 44,617.0	\$ 37,697.7	\$ 36,602.6	\$ 36,323.1	\$ 36,322.7

AUTHORIZED POSITIONS BY DEPARTMENT	2010 Adopted Budget	2011 Adopted Budget	2012 Amended Budget	2013 Adopted Budget	2013 Amended Budget
Office of the VP - Distribution and Collection	2	2	2	2	2
Construction and Maintenance	117	131	123	151	151
Distribution and Collection Support Services	12	13	13	13	13
Dos Rios Service Center	-	-	-	12	12
Eastern Service Centers	157	154	155	140	140
Fleet Management	47	49	49	48	48
Medio Creek Service Center	-	-	-	9	9
Western Service Centers	149	149	146	111	111
Total Authorized Positions	484	498	488	486	486



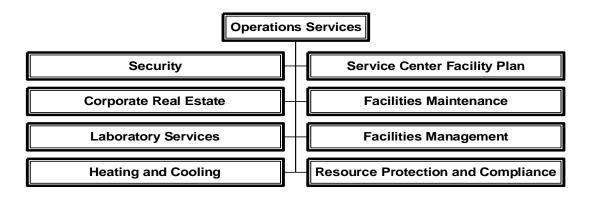
#### **OPERATIONS SERVICES**

The **Operations Services Group** includes seven departments - each with specific objectives, yet collectively designed to support the work needs of employees and their environment. This includes providing functional work areas, well maintained facilities, a proactive security program, dependable transportation, and other tools that allow employees to function efficiently and address the needs of their customers – both internal and external.

The Operations Services Group is also responsible for water quality management to help protect the health, safety and welfare of our residents and the environment. This includes oversight and regulation of land use activities, specifically over the Edwards Aquifer Recharge Zone, to prevent the degradation of water quality. This effort is ever changing and requires active participation with city representatives, developers, governmental agencies, and the general public.

Functions of the Individual departments within the Operations Services Group are:

- **Corporate Real Estate** Responsible for property acquisitions, dispositions and lease management activities associated with capital improvement projects. This includes researching title issues and providing information relating to System owned property to the public and other agencies.
- Environmental Laboratory Services Provides analytical services to internal business groups and one
  external client. Activities include sample testing, environmental and safety tests, regulatory reporting,
  analytical planning, training and quality assurance. The Lab was certified by the National
  Environmental Laboratory Accreditation Conference in 2008.
- Facilities Management/Maintenance
   Provides building management services at corporate headquarters including space planning, office reconfigurations, oversight of electrical and HVAC systems, building repairs and internal renovation projects; manages SAWS mail room and contracts for custodial, landscaping and cafeteria services at the headquarters. The area is also responsible for maintenance of buildings and grounds at SAWS service centers, treatment plants and lift stations. This includes internal and external building maintenance and repairs as well as landscaping, fencing, parking lots, gates and roads.
- Resource Protection & Compliance Implements a non-degradation policy for the Edwards aquifer
  and other potable aquifers to ensure water quality is protected. Staff manages regulatory programs of
  industrial wastewater customers discharging into the collection & treatment system, monitors best
  management practices at construction sites, and provides land use planning. This department utilizes
  an extensive sampling and monitoring network for compliance purposes.
- Security Responsible to manage the security program and associated activities for all SAWS
  personnel and properties. Staff monitors available threat-level information and escalates security
  procedures as necessary. They also develop strategies for regular, on-going security related
  communications with employees, response organizations and employees.
- **Service Center Facility Plan** Responsible for planning and coordinating the location, strategic placement of the facility and ensuring that the logistics and operations of the service center meets the needs of the System.
- Heating and Cooling Responsible for the production of chilled water and steam to provide thermal services to federal, city and private facilities in San Antonio.

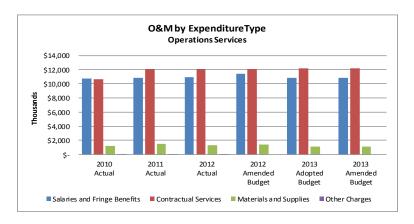


# **OPERATIONS SERVICES (Continued)**

EXPENDITURES BY TYPE	2010 Actual	2011 Actual	2012 Actual	2012 Amended Budget	ž.	2013 Adopted Budget	,	2013 Amended Budget
O&M Before Capitalized Cost				-				
Salaries and Fringe Benefits	\$ 10,745.4	\$ 10,839.4	\$ 10,924.3	\$ 11,425.5	\$	10,833.3	\$	10,833.3
Contractual Services	10,681.4	12,090.1	12,128.4	12,113.8		12,172.2		12,158.1
Materials and Supplies	1,245.5	1,512.4	1,299.4	1,383.5		1,155.8		1,155.8
Other Charges	0.3	0.2	2.1	-		-		-
Total O&M Before Capitalized Cost	22,672.6	24,442.1	24,354.2	24,922.7		24,161.3		24,147.2
Capitalized Cost	(1,048.0)	(934.5)	(935.6)	(1,216.6)		(1,182.2)		(1,180.1)
Intercenter Transfers	148.8	200.8	126.4	-		-		-
Net Change in Equity Total	\$ 21,773.3	\$ 23,708.4	\$ 23,544.9	\$ 23,706.1	\$	22,979.2	\$	22,967.1
Capital Outlay	\$ 102.8	\$ 24.7	\$ 538.8	\$ 521.7	\$	117.3	\$	234.5

EXPENDITURES BY DEPARTMENT	2010 Actual	2011 Actual	2012 Actual	2012 Amended	2013 Adopted	2013 Amended
				Budget	Budget	Budget
Office of VP - Operations Services	392.2	411.3	261.9	391.3	334.4	332.7
Corporate Real Estate Department	845.6	878.2	775.1	955.0	731.1	729.6
Facilities Maintenance	2,339.8	3,036.4	3,603.4	3,118.0	3,397.8	3,397.1
Facilities Management	1,979.8	2,057.6	2,008.5	1,965.0	1,801.5	1,801.5
Heating and Cooling Department	7,903.0	7,641.7	7,727.9	7,434.6	7,787.1	7,787.1
Laboratory Technical Services Department	1,885.8	1,908.4	1,648.8	2,131.1	1,714.6	1,711.6
Resource Protection & Compliance Div	4,988.8	5,498.3	5,697.6	6,281.3	5,715.2	5,709.6
Security	2,244.8	2,904.3	2,519.2	2,541.2	2,571.9	2,570.7
Service Center Facility Plan	92.8	105.8	112.0	105.3	107.8	107.4
O&M Before Capitalized Cost Total	22,672.6	24,442.1	24,354.2	24,922.7	24,161.3	24,147.2
Capitalized Cost	(1,048.0)	(934.5)	(935.6)	(1,216.6)	(1,182.2)	(1,180.1)
Intercenter Transfers	148.8	200.8	126.4	•	-	- 1
Net Change in Equity Total	\$ 21,773.3	\$ 23,708.4	\$ 23,544.9	\$ 23,706.1	\$ 22,979.2	\$ 22,967.1

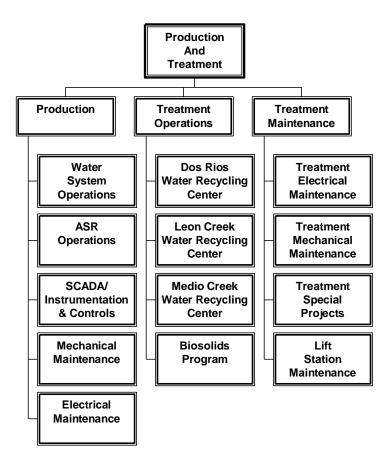
	2010	2011	2012	2013	2013
AUTHORIZED POSITIONS BY DEPARTMENT	Adopted	Adopted	Amended	Adopted	Amended
	Budget	Budget	Budget	Budget	Budget
Office of VP - Operations Services	3	3	3	4	4
Corporate Real Estate Department	9	8	9	8	8
Facilities Maintenance	28	28	28	26	26
Facilities Management	7	7	7	9	9
Heating and Cooling Department	29	29	22	21	21
Laboratory Technical Services Department	23	22	23	23	23
Resource Protection & Compliance Div	72	69	71	71	71
Security	8	8	10	10	10
Service Center Facility Plan	-	1	1	1	1
Total Authorized Positions	179	175	174	173	173



#### **PRODUCTION AND TREATMENT OPERATIONS**

The Production and Treatment Operations group reports directly to the Operations Group and provides the essential function of managing the 24-hour-a-day operation of the system. The group is responsible for the operation, maintenance, and repair of facilities and equipment involved in the production and pumping of potable water, the production, and operation of the System's water recycling facilities, which manage the mechanical and biological treatment and disinfection of wastewater, and the processing of wastewater biosolids for ultimate disposal. This group consists of the following departments:

- Production Manages, controls and operates the production of potable water for SAWS' customers.
- Treatment Operations Oversees all the operations of the water recycling centers for the system as well as manages all the biosollids to ensure proper disposal of the waste as to meet federal regulations.
- **Treatment Maintenance** Manages all the electrical, instrumentation, mechanical and recycle maintenance of SAWS' water recycling centers.

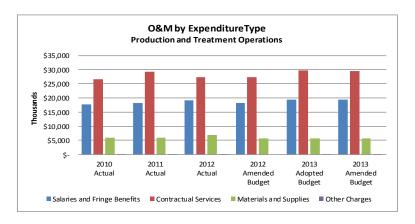


# PRODUCTION AND TREATMENT OPERATIONS (Continued)

EXPENDITURES BY TYPE	2010 Actual	2011 Actual	2012 Actual	2012 Amended Budget	,	2013 Adopted Budget	,	2013 Amended Budget
O&M Before Capitalized Cost						_		
Salaries and Fringe Benefits	\$ 17,815.8	\$ 18,118.8	\$ 19,070.1	\$ 18,121.5	\$	19,353.2	\$	19,353.2
Contractual Services	26,585.7	29,202.0	27,451.9	27,255.5		29,641.1		29,632.6
Materials and Supplies	5,972.7	6,053.4	6,998.2	5,679.9		5,799.7		5,799.7
Other Charges	1.9	3.6	0.3	-		0.7		0.7
Total O&M Before Capitalized Cost	50,376.1	53,377.8	53,520.5	51,056.9		54,794.7		54,786.2
Capitalized Cost	(2,334.2)	(1,226.0)	(1,168.9)	(3,487.6)		(2,320.6)		(2,319.9)
Intercenter Transfers	(319.5)	(259.7)	(485.3)	-		-		-
Net Change in Equity Total	\$ 47,722.4	\$ 51,892.0	\$ 51,866.3	\$ 47,569.3	\$	52,474.1	\$	52,466.3
	-	-	-	-		-		-
Capital Outlay	\$ 766.6	\$ 370.9	\$ 951.2	\$ 1,825.0	\$	907.0	\$	1,814.0

EXPENDITURES BY DEPARTMENT	2010 Actual	2011 Actual	2012 Actual	2012 Amended Budget	2013 Adopted Budget	2013 Amended Budget
Office of the VP - Production and Treatment	43.1	99.8	108.2	30.4	30.4	30.4
Production Department	24,919.4	27,333.5	25,432.1	26,694.1	27,686.3	27,684.2
Treatment Maintenance Management	8,789.3	9,284.7	10,164.6	8,057.3	8,855.3	8,851.1
Treatment Operations Management	15,859.2	15,869.7	16,908.0	15,435.8	17,357.7	17,355.5
Predictive Maintenance	765.2	790.0	907.8	839.3	865.0	865.0
O&M Before Capitalized Cost Total	50,376.1	53,377.8	53,520.5	51,056.9	54,794.7	54,786.2
Capitalized Cost	(2,334.2)	(1,226.0)	(1,168.9)	(3,487.6)	(2,320.6)	(2,319.9)
Intercenter Transfers	(319.5)	(259.7)	(485.3)	-	-	-
Net Change in Equity Total	\$ 47,722.4	\$ 51,892.0	\$ 51,866.3	\$ 47,569.3	\$ 52,474.1	\$ 52,466.3

AUTHORIZED POSITIONS BY DEPARTMENT	2010 Adopted Budget	2011 Adopted Budget	2012 Amended Budget	2013 Adopted Budget	2013 Amended Budget
Office of the VP - Production and Treatment	-	-	-	-	-
Production Department	100	100	100	98	98
Treatment Maintenance Management	104	105	105	107	107
Treatment Operations Management	78	78	76	80	80
Predictive Maintenance	13	13	12	12	12
Total Authorized Positions	295	296	293	297	297

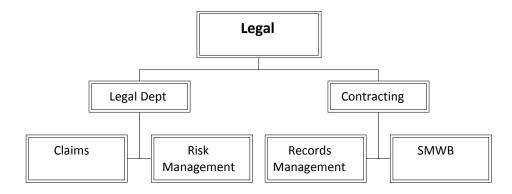


#### **L**EGAL

The Legal Group provides full service, in-house legal support to the SAWS' Board of Trustees, the President/CEO, the Executive Management Team, directors and managers. The range of legal expertise includes water resources, labor and employment, real estate, general transactional, environmental, and public law.

Legal also incorporates the following functions:

- Records Management Provides for efficient, economical, and effective controls over the
  creation, distribution, organization, maintenance, use, and disposition of all San Antonio Water
  System records consistent with the requirements of the Texas Local Government Records Act
  and best records management practice. Also coordinates responses to public information
  requests.
- **Claims** Operates as a small insurance claims office for SAWS. All Worker Compensation, casualty and subrogation claims handling originates in this department.
- Risk Management Manages all facets of SAWS Comprehensive Commercial Insurance Program. Through our agent of record, this area responds to inquiries from Legal, Contract Administration, Purchasing and Counter Services (water and sewage connection permits) about insurance matters. It also conducts premises risk assessments.
- **Contracting** Responsible for the administration of construction and professional services contracts. This includes contract preparation, solicitation, negotiation, acceptance, monitoring, compliance, approval of payments and closeout. The Contracting Department also coordinates and administers the Texas Water Development Board funding program.
- Small, Minority, and Women-Owned Business Program (SMWB) Responsible for developing and implementing SAWS small, minority and women-owned business program for procurement of goods and services.



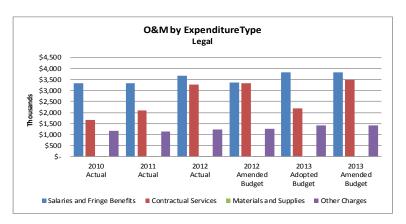
# LEGAL (Continued)

(\$ in thousands)

EXPENDITURES BY TYPE	2010 Actual	2011 Actual	2012 Actual	ļ	2012 Amended Budget	5	2013 Adopted Budget	 2013 mended Budget
O&M Before Capitalized Cost								
Salaries and Fringe Benefits	\$ 3,320.4	\$ 3,333.8	\$ 3,659.5	\$	3,354.2	\$	3,816.1	\$ 3,816.1
Contractual Services	1,654.6	2,101.4	3,283.7		3,324.7		2,175.5	3,471.3
Materials and Supplies	24.2	27.1	17.5		33.5		38.4	38.4
Other Charges	1,160.9	1,150.0	1,219.0		1,250.0		1,414.3	1,414.3
Total O&M Before Capitalized Cost	6,160.1	6,612.3	8,179.7		7,962.4		7,444.3	8,740.0
Capitalized Cost	(1,532.5)	(1,950.0)	(2,265.8)		(2,361.3)		(2,428.3)	(2,394.0)
Intercenter Transfers	(0.3)	(0.4)	(0.1)		-		-	-
Net Change in Equity Total	\$ 4,627.4	\$ 4,662.0	\$ 5,913.8	\$	5,601.1	\$	5,016.0	\$ 6,346.0
	-	-	_		-		_	-
Capital Outlay	\$ -	\$ -	\$ -	\$	-	\$	-	\$ -

EXPENDITURES BY DEPARTMENT	2010 Actual	2011 Actual	2012 Actual	2012 Amended Budget	2013 Adopted Budget	2013 Amended Budget
Contracting Department	1,377.1	1,526.7	1,669.4	1,475.1	1,875.7	1,874.1
Legal Department	4,783.0	5,085.6	6,510.3	6,487.3	5,568.5	6,866.0
O&M Before Capitalized Cost Total	6,160.1	6,612.3	8,179.7	7,962.4	7,444.3	8,740.0
Capitalized Cost	(1,532.5)	(1,950.0)	(2,265.8)	(2,361.3)	(2,428.3)	(2,394.0)
Intercenter Transfers	(0.3)	(0.4)	(0.1)	-	-	-
Net Change in Equity Total	\$ 4,627.4	\$ 4,662.0	\$ 5,913.8	\$ 5,601.1	\$ 5,016.0	\$ 6,346.0

	2010	2011	2012	2013	2013
AUTHORIZED POSITIONS BY DEPARTMENT	Adopted	Adopted	Amended	Adopted	Amended
	Budget	Budget	Budget	Budget	Budget
Contracting Department	17	17	18	22	22
Legal Department	20	20	21	22	22
Total Authorized Positions	37	37	39	44	44



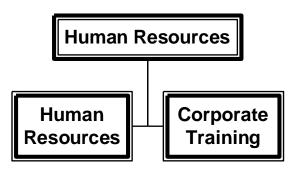
123

#### **HUMAN RESOURCES**

The Human Resource Group engages in attracting, training, and retaining a workforce of qualified employees to help SAWS in reaching its organizational goals and mission through a focus on safety, excellence and continuous improvement. This is accomplished through the functions listed below, which are performed by 2 departments: Human Resources and Corporate Training.

#### • Human Resources

- Employment and Staffing Provides staffing and recruiting services for internal and external candidates in order to fully meet the needs of our customers.
- Compensation & Benefits Plans, develops and manages the employees' compensation and benefit programs to ensure than competitive and cost-effective plans and programs are in place.
- Employee Development & Communications Develops and administers a variety of employee development and communications programs including career development, orientations, education assistance, mentoring and internship programs.
- Wellness Coordinates system-wide wellness programs to enhance employee health while promoting programs to minimize future cost increases for medical care.
- Corporate Training Establishes training objectives and strategies that integrate with SAWS strategic plan and implements both in-house and off-site employee training for career and selfdevelopment.



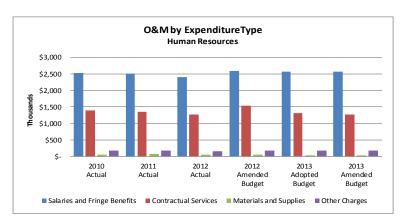
2013 Annual Budget

# **HUMAN RESOURCES (Continued)**

EXPENDITURES BY TYPE	2010 Actual		2011 Actual	2012 Actual	2012 Amended Budget	ž.	2013 Adopted Budget	2013 mended Budget
O&M Before Capitalized Cost								
Salaries and Fringe Benefits	\$ 2,528.7	\$	2,502.3	\$ 2,413.8	\$ 2,593.3	\$	2,563.2	\$ 2,563.2
Contractual Services	1,404.3	1	1,361.1	1,281.1	1,545.8		1,323.1	1,267.4
Materials and Supplies	61.5		68.2	63.5	59.6		39.2	39.2
Other Charges	174.2		186.8	161.5	175.1		188.2	188.2
Total O&M Before Capitalized Cost	4,168.7		4,118.3	3,919.9	4,373.8		4,113.7	4,058.0
Capitalized Cost	-		-	-	-		-	-
Intercenter Transfers	-		-	-	-		-	-
Net Change in Equity Total	\$ 4,168.7	\$	4,118.3	\$ 3,919.9	\$ 4,373.8	\$	4,113.7	\$ 4,058.0
	-		-	-	-		-	-
Capital Outlay	\$ -	\$	-	\$ -	\$ -	\$	-	\$ -

EXPENDITURES BY DEPARTMENT	2010 Actual	2011 Actual	2012 Actual	2012 Amended Budget	2013 Adopted Budget	2013 Amended Budget
Office of the VP - Human Resources	735.4	630.5	645.0	701.1	582.1	580.3
Corporate Training	1,377.9	1,478.5	1,388.4	1,472.9	1,151.8	1,150.6
Human Resources Div	2,055.3	2,009.3	1,886.5	2,199.7	2,379.8	2,327.2
O&M Before Capitalized Cost Total Capitalized Cost	4,168.7	4,118.3	3,919.9	4,373.8	4,113.7	4,058.0
Intercenter Transfers	-	-	-	-	-	-
Net Change in Equity Total	\$ 4,168.7	\$ 4,118.3	\$ 3,919.9	\$ 4,373.8	\$ 4,113.7	\$ 4,058.0

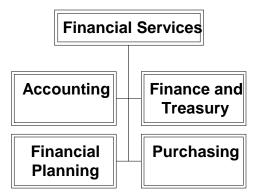
AUTHORIZED POSITIONS BY DEPARTMENT	2010 Adopted Budget	2011 Adopted Budget	2012 Amended Budget	2013 Adopted Budget	2013 Amended Budget
Office of the VP - Human Resources	5	5	5	5	5
Corporate Training	10	10	10	8	8
Human Resources Div	16	17	17	16	16
Total Authorized Positions	31	32	32	29	29



#### **FINANCIAL SERVICES**

The Financial Services Group ensures the utility's efficient operation by effectively managing and reporting on the corporate financial position, ensuring financial compliance with current legal and regulatory requirements, and providing timely financial support, services and guidance to internal and external stakeholders. This is accomplished through the following functions:

- Accounting Manages payroll, general records, property records, accounts payable and supply.
- **Finance and Treasury** Responsible for the securitization and overall management of the utility's debt, as well as investments, cash, and bank relationship management.
- **Financial Planning** Responsible for short and long-range financial plans and developing and implementing the budget.
- **Purchasing** Manages the processing and contracting of all purchasing requests for materials, supplies and services.

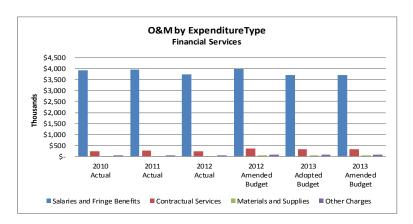


# FINANCIAL SERVICES (Continued)

EXPENDITURES BY TYPE	2010 Actual	2011 Actual	2012 Actual	2012 Amended Budget	ž.	2013 Adopted Budget	2013 mended Budget
O&M Before Capitalized Cost							
Salaries and Fringe Benefits	\$ 3,924.7	\$ 3,946.9	\$ 3,729.6	\$ 3,979.0	\$	3,713.3	\$ 3,713.3
Contractual Services	240.4	272.7	250.1	364.0		325.1	320.5
Materials and Supplies	6.2	23.6	38.8	57.5		59.8	59.8
Other Charges	65.2	44.6	41.2	87.8		73.9	73.9
Total O&M Before Capitalized Cost	4,236.6	4,287.8	4,059.8	4,488.4		4,172.0	4,167.4
Capitalized Cost	(713.1)	(947.9)	(896.3)	(993.9)		(978.2)	(976.7)
Intercenter Transfers	1.2	(1.2)	(0.6)	-		-	-
Net Change in Equity Total	\$ 3,524.6	\$ 3,338.7	\$ 3,162.8	\$ 3,494.5	\$	3,193.8	\$ 3,190.7
				·			
Capital Outlay	\$ -	\$ -	\$ -	\$ -	\$	-	\$ -

EXPENDITURES BY DEPARTMENT	2010 Actual	2011 Actual	2012 Actual	2012 Amended Budget	2013 Adopted Budget	2013 Amended Budget
Office of the CFO	317.0	332.8	335.3	334.6	309.4	308.2
Accounting	2,221.3	2,331.6	2,254.6	2,419.8	2,349.5	2,349.4
Financial Planning	717.5	648.2	597.4	687.9	632.8	632.4
Purchasing	633.8	633.2	539.1	635.6	506.3	505.2
Treasury	346.9	341.9	333.4	410.7	374.0	372.3
O&M Before Capitalized Cost Total	4,236.6	4,287.8	4,059.8	4,488.4	4,172.0	4,167.4
Capitalized Cost	(713.1)	(947.9)	(896.3)	(993.9)	(978.2)	(976.7)
Intercenter Transfers	1.2	(1.2)	(0.6)	-	-	-
Net Change in Equity Total	\$ 3,524.6	\$ 3,338.7	\$ 3,162.8	\$ 3,494.5	\$ 3,193.8	\$ 3,190.7

AUTHORIZED POSITIONS BY DEPARTMENT	2010 Adopted Budget	2011 Adopted Budget	2012 Amended Budget	2013 Adopted Budget	2013 Amended Budget
Office of the CFO	2	2	2	2	2
Accounting	38	38	37	36	36
Financial Planning	8	8	8	8	8
Purchasing	7	7	7	6	6
Treasury	3	3	3	3	3
Total Authorized Positions	58	58	57	55	55

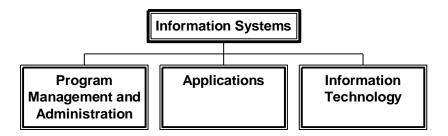


#### **INFORMATION SYSTEMS**

Information Services seamlessly delivers quality, cost effective information technology services, promoting innovation, sustaining growth and enabling SAWS to better serve our community. Information Services delivers a broad spectrum of applications and technology services and supports all areas of SAWS.

## This is accomplished through:

- Information Technology provides the following services: Data Center Services, Network Engineering Services, IP Telephony Services (Telephone, Radio and Call Center system), Computer Operations, Print Shop Services, Client Services and Desktop Support Services.
- **Applications** responsible for developing, implementing, maintaining and upgrading internal business applications and interfaces as well as business process analysis.
- Program Management and Administration provides the following services: program
  management, testing, change control and quality assurance, project management, and overall
  administrative support for Information Systems and SAWS programs

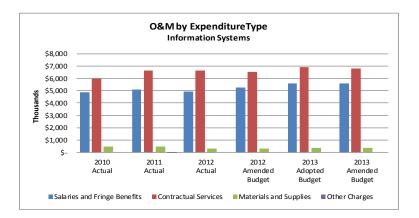


## **INFORMATION SYSTEMS (Continued)**

EXPENDITURES BY TYPE		2010 Actual	2011 Actual	2012 Actual	2012 Amended Budget	:	2013 Adopted Budget	2013 mended Budget
O&M Before Capitalized Cost								
Salaries and Fringe Benefits	\$	4,872.3	\$ 5,082.8	\$ 4,941.5	\$ 5,244.9	\$	5,607.8	\$ 5,607.8
Contractual Services		6,001.8	6,610.7	6,660.4	6,553.9		6,903.6	6,792.1
Materials and Supplies		499.1	501.8	339.2	326.6		360.7	360.7
Other Charges	1	-	1.0	-	-		-	-
Total O&M Before Capitalized Cost		11,373.2	12,196.2	11,941.1	12,125.4		12,872.1	12,760.6
Capitalized Cost		(1,056.2)	(771.9)	(762.4)	(1,016.2)		(1,139.8)	(1,138.2)
Intercenter Transfers		(0.3)	(0.9)	(0.4)	- 1		-	- 1
Net Change in Equity Total	\$	10,316.7	\$ 11,423.3	\$ 11,178.3	\$ 11,109.3	\$	11,732.2	\$ 11,622.3
Capital Outlay	\$	2,207.9	\$ 2,000.2	\$ 1,964.8	\$ 1,834.6	\$	1,780.0	\$ 1,780.0

EXPENDITURES BY DEPARTMENT	2010 Actual	2011 Actual	2012 Actual	2012 Amended Budget	2013 Adopted Budget	2013 Amended Budget
Application Services Section	1,740.3	2,420.3	2,515.2	2,529.8	2,575.6	2,571.1
Information Technology	8,373.3	8,819.7	8,575.9	8,510.1	9,217.8	9,113.0
Program Management and Administration	1,259.5	956.2	850.0	1,085.6	1,078.6	1,076.5
O&M Before Capitalized Cost Total	11,373.2	12,196.2	11,941.1	12,125.4	12,872.1	12,760.6
O&M Before Capitalized Cost Total	11,373.2	12,196.2	11,941.1	12,125.4	12,872.1	12,760.6
Capitalized Cost	(1,056.2)	(771.9)	(762.4)	(1,016.2)	(1,139.8)	(1,138.2)
Intercenter Transfers	(0.3)	(0.9)	(0.4)	-	-	-
Net Change in Equity Total	\$ 10,316.7	\$ 11,423.3	\$ 11,178.3	\$ 11,109.3	\$ 11,732.2	\$ 11,622.3

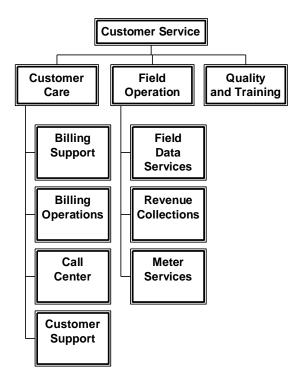
AUTHORIZED POSITIONS BY DEPARTMENT	2010 Adopted Budget	2011 Adopted Budget	2012 Amended Budget	2013 Adopted Budget	2013 Amended Budget
Application Services Section	15	15	15	15	15
Information Technology	37	38	37	37	37
Program Management and Administration	9	9	9	9	9
Total Authorized Positions	61	62	61	61	61



#### **CUSTOMER SERVICE**

The Customer Service Group is responsible for providing the highest level of service to SAWS customers at all times, responding in the most expedient and professional manner possible. This group is also responsible for the accurate and timely billing of SAWS customers and the maintenance of customer accounts. This is accomplished by 3 departments — Customer Care, Field Operation, and Quality — performing the following functions:

- **Billing Support** Ensures customer billing is accurate and timely; provides support for the billing process; validates consumption prior to billing, and responds to and resolves high bill inquiries.
- **Billing Operations** Coordinates specialized billing programs such as the Flat Rate Sewer Program, Stormwater Billing, and Ancillary Billing.
- **Call Center** Serves as the primary liaison between SAWS and its customers; promptly handles all inbound telephone customer inquiries regarding billing, account information, service problems, and payments.
- Customer Support Operates three full service walk-in locations and manages Remittance
   Processing, which processes all payments received by mail and summarizes payments collected
   from pay stations throughout our service area.
- **Field Data Services** Ensures all meter reads are collected and accurate as the first step in the billing process.
- Revenue Collections Dedicated to reducing and mitigating revenue losses to SAWS associated with theft or unauthorized use of services, as well as proactively collecting revenue from delinquent accounts.
- Meter Services Ensures meter equipment remains functional and operational.
- Quality and Training Responsible for training and process improvements throughout the various divisions in Customer Service

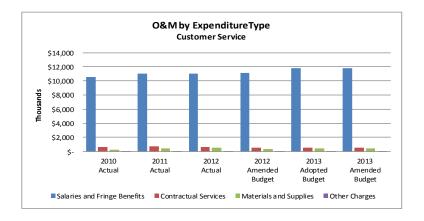


# **CUSTOMER SERVICE (Continued)**

EXPENDITURES BY TYPE	2010 Actual	2011 Actual	2012 Actual	2012 Amended Budget	•	2013 Adopted Budget	ļ	2013 Amended Budget
O&M Before Capitalized Cost								
Salaries and Fringe Benefits	\$ 10,597.1	\$ 11,013.6	\$ 11,016.8	\$ 11,092.4	\$	11,829.5	\$	11,829.5
Contractual Services	655.4	796.5	687.0	588.3		528.9		512.7
Materials and Supplies	296.3	489.8	537.2	348.4		416.3		416.3
Other Charges	0.3	3.5	3.8	5.4		5.6		5.6
Total O&M Before Capitalized Cost	11,549.1	12,303.4	12,244.8	12,034.5		12,780.2		12,764.0
Capitalized Cost	(613.5)	(519.3)	(369.3)	(353.7)		(479.8)		(479.8)
Intercenter Transfers	82.5	35.7	56.7	-		-		- '
Net Change in Equity Total	\$ 11,018.1	\$ 11,819.8	\$ 11,932.1	\$ 11,680.8	\$	12,300.4	\$	12,284.2
Capital Outlay	\$ _	\$ _	\$ 45.0	\$ 41.5	\$	280.5	\$	280.5

EXPENDITURES BY DEPARTMENT	2010 Actual	2011 Actual	2012 Actual	2012 Amended Budget	2013 Adopted Budget	2013 Amended Budget
Customer Service Administration	251.0	274.9	429.0	252.9	517.4	515.6
Customer Care	4,709.3	4,904.7	4,514.4	4,975.6	4,854.4	4,847.4
Field Operations	6,183.9	6,646.7	6,861.5	6,264.6	6,694.0	6,686.6
Quality and Training	404.8	477.0	439.9	541.4	714.4	714.4
O&M Before Capitalized Cost Total	11,549.1	12,303.4	12,244.8	12,034.5	12,780.2	12,764.0
Capitalized Cost	(613.5)	(519.3)	(369.3)	(353.7)	(479.8)	(479.8)
Intercenter Transfers	82.5	35.7	56.7	-	-	-
Net Change in Equity Total	\$ 11,018.1	\$ 11,819.8	\$ 11,932.1	\$ 11,680.8	\$ 12,300.4	\$ 12,284.2

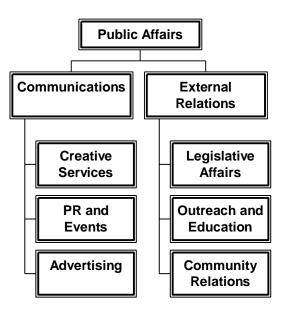
AUTHORIZED POSITIONS BY DEPARTMENT	2010 Adopted Budget	2011 Adopted Budget	2012 Amended Budget	2013 Adopted Budget	2013 Amended Budget
Customer Service Administration	3	2	2	6	6
Customer Care	95	98	99	91	91
Field Operations	115	120	120	121	121
Quality and Training	8	7	8	11	11
Total Authorized Positions	221	227	229	229	229



#### **PUBLIC AFFAIRS**

The Public Affairs Group engages in proactive strategic outreach and partnerships to inform and involve SAWS customer and stakeholders, driving the image and success of the organization. This is accomplished through:

- Communications Encompasses media relations for accuracy in news coverage concerning SAWS and advertising for building and maintaining awareness of corporate programs, projects and image. This department handles internal and external publications, including newsletters, brochure development, internet, intranet, marketing brochures, audio/video presentation support, video production, etc.
- External Relations Covers all community outreach efforts such as community relations with: neighborhood leaders; governmental relations with elected officials and agencies; and youth education in developing tomorrow's informed water consumers.

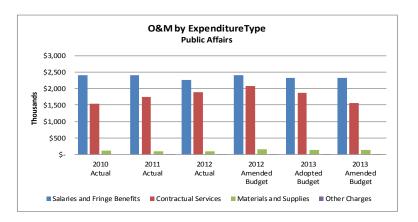


# PUBLIC AFFAIRS (Continued)

EXPENDITURES BY TYPE	2010 Actual	2011 Actual	2012 Actual	2012 Amended Budget	t .	2013 Adopted Budget		2013 nended Budget
O&M Before Capitalized Cost								
Salaries and Fringe Benefits	\$ 2,401.9	\$ 2,399.3	\$ 2,264.3	\$ 2,405.3	\$	2,324.4	\$	2,324.4
Contractual Services	1,531.2	1,736.9	1,890.7	2,068.3		1,861.6		1,568.4
Materials and Supplies	122.0	103.8	103.9	159.4		130.4		130.4
Other Charges	-	5.1	0.1	0.5		3.1		3.1
Total O&M Before Capitalized Cost	4,055.1	4,245.2	4,259.1	4,633.5		4,319.5		4,026.3
Capitalized Cost	(777.2)	(790.6)	(775.7)	(865.1)		(857.0)		(791.9)
Intercenter Transfers	7.3	- 1	-	-		-		-
Net Change in Equity Total	\$ 3,285.1	\$ 3,454.6	\$ 3,483.3	\$ 3,768.4	\$	3,462.5	\$	3,234.4
Oswitel Outland								
Capital Outlay	\$ -	\$ -	\$ -	\$ -	\$	-	\$	-

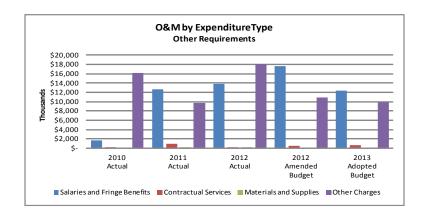
EXPENDITURES BY DEPARTMENT	2010 Actual	2011 Actual	2012 Actual	2012 Amended Budget	2013 Adopted Budget	2013 Amended Budget
Public Affairs Administration	454.6	364.6	332.4	398.7	377.3	376.1
Communications	1,459.6	1,707.5	1,841.0	2,048.2	1,792.7	1,517.0
External Relations	2,140.9	2,173.1	2,085.6	2,186.5	2,149.4	2,133.2
O&M Before Capitalized Cost Total Capitalized Cost Intercenter Transfers	4,055.1 (777.2) 7.3	4,245.2 (790.6)	4,259.1 (775.7)	4,633.5 (865.1)	4,319.5 (857.0)	4,026.3 (791.9)
Net Change in Equity Total	\$ 3,285.1	\$ 3,454.6	\$ 3,483.3	\$ 3,768.4	\$ 3,462.5	\$ 3,234.4

AUTHORIZED POSITIONS BY DEPARTMENT	2010 Adopted Budget	2011 Adopted Budget	2012 Amended Budget	2013 Adopted Budget	2013 Amended Budget
Public Affairs Administration	4	4	3	3	3
Communications	12	12	13	13	13
External Relations	16	16	16	16	16
Total Authorized Positions	32	32	32	32	32



## **OTHER REQUIREMENTS**

EXPENDITURES BY TYPE	2010 Actual	2011 Actual	2012 Actual		2012 Amended Budget		2013 Adopted Budget		2013 mended Budget
O&M Before Capitalized Cost									
Salaries and Fringe Benefits	\$ 1,705.4	\$ 12,573.0	\$ 13,784.3	\$	17,544.5	\$	12,355.8	\$	15,295.0
Contractual Services	192.3	987.2	263.1		493.7		562.0		569.1
Materials and Supplies	-	92.5	8.9		-		-		-
Other Charges	16,182.1	9,648.1	18,047.0		10,844.9		9,805.1		9,605.1
Total O&M Before Capitalized Cost	18,079.7	23,300.8	32,103.3		28,883.1		22,722.9		25,469.2
Capitalized Cost Intercenter Transfers	(2,008.5) -	(2,874.9) -	(4,210.6) -		(3,767.7) -		(2,616.0) -		(2,924.7) -
Net Change in Equity Total	\$ 16,071.2	\$ 20,425.9	\$ 27,892.6	\$	25,115.4	\$	20,106.9	\$	22,544.5
Capital Outlay	\$ -	\$ -	\$ -	\$	-	\$	-	\$	-



## **AUTHORIZED POSITIONS**

The 2013 Budget includes funding for 1,797 positions: 1,752 full-time and 45 part-time. There were 21 new full-time positions and 28 part-time positions added during the 2013 budget process.

- Twenty-one (21) positions were added to enhance ongoing efforts to reduce sanitary sewer overflows. These new position will be located in the Operations Group initially.
- Water Resources and Conservation added eighteen (18) part-time Conservation Enforcement
  Officers. These Conservation Enforcement Officers are off-duty San Antonio Police Officers who
  will work on an as-needed basis when the Edwards Aquifer level at the J-17 well falls below 660
  feet. They provide an important role in the enforcement of the City of San Antonio's drought
  management rules.
- Legal added one full-time Claims Adjuster to support Claims activity.
- Nine (9) paid intern positions, classified as part-time, were included in the budget, six in
  Engineering and Construction, and three in Water Resource and Conservation. The Internship
  Program affords opportunities to all levels of college students to have a unique hands-on
  experience in an industry or functional area of interest. Interns are limited to working 1,000
  hours per calendar year.

Periodically, positions and resources are reallocated among different areas of the organization in order to better meet current and future needs. In such instances, where possible, prior year authorized position levels have been restated in order to be consistent with the current year organizational structure.

The following table summarizes authorized positions by organizational unit.

		2010			2011			2012			2013	
	Full	Part		Full	Part		Full	Part		Full	Part	
	Time	Time	Total									
Board of Trustees and Pres/CEO	13	-	13	13	-	13	13	-	13	13	-	13
Engineering and Construction Group	202	10	212	201	3	204	200	3	203	209	9	218
Water Resources and Conservation Group	54	5	59	50	5	55	50	5	55	42	26	68
Operations Group			-			-			-	90	2	92
Maintenance Planning	29		29	29		29	28		28			-
Distribution and Collection Operations Group	437	-	437	437	12	449	437	2	439	484	2	486
Operations Services Group	194	3	197	193	2	195	199	2	201	171	2	173
Production and Treatment Operations	349	-	349	350	-	350	347	-	347	296	1	297
Legal Group	14	1	15	14	1	15	14	1	15	42	2	44
Human Resources Group	48	2	50	50	1	51	50	2	52	29	-	29
Financial Services Group	71	2	73	72	1	73	72	1	73	55	-	55
Information Systems	61	-	61	62	-	62	61	-	61	61	-	61
Customer Service	221	-	221	227	-	227	229	-	229	229	-	229
Public Affairs	32	-	32	31	1	32	31	1	32	31	1	32
Total Authorized Positions	1,725	23	1,748	1,729	26	1,755	1,731	17	1,748	1,752	45	1,797

This page intentionally left blank



This page intentionally left blank

## **CAPITAL IMPROVEMENT PROGRAM**

The Capital Improvement Program (CIP) is a multi-year plan for implementing projects that support water supply, water delivery, wastewater collection, wastewater treatment, and heating and cooling infrastructure needs in the SAWS service area. The CIP is a financial planning and management tool that identifies facility and equipment requirements, and schedules funding for their implementation.

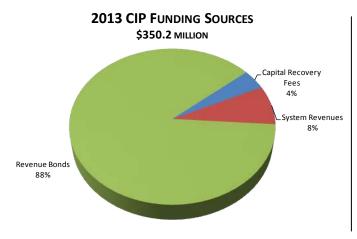
The provision of water, wastewater and heating and cooling services is very capital intensive. As of 12/31/2012, the net book value of SAWS capital assets was nearly \$3.8 billion. Continued capital investment is necessary in order to replace aging infrastructure and minimize service interruption, comply with state and federal laws and permits, and develop additional capacity and support growth within our service area.

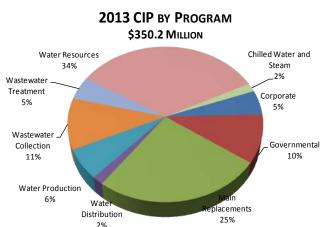
While many utilities have traditionally based their infrastructure replacement schedules solely on age, SAWS is moving toward a more sophisticated, condition-based approach. This allows us to extend the useful lifespan of pipes that have aged well, while more aggressively pursuing replacement of those with the highest likelihood of failure. This process leverages our financial resources to sustain the high quality, reliable service SAWS customers have come to expect, while helping to maintain rate stability – now and in the future.

Over the next five years, SAWS projects an investment in excess of \$1.8 billion to:

- Replace aging infrastructure and maintain compliance with the Clean Water Act
- Develop new water resources
- Develop additional capacity

The 2013 amended budget is projected to cost \$350.2 million, which is an increase of \$134.7 million over the 2012 budget. This increase relates primarily to the planned construction of SAWS brackish desalination plant as well as additional wastewater capital expenditures supporting SAWS' accelerated SSO reduction efforts.





### **CAPITAL IMPROVEMENT PROGRAM PLANNING PROCESS**

The 2012 program was developed using a refined prioritization process which started in 2006. Projects submitted by Treatment, Production, Master Planning, Facilities Engineering, and the Distribution and Collection departments were reviewed and scored by a CIP Planning Group consisting of vice presidents, directors and managers responsible for CIP execution. The scoring process addresses the business risk exposure, independent of available funds, through a derivative of the Failure Modes and Effects Analysis (FMEA) methodology. FMEA provides a structured approach to the analysis of risk through a composite index that considers potential impact of failure, probability of occurrence, and ability to mitigate the impact. Projects are totaled by dollar amount and compared to the long term funding strategy, and final selection is made by SAWS' Executive Management Team and approved by SAWS' Board of Trustees. Other criteria used to prioritize projects included project coordination, impact to the annual Operations and Maintenance budget, improved customer service, regulatory mandates, criticality, priority in relation to other projects and availability of funds.

#### Sources of Funds - Capital Improvement Program Funding

The capital improvement program is funded from several sources: system revenues, proceeds from revenue bonds and capital recovery fees. Funds from these sources are accounted for in the Renewal and Replacement Fund and the Project Fund, which are described below.

(\$ in thousands)	Water Supply		Water Delivery			Wastewater	Chilled Water and Steam			Grand Total
Capital Recovery Fees	\$	6,000	\$	3,789	\$	4,551	\$	-	\$	14,340
System Revenues		8,695		8,701		11,064		-		28,460
Revenue Bonds		\$104,207		\$52,716		\$144,258		\$6,170		307,351
Total Sources of Funds	\$	118,902	\$	65,206	\$	159,873	\$	6,170	\$	350,151

Sources of funding for the 2013 CIP program are summarized below:

#### **SYSTEM REVENUES**

Revenues are used to meet the requirements of Ordinance No. 75686, which created the San Antonio Water System. After funding maintenance and operation expenses and debt service requirements, revenues must be sufficient to distribute equal amounts to the City of San Antonio's General Fund and the SAWS Renewal and Replacement Fund. Any revenues in excess of these obligations are available for deposit to the SAWS Renewal and Replacement Fund. This fund is primarily used for property acquisition and capital improvements.

#### REVENUE BONDS AND TAX EXEMPT COMMERCIAL PAPER

Proceeds from the issuance of revenue bonds and Tax Exempt Commercial Paper (TECP) are also used capital improvements. SAWS is authorized to issue up to \$500 million in TECP to be used for interim financing for a portion of the capital improvement program. Revenue bonds are issued to finance capital projects and to refund outstanding TECP. Any proceeds received from the issuance of revenue bonds and TECP are deposited into the Project Fund and may only be used for capital improvements and system expansion.

#### **CAPITAL RECOVERY FEES**

Capital Recovery Fees are designed to recoup the cost of capital expenditures used to meet the needs of new customers. These include impact fees – collected in accordance with Chapter 395 of the Local Government Code – and user connection fees. Expenditure of impact fees collected may only be used to fund growth-related projects as identified in the 2011-2020 Land Use Assumptions Plan, Capital Improvement Plan, and Maximum Water and Wastewater Impact Fees Report.

## **CAPITAL IMPROVEMENT PROGRAM BY CORE BUSINESS**

The CIP supports four core business areas:

- Water Delivery
- Wastewater
- Water Supply
- Heating and Cooling

The projected CIP is summarized by core business in the table below:

(\$ in thousands)	Water	Supply	Wate	r Delivery	W	astewater	 l Water Steam	Gra	and Total
Corporate	\$	-	\$	8,950	\$	8,791	\$ -	\$	17,741
Governmental		-		16,548		18,693	-		35,241
Main Replacements		-		11,682		78,128	-		89,810
Water Distribution		-		5,970		-	-		5,970
Water Production		-		22,057		-	-		22,057
Wastewater Collection		-		-		37,360	-		37,360
Wastewater Treatment		-		-		16,901	-		16,901
Water Resources		118,901		-		-	-		118,901
Chilled Water and Steam		-		-		-	6,170		6,170
Total	\$	118,901	\$	65,207	\$	159,873	\$ 6,170	\$	350,151

#### **WASTEWATER COLLECTION AND TREATMENT**

SAWS is currently engaged in negotiations with the U.S. Environmental Protection Agency (EPA) concerning the terms of a potential consent decree that, if approved and adopted, will require SAWS to expand its programs to reduce the occurrence of sanitary sewer overflows (SSO's). As a consequence, of the \$159.9 million budgeted in total for all Wastewater CIP projects in 2013, \$115.37 million is directed toward funding of capital projects designed to identify and address SSO's (\$34.9 million), and to rehabilitate aging sewer infrastructure to minimize future SSO occurrence (\$80.4 million).

## Sanitary Sewer Overflow (SSO) Reduction Program (\$34.9 million)

Sewer Pipe Rehabilitation – \$32.1 million

Sewer system management includes the rehabilitation of sewer pipelines and manholes that contribute to SSOs due to compromised structural condition.

Sewer System Capacity Program – \$2.8 million

The regular assessment of sewer system flows identifies the need to replace or construct new sewer pipelines to alleviate capacity constraints that contribute to SSOs.

#### Aging Sewer Infrastructure Rehabilitation (\$80.4 million)

• Sewer Infrastructure Renewal and Rehabilitation – \$43.1 million

Ongoing annual renewal and rehabilitation of sewer infrastructure occurs as required under various conditions such as in situations of emergency and compromised integrity. The work is performed by SAWS crews or contractors, and can require external engineering design services.

Major Sewer Replacement Projects - \$33.8 million

Design and/or construction will be performed in 2013 on four specific major sewer replacement projects identified by the SAWS Wastewater Master Plan to address capacity deficiencies and/or conditional defects thereby serving to reduce SSO's.

Lift Station Elimination – \$3.5 million

At times, wastewater flow must be forced uphill by a lift station, but the preference is for wastewater to flow through sewer mains via gravity. The 2013 budget includes funding for the elimination of 2 lift stations, which will be replaced with gravity sewer mains.

### Additional Wastewater Improvements (\$44.4 million)

## Governmental Sewer System Projects – \$18.7 million

SAWS coordinates with other governmental agencies to relocate, replace or rehabilitate sewer infrastructure as part of non-SAWS infrastructure projects planned by other agencies. Required work can include maintenance or capital improvement projects performed by the Texas Department of Transportation, Bexar County, San Antonio River Authority, and City of San Antonio's Bond Program.

#### • Water Recycling Center Improvements - \$16.9 million

Upgrades and improvements to equipment, systems and facilities at the Dos Rios, Leon Creek and Medio Creek water recycling centers.

## • Other Improvements - \$8.8 million

- Information Systems Support includes plans for a Wastewater CIP Management Software System, Customer Information Software System, and an IBM mainframe upgrade.
- Service Crew Dispatch Center improved efficiencies for sewer maintenance and response.

#### WATER DELIVERY PROGRAM

The Water Delivery system conveys water to customers through elevated and ground storage tanks, pump stations, transmission mains, and distribution mains. The Water Delivery CIP includes programs and projects designed to expand and improve water production, water storage, and transmission facilities in SAWS' service areas.

The 2013 CIP funds projects proposed in the Water Master Plan to ensure that sufficient potable water service is available to meet growth within SAWS' service area. The selection of projects helps maintain the implementation schedule for water production, distribution, and storage facility improvements recommended in the Water Infrastructure Master Plan. Upgrades, replacements and rehabilitations of production facilities to maintain system integrity and meet Texas Commission on Environmental Quality (TCEQ) requirements are also included.

The 2013 Water Delivery CIP continues to focus on:

## Governmental water projects - \$16.5 million

Repairing and adjusting water mains in conjunction with the City of San Antonio's bond program and also supporting CIP requirements in coordination with other governmental agencies.

## **Production Renewal and Replacement**

The repair and replacement portion also addresses water infrastructure by continuing an ongoing program to bring critical pump stations to current standards. To this effort, the 2013 water delivery program funds

## Nacogdoches Pump Station - \$15.0 million / Basin Pump Station \$4.6 million

These projects are part of a multi-year program to rehabilitate primary and booster water production pump stations.

## • Tank Mixing Systems - Shields/Cross Mountain - \$1.2 million

This project involves the addition of a tank mixing and aeration system to reduce trihalomethane (TTHM) levels and ensure compliance with state and federal requirements.

### Main Replacements - \$11.7 million

Valves, services and meters - \$4.9 million

Installation or replacement of unserviceable valves, services, meters, fire hydrants, ant other water system appurtenances.

#### Meter Replacements - \$3.9 million

Replacement of aging water meters in defined geographical areas to improve meter accuracy and reduce the amount of unbilled for water.

#### Distribution System Growth - \$5.9 million

- Dominion Fire Flow Improvement \$3.2 million
- Hidden Springs Water System Improvement \$1.3 million

## **WATER SUPPLY PROGRAM**

The Water Supply Program is intended to execute projects that will provide ratepayers with the most viable and affordable options to secure current and future water supplies. These project recommendations are outlined in the 2012 Water Management Plan

#### Groundwater Desalination Plant Construction – \$98.2 million

SAWS already has wells in the ground for the region's first-ever groundwater desalination project. Water will begin flowing from the state-of-the-art reverse osmosis plant in southern Bexar County in 2016. The facility will reach its full production capacity of 30,525 acre-feet per year by 2026. Unlike San Antonio's Edwards Aquifer supply, the brackish groundwater in the Wilcox Aquifer is not subject to pumping restrictions during drought.

## Edwards Aquifer Rights Acquisition – \$11.0 million

The 2013 CIP budget includes funds to purchase approximately 2,180 acre-feet of Edwards Aquifer rights.

## Integration Pipeline Easements – \$5.8 million

As new water supplies are brought on line, foundational infrastructure must be built to transport that water throughout San Antonio. Acquiring right-of-way is a critical step to ensure the delivery system is in place when needed. The new pipeline will be capable of simultaneously moving water from the desalination plant and the local Carrizo Aquifer to high growth areas in western San Antonio.

## Regional Carrizo Project Pipeline – \$1.1 million

This project will supply SAWS ratepayers with the largest non-Edwards Aquifer water supply to date through an innovative and cost-saving infrastructure-sharing arrangement. By the end of 2013, up to 17,200 acre-feet per year of Carrizo Aquifer water piped to San Antonio in cooperation with the Schertz-Seguin Local Governmental Corporation and the Gonzales Water Supply Corporation.

## Recycle Water - \$2.7 Million

Through is Recycled Water Program, SAWS is able to provide 75,000 acre-feet of recycled water to irrigation and industrial customers as an alternative to potable water. The projects included in the 2013 CIP Budget will extend recycled water lines and develop additional infrastructure necessary to provide recycled water to new customers.

#### **HEATING AND COOLING PROGRAM**

The Central Heating and Cooling plant, located in the heart of downtown San Antonio, provides heating and cooling requirements to facilities owned by the City of San Antonio (COSA). The 2013 CIP budget includes \$6.2 million funding for:

- Replacement and adjustment of chilled water and steam facilities in conjunction with City of San Antonio projects
  - Market Street realignment and Hemisfair area street projects
  - Convention center expansion
- Chilled water and steam mains deterioration

## SIGNIFICANT NON-ROUTINE CAPITAL EXPENDITURES

The majority of SAWS' CIP projects provide for routine, ongoing expenditures for the repair of infrastructure and for the gradual replacement of various capital assets. Major projects that are typically "one time" in nature and involve the construction or expansion of new facilities or infrastructure, extensive renovation of existing facilities, the purchase of important capital assets, or the acquisition of new technology which will enhance service delivery could be considered significant non-routine capital expenditures. The 2013 CIP includes three projects, which are considered significant and non-routine, and account for \$ 16.6 million or 4.7% of the 2013 CIP. The projects are listed as follows:

- Enterprise Resource Software System (ERSS) This project is the continuation of a major implementation of an Enterprise Resource Software System (ERSS) that includes Customer Service, Financial, Human Resources, Work Order, and Permitting modules. This implementation is desired because the current legacy system is not integrated and does not provide all of the functionality required to run the business efficiently and effectively. To date, the Financial, Human Resources, Work Order, and Permitting modules have been successfully implemented. It is currently projected that an additional \$1.1 million will be required to complete the Customer Information System, with completion projected in 2013.
- Service Center Facility Plan Project The purpose of this project is to program, design, locate, and construct new Service Centers, Satellite Centers and make any required adjustments to the existing properties as a result of relocated staff. SAWS currently has mixed use at service centers by having Fleet, Distribution and Collection, and Production crews based at these service centers, which has compromised efficiencies and has increased congestion at the sites. Realignment would address these embedded inefficiencies in operations. The Service Center Facility Plan project will have multiple phases. The 2013 project budget of \$12.6 million will fund real estate acquisitions and architectural design. The design phase should continue through 2014, with construction expected to begin in the 4<sup>th</sup> quarter of 2014.
- CIP Program Management Software The purpose of this project is to acquire a robust, full
  functioning application that can be configured to manage SAWS capital programs/projects from
  initial planning through completion. This application will provide the features specific to
  facilitate CIP planning, budgeting, project financials, contract management and construction
  project management. The projected cost for 2013 is \$2.9 million.

## **ESTIMATED OPERATIONS AND MAINTENANCE COSTS FROM CAPITAL EXPENDITURES**

The cumulative operations and maintenance cost of the 2012 Water Management Plan from 2012 through 2030 is estimated to range from a minimum of \$1.2 billion to a maximum of \$2.6 billion. The costs shown in the following table reflect 3% annual inflation. The primary cost driver for the purpose of this calculation is the range of estimated costs shown for the Request for Competitive Sealed Proposal (RFCSP) project (see "Water Supply" section under the San Antonio Water System Profile).

## **Cumulative Operations and Maintenance Costs by Project**

Estimated Operations & Maintenance Costs (2012-2030)	2012 WMP - (Min)	2012 WMP - (Max)
Edwards Aquifer *	\$ 17,707,758	\$ 17,707,758
Brackish Desalination	166,695,955	166,695,955
Integration Pipeline	103,485,093	103,485,093
Expanded Carrizo	52,885,940	52,885,940
RFCSP **	884,000,000	2,237,795,000
Total Program Costs	\$ 1,224,774,747	\$ 2,578,569,747

<sup>\*</sup> Estimated O&M costs for the Edwards Aquifer do not include Aquifer Management Fees (AMF).

<sup>\*\*</sup> Estimated O&M costs for the RFCSP reflect the \$1,000/acre-ft (Min) and \$2,500/acre-ft (Max) range.

## **2013 CAPITAL IMPROVEMENT PROGRAM SUMMARY**

Category	Project Title	Phase	Estimated Cost	Programmed Amount
Wastewater				
	Service Center Facility Project Plan - WW Share	Acquisition	\$ 5,500,000	\$ 6,238,650
	IBM Mainframe Upgrade - WW Share	Acquisition	500,000	567,150
Corporate	ERSS Customer Information System - WW Share	Acquisition	500,000	567,150
	CIP Program Management Software	Acquisition	1,250,000	1,417,875
	Total		7,750,000	8,790,825
Collection	W-6: Western Watershed Sewer Relief Line – Project 2	Construction	13,000,000	14,745,900
Growth	Sewer Main Oversizing 2013	Construction	100,000	113,430
Growar	Total		13,100,000	14,859,330
	C-12 Donaldson Terrace	Design	1,286,707	1,459,512
	C-13 Broadway Corridor: N New Braunfels to Commerce	Construction	7,500,000	8,507,250
Collection R&R	C-33 Broadway Corridor: Carnahan to Mulberry	Construction	8,000,000	9,074,400
Comoditativitati	LS 11 and LS 111 Elimination	Construction	2,750,000	3,119,325
	Lift Stations 251, 267, 225 & 175 Elimination	Design	300,000	340,290
	Total		19,836,707	22,500,777
	Governmental Sewer Adjustments	Construction	1,980,000	2,245,914
Governmental	Governmental Sewer Installations	Construction	6,500,000	7,372,950
Sewer	Governmental Sewer Replacements	Construction	8,000,000	9,074,400
	Total		16,480,000	18,693,264
	Main Replacements - Sewer - SAWS Crews	Construction	3,325,000	3,771,548
	Sanitary Sewer Overflow Rehabilitation 2013	Construction	18,000,000	20,417,400
	Small Diameter Rehabilitation Program	Construction	24,332,459	27,600,308
	Large Diameter Rehabilitation Program	Construction	2,250,000	2,552,175
Main	Capacity Program	Construction	2,500,000	2,835,750
Replacement - Sewer	Manhole Rehabilitation Program	Construction	1,720,547	1,951,616
Sewer	Unspecified Services Engineering Contract Sewer	Design	2,000,000	2,268,600
	Open-Cut Sewer Pipe Replacement Contract	Construction	2,000,000	2,268,600
	San Antonio River Outfall Pipeline Rehabilitation	Construction	9,800,000	11,116,140
	Sewer Laterals 2013	Construction	2,950,000	3,346,185
	Total		68,878,006	78,128,322
	Dos Rios WRC Feasibility and Design for Sludge Conditioning and Dewatering	Design	1,525,000	1,729,808
	Dos Rios WRC Aeration and Secondary Settling Tank Improvements	Design	1,800,000	2,041,740
	Medio Creek WRC Process Piping Improvements	Design	100,000	113,430
Treatment R&R	Dos Rios WRC Digester Mixing and System Enhancements - Phase 2	•	11,000,000	12,477,300
	Dos Rios WRC Instrumentation and Control Upgrade	Design	200,000	226,860
	Leon Creek WRC Automation	Design	275,000	311,933
	Total	S	14,900,000	16,901,070
	TOTAL WASTEWATER		\$140,944,713	\$ 159,873,588

## **2013 CAPITAL IMPROVEMENT PROGRAM SUMMARY**

Category	Project Title	Phase	Estimated Cost	Programmed Amount
Water Delivery				
Water Delivery				
	Service Center Facility Project Plan - WD Share	Acquisition	5,500,000	6,351,400
	IBM Mainframe Upgrade - WD Share	Acquisition	500,000	577,400
Corporate	ERSS Customer Information System - WD Share	Acquisition	500,000	577,400
	CIP Program Management Software	Acquisition	1,250,000	1,443,500
	Total		7,750,000	8,949,700
	Hidden Springs Water System Improvement	Construction	1,149,404	1,327,332
	Install PRVs With Hidden Springs Project	Construction	70,000	80,836
Distribution	Water Main Oversizing 2013	Construction	1,000,000	1,154,800
Growth	Dominion Fire Flow Improvement	Construction	2,750,000	3,175,700
	Install PRVs With Dominion Fire Flow Project	Construction	200,000	230,960
	Total		5,169,404	5,969,628
	Governmental Water Adjustments	Construction	5,080,000	5,866,384
Governmental	Governmental Water Installations	Construction	1,200,000	1,385,760
Water	Governmental Water Replacements	Construction	8,050,000	9,296,140
	Total		14,330,000	16,548,284
	Meter Replacements	Construction	3,406,000	3,933,249
Main	Open Cut Water Contract	Construction	1,500,000	1,732,200
Replacement -	Unspecified Services Engineering Contract Water	Design	1,000,000	1,154,800
Water	Main Replacements - Water - SAWS Crews	Construction	10,000	11,548
	Valves, Services and Meters	Construction	4,200,000	4,850,160
	Total		10,116,000	11,681,957
	Chlorine System Upgrades	Design	600,000	692,880
	Tank Mixing Systems - Shields/Cross Mountain	Construction	1,000,000	1,154,800
Production	Winwood Disinfectant Treatment Process Change (MIOX)	Construction	500,000	577,400
R&R	Water Production Facility Upgrades Program Phase 8 - Nacogdoches	Construction	13,000,000	15,012,400
	Water Production Facility Upgrades Program Phase 4a - Basin	Construction	4,000,000	4,619,200
	Total		19,100,000	22,056,680
	TOTAL WATER DELIVERY		\$ 56,465,404	\$ 65,206,249

## **2013 CAPITAL IMPROVEMENT PROGRAM SUMMARY**

Category	Project Title	Phase	Estimated Cost	Programmed Amount
Water Supply				
Recycled	San Jose and Brooks Recycled Water Pump Station and Ground Stora	Construction	990,000	1,367,883
Water	Recycle Customer Lines	Construction	1,000,000	1,381,700
77 010	Total		1,990,000	2,749,583
	Desalination: Construction Manager at Risk (Construction Services)	Construction	84,280,000	98,034,496
	Desalination: Legal	Acquisition	100,000	116,320
Water	Edwards Aquifer Acquisitions Contract Advisory Services	Acquisition	64,438	64,922
Resources	Edwards Aquifer Water Rights	Acquisition	10,900,000	10,981,750
7100001000	Integration: Construction Management & Inspection	Construction	5,000,000	5,816,000
	Regional Carrizo: Well Mitigation Program	Construction	978,640	1,138,354
	Total		101,323,078	116,151,842
	TOTAL WATER SUPPLY		\$103,313,078	\$ 118,901,425
Heating & Cod	oling			
Heating &	Chilled Water Distribution Loop Isolation Valves/Meter Upgrades	Design	74,420	93,025
Cooling	Heating and Cooling Governmental Projects	Construction	4,761,817	5,952,271
Infrastructure	Heating and Cooling System Infrastructure 2013	Construction	100,000	125,000
	Total		4,861,817	6,170,296
	TOTAL HEATING & COOLING		\$ 4,861,817	\$ 6,170,296
	TOTAL CAPITAL IMPROVEMENT PROGRAM		\$305,585,012	\$ 350,151,557
			+550,000,012	Ţ 300, 10 1,007



This page intentionally left blank



## Wastewater

This page intentionally left blank



## PROJECT DESCRIPTION

Project: Service Center Facility Project Plan - WW Share

Programmed Amount: \$6,238,650

Core Business Wastewater Category: Corporate WW

Phase: Acquisition

Council District System wide

## PROJECT INFORMATION

Project Objective: Construction of new service center and spoils site.

## Description and Scope:

SAWS currently has increased risk by having fleet and production on the same site at the NWSC. This project will eliminate risk from code compliance issues at the facilities and decrease risk at production sites by relocating D&C crews away from tanks and wells.

#### Remarks:

Based on previous Operations Research assessment, this project will improve D&C response time at all facilities and allow for a master planned realignment that increases efficiencies in projection, RPC, and customer service.

## FAILURE ANALYSIS AND RISK RATINGS

Failure Mode: Failure Impact: Failure Root Cause:

Impact Severity Likelihood of Occurrence Risk Mitigation Risk Exposure

FUNDING INFORMATION LandYear: DesignYear: Construction Year
Amounts shown are estimated 2013 0 0

costs without SAWS overhead. \$5,500,000 \$0 \$0



## PROJECT DESCRIPTION

Project: IBM Mainframe Upgrade - WW Share

Programmed Amount: \$567,150
Core Business Wastewater
Category: Corporate WW

Phase: Acquisition

Council District System wide

## PROJECT INFORMATION

Project Objective: Upgrade a legacy system which is no longer supported.

Description and Scope:

New hardware and software to upgrade the system.

## Remarks:

If the existing mainframe crashes, it can take up to two months to recover.

## FAILURE ANALYSIS AND RISK RATINGS

Failure Mode: Failure Impact: Failure Root Cause:

Impact Severity Likelihood of Occurrence Risk Mitigation Risk Exposure

FUNDING INFORMATION LandYear: DesignYear: Construction Year
Amounts shown are estimated 2013 0 0

costs without SAWS overhead. \$500,000 \$0 \$0



FUNDING INFORMATION

Amounts shown are estimated

costs without SAWS overhead.

# 2013 CAPITAL IMPROVEMENTS PROGRAM Project Data Sheet

System			
PROJECT DESCRIPT	ION		
Project: ERSS Custom	ner Information System - WW Sh	are	
Programmed Amount	t: \$567,150		
Core Business Waste	ewater		
Category: Corporate V	VW		
Phase: Acquisition			
Council District Syste	em wide		
PROJECT INFORMAT	ION		
Project Objective: C	Complete the Customer Informatio	on System by November 20	013.
Description and Sco	pe:		
Continuously assess the requirements.	project to deliver a product which	h will perform and scale to	SAWS expectations and
Remarks:			
Tromarko.			
FAILURE ANALYSIS	AND RISK RATINGS		
Failure Mode:	Failure Impact:	Failure R	oot Cause:
Impact Severity	Likelihood of Occurrence	Risk Mitigation	Risk Exposure
l			

0

\$0

DesignYear:

Construction Year

0

**\$**0

LandYear:

2013

\$500,000



## PROJECT DESCRIPTION

Project: CIP Program Management Software

Programmed Amount: \$1,417,875

Core Business Wastewater Category: Corporate WW

Phase: Acquisition

Council District System wide

## PROJECT INFORMATION

Project Objective: Develop software to enable management of SAWS Capital Improvement Program.

## Description and Scope:

The \$200 million annual CIP program is currently managed on disconnected spreadsheets, resulting in inefficiency and making it difficult to track the program and understand the impact of changes to multi-year projects. This project will increase the efficiency and quality of program management, and increase the accuracy of project and program tracking and decision making. The project will include a requirements analysis of SAWS CIP program to determine the best tool(s) to manage the program, and evaluate CIPPlanner, Prolog, Skire, and other capital program management software, before implementing a solution.

Remarks:			
FAILURE ANALYSIS A	ND RISK RATINGS		
Failure Mode:	Failure Impact:	Failure	Root Cause:
Impact Severity Li	ikelihood of Occurrence	Risk Mitigation	Risk Exposure
FUNDING INFORMATION	ON LandYear:	DesignYear:	Construction Year
Amounts shown are estima	2013	0	0
costs without SAWS overho	\$1,250,000	\$0	\$0
·			



## PROJECT DESCRIPTION

Project: W-6: Western Watershed Sewer Relief Line - Project 2

Programmed Amount: \$14,745,900

Core Business Wastewater Category: Collection Growth

Phase: Construction Council District 4



## PROJECT INFORMATION

Project Objective: Construct sewer infrastructure to support growth in the Western Sewershed

## Description and Scope:

This project will replace approximately 1.08 miles of 54-inch sewer main and 1 siphon. The project is located between north of private road Edward Schlundt to Quintana Road. This is part of the lower segment. The project will result in sewer improvements between north of private road Edward Schlundt to Quintana Road to add capacity and replace or rehabilitate the pipe in poor condition.

This project was identified in the Comprehensive Wastewater Master Plan developed by the SAWS Master Planning Division. The outfalls within this project are in poor condition due to deterioration and lack sufficient capacity to handle future sewer flows due to growth and during peak storm events.

(formerly Western Relief Main, Hwy 90 to Loop 410 Lower to Upper Segments)

## Remarks:

Construction in 6 phases 2012-2017. Total construction cost \$85 million.

This project was split into separate job numbers for each phase in August 2012. New name is W-6: Western Watershed Sewer Relief Line - Project X.

## FAILURE ANALYSIS AND RISK RATINGS

Amounts shown are estimated

costs without SAWS overhead.

FUNDING INFORM	ATION	LandYear:	DesignYear:	Construction Year		
Impact Severity 10	Likelih	ood of Occurrence 10	Risk Mitigation 10	Risk Exposure 1000		
Inadequate Capa	city	Line Surch	arge	Undersized Lines		
Failure Mode:		Failure Impact:	Failur	ire Root Cause:		

2010

157

\$2,000,000

\$3,500,000

2013

\$13,000,000



## PROJECT DESCRIPTION

Project: Sewer Main Oversizing 2013 Programmed Amount: \$113,430

Core Business Wastewater Category: Collection Growth

Phase: Construction

Council District System wide



## PROJECT INFORMATION

Project Objective: Oversize sewage collection system for future growth.

## Description and Scope:

Pay for SAWS proportionate share of the cost of mains which are necessary to serve anticipated growth but are larger than the size main required by a developer customer or single customer. This annual requirement provides funds to oversize various sewer main installations throughout the service area.

Re	m	ar	k	S:
		•		٠.

#### FAILURE ANALYSIS AND RISK RATINGS Failure Root Cause: Failure Mode: Failure Impact: Undersized Lines Line Surcharge Inadequate Capacity Impact Severity Likelihood of Occurrence Risk Mitigation Risk Exposure 400 10 FUNDING INFORMATION LandYear: DesignYear: Construction Year Amounts shown are estimated 2013 costs without SAWS overhead. \$100,000



## PROJECT DESCRIPTION

Project: C-12 Donaldson Terrace Programmed Amount: \$1,459,512

Core Business Wastewater Category: Collection R&R

Phase: Design Council District 7

## PROJECT INFORMATION

Project Objective: Construct sewer infrastructure to support growth in the Central Sewershed

#### Description and Scope:

The "C-12 Donaldson Terrace" project consists of a total of approximately 23,000 linear feet of 21-inch and 24-inch wastewater mains. The project will construct a 24-inch gravity main along Manor Drive between West Mistletoe and West Huisache in the Central Basin. The project also includes a 24-inch gravity main along West Mulberry Avenue to Morning Glory, a 24-inch main along Morning Glory to Senisa Drive, a 24-inch along Senisa Drive to Seeling, a 24-inch along Red Bud Drive to Sutton, a 24-inch main along Sutton to East Cheryl Drive, a 24-inch along East Cheryl Drive to Shadwell, a 12-inch main along Shadwell to Colleen, a 24-inch main along Colleen to Donaldson Avenue, and a 24-inch along East Cheryl Drive, Senisa Drive, Oriole, Palm Drive, and Bandera Road to West Woodlawn.

#### Remarks:

The project also includes a 21-inch gravity main along Sutton between Red Bud Drive and Evelyn and a 21-inch gravity main along Evelyn Drive and Overbook to Erskine Place.

Formerly known as C-14 & C-15. Construction 2015-16 at a total cost of \$12.9 million.

## FAILURE ANALYSIS AND RISK RATINGS

Failure Mode:	Failure Impact:	Failur	e Root Cause:
Inadequate Capacity	SSO		Age/Deterioration
		B: 1 11:00	B: . E

Impact Severity Likelihood of Occurrence Risk Mitigation Risk Exposure 10 10 10 1000

FUNDING INFORMATION LandYear: DesignYear: Construction Year

Amounts shown are estimated costs without SAWS overhead.

0 2013 2015

\$0 \$1.286,707 \$6,433,535



## PROJECT DESCRIPTION

Project: C-13 Broadway Corridor: N New Braunfels to Commerce

Programmed Amount: \$8,507,250

Core Business Wastewater Category: Collection R&R

Phase: Construction Council District 1

## PROJECT INFORMATION

Project Objective: Construct sewer infrastructure to support growth in the Central Sewershed

## Description and Scope:

The "C-13 Broadway Corridor: N New Braunfels to Commerce" project consists of a total of approximately 55,000 linear feet of 18", 21", 24", 27", 30", 33", 36", 42", 48", 54", 60", 66", 78" and 90" wastewater mains at the Central Basin. The project will be divided into 2 phases: Phase A & Phase B. Phase A includes all of the limits from the former C-3 project started in 2009. This also includes projects C\_14 & C\_33 of the current CIP list. The project will include a 60-inch gravity main from E. Josephine St to Ave. B. The project also includes a 18-inch gravity main along Broadway between Brackenridge and East Mulberry Ave, a 42-inch, 36-inch, and 24-inch gravity main west of Broadway and along Ave B between Brackenridge and Patterson Ave, a 18" gravity main along Broadway between Patterson Ave. and Grandview Place and along Patterson Ave., an 18" along Cleveland Ct. between Grandview Place & Kampmann Rd., along Kampmann Ave. between Cleveland Ct & New Braunfels Ave. and 18-inch and 15-inch main along North New Braunfels Ave. between Kampmann Ave. and Castano Ave.

#### Remarks:

Formerly C04A, C03A, C03B, C05, and C02B. Contruction 2013-16 at a total cost of \$28 million.

## FAILURE ANALYSIS AND RISK RATINGS

Failure Mode: Failure Impact: Failure Root Cause:

Inadequate Capacity SSO Age/Deterioration

Impact Severity Likelihood of Occurrence Risk Mitigation Risk Exposure
10 10 10 10 1000

FUNDING INFORMATION LandYear: DesignYear: Construction Year

Amounts shown are estimated costs without SAWS overhead. 0 2011 2013 2013 \$0 \$2,600,000 \$7,500,000



## PROJECT DESCRIPTION

Project: C-33 Broadway Corridor: Carnahan to Mulberry

Programmed Amount: \$9,074,400

Core Business Wastewater Category: Collection R&R

Phase: Construction Council District 9



## PROJECT INFORMATION

Project Objective: Construct sewer infrastructure to support growth in the Central Sewershed

## Description and Scope:

This project consists of approximately 7,200 linear feet of 12-inch, 36-inch, 42-inch, 54-inch, and 60-inch wastewater mains. The project will construct a 60-inch, 54-inch, 42-inch, and 36-inch gravity main in the Central Sewershed along Avenue B from East Mulberry Avenue to north of Tuleta and a 12-inch gravity main along Broadway between East Mulberry Avenue and Pershing Avenue.

SAWS staff checked the limits of this project and determined that there is no overlap between the C-13, C-14, and C-33 projects.

#### Remarks:

Formerly called C-3 (C-2 to C-6). Construction 2012-16 at a total cost of \$38 million.

## FAILURE ANALYSIS AND RISK RATINGS

Failure Mode: Failure Impact: Failure Root Cause:

Line Collapse SSO Age/Deterioration

Impact Severity Likelihood of Occurrence Risk Mitigation Risk Exposure

FUNDING INFORMATION LandYear: DesignYear: Construction Year

Amounts shown are estimated 0 2009 2013 costs without SAWS overhead. \$0 \$1.200.000 \$8.000.000



## PROJECT DESCRIPTION

Project: LS 11 and LS 111 Elimination Programmed Amount: \$3,119,325

Core Business Wastewater Category: Collection R&R

Phase: Construction Council District 9, 10



## PROJECT INFORMATION

Project Objective: Construct sewer infrastructure to support growth in the Eastern Sewershed

## Description and Scope:

This project will eliminate Lift Stations #11 (Feathercrest) & #111 (Stone Ridge) by constructing a 24-inch main from the existing location of Lift Station #11 to the proposed CIP project E-20. The 24 inch main is approximately 9,765 linear feet in length. This main will connect to an existing 36-inch gravity sewer main. The existing 36-inch sewer gravity main along Salado Creek that has been identified as undersized and will need to be replaced or paralleled as recommended in the 2008 CWWIP. This project is known as E-20 Salado Creek: Nacogdoches Rd. to Jones Maltsberger Rd. (formerly E\_15 PBS&J, E\_10 PBS&J, E\_09 PBS&J, E\_06 PBS&J, E\_05A PBS&J).

#### Remarks:

The lift station can be eliminated now, at minimal risk of surcharging the new mains. On the other hand, if we wait until E-20 is built to eliminate it (past 2020), we risk multiple overflows at the station between now and then.

Design was completed in 2011 using an unspecified contract. Acquire easements in 2012.

## FAILURE ANALYSIS AND RISK RATINGS

Failure Mode: Failure Impact: Failure Root Cause:

Inadequate Capacity SSO Age/Deterioration

Impact Severity Likelihood of Occurrence Risk Mitigation Risk Exposure

FUNDING INFORMATION LandYear: DesignYear: Construction Year

Amounts shown are estimated costs without SAWS overhead. 2012 2011 2013 \$200,000 \$0 \$2,750,000



## PROJECT DESCRIPTION

Project: Lift Stations 251, 267, 225 & 175 Elimination

Programmed Amount: \$340,290 Core Business Wastewater Category: Collection R&R

Phase: Design

Council District System wide

## PROJECT INFORMATION

Project Objective: Construct sewer infrastructure for lift station eliminations

## Description and Scope:

This Project will construct approximately 10,927 linear feet of 8-inch gravity sewer main from LS#251(Solana Ridge) to LS #193 (Standard Electric). Approximately 3,000 linear feet of 8-inch gravity sewer main from LS#225 (Valley Ridge) and 930 linear feet of 8-inch gravity sewer main will also be constructed and be connected to this main. LS 193 is scheduled for O&M elimination as part of the MRSO project. LS 175 will be eliminated in place of LS 193.

#### Remarks:

This project will reduce operating and maintenance costs for the four lift stations. Design will use an existing unspecified design contract.

## FAILURE ANALYSIS AND RISK RATINGS

Failure Mode: Failure Impact: Failure Root Cause:
Unsustainable Equipment SSO Age/Deterioration

Impact Severity Likelihood of Occurrence Risk Mitigation Risk Exposure
10 7 8 560

FUNDING INFORMATION LandYear: DesignYear: Construction Year

Amounts shown are estimated 2013 2016 costs without SAWS overhead. \$300,000 \$770,000



## PROJECT DESCRIPTION

Project: Governmental Sewer Adjustments

Programmed Amount: \$2,245,914

Core Business Wastewater Category: Governmental Sewer

Phase: Construction

Council District System wide



## PROJECT INFORMATION

Project Objective: Realign Collection lines due to conflicts with other agencies work.

## Description and Scope:

Governmental Program Adjustments consists of projects implemented in conjunction with other government entities, when they implement maintenance or capital improvement projects. Through this program, SAWS participates in the relocation and replacement of sewer facilities, when appropriate or required. Unspecified scope.

## Remarks:

This is an annually recurring project.

## FAILURE ANALYSIS AND RISK RATINGS

Failure Mode: Failure Impact: Failure Root Cause:

Service Interruption Excessive Downtime Conflict with City or State

Impact Severity Likelihood of Occurrence Risk Mitigation Risk Exposure
9 9 10 810

FUNDING INFORMATION LandYear: DesignYear: Construction Year

Amounts shown are estimated 2013

costs without SAWS overhead. \$1,980,000



## PROJECT DESCRIPTION

Project: Governmental Sewer Installations

Programmed Amount: \$7,372,950

Core Business Wastewater
Category: Governmental Sewer

Phase: Construction

Council District System wide



## PROJECT INFORMATION

Project Objective: Increase system capacity for future growth.

Description and Scope:

Governmental Program Installations is used to install new mains in conjunction and coordination with Master Plan projects. Unspecified scope.

## Remarks:

This is an annually recurring project.

## FAILURE ANALYSIS AND RISK RATINGS

Failure Mode: Failure Impact: Failure Root Cause:

Service Interruption Service Interruption Conflict with City or State

Impact Severity Likelihood of Occurrence Risk Mitigation Risk Exposure

9 9 8 648

FUNDING INFORMATION LandYear: DesignYear: Construction Year

Amounts shown are estimated 2013 costs without SAWS overhead. \$6.500,000

2013 Annual Budget



## 2013 CAPITAL IMPROVEMENTS PROGRAM Project Data Sheet

## PROJECT DESCRIPTION

Project: Governmental Sewer Replacements

Programmed Amount: \$9,074,400

Core Business Wastewater Category: Governmental Sewer

Phase: Construction

Council District System wide



## PROJECT INFORMATION

Project Objective: Replace Collection lines due to condition by joint bidding with other agencies work.

## Description and Scope:

Governmental Program Replacements consists of projects implemented in conjunction with other government entities, when they implement maintenance and/or capital improvement projects. Through this program, SAWS participates in the relocation and replacement of sewer facilities, when appropriate or required. Unspecified scope.

#### Remarks:

This is an annually recurring project.

## FAILURE ANALYSIS AND RISK RATINGS

Failure Mode: Failure Impact: Failure Root Cause:

Service Interruption Excessive Downtime Conflict with City or State

Impact Severity Likelihood of Occurrence Risk Mitigation Risk Exposure

9 8 10 720

FUNDING INFORMATION LandYear: DesignYear: Construction Year

Amounts shown are estimated 2013

costs without SAWS overhead. \$8,000,000



## PROJECT DESCRIPTION

Project: Main Replacements - Sewer - SAWS Crews

Programmed Amount: \$3,771,548

Core Business Wastewater

Category: Main Replacement - Sewer

Phase: Construction

Council District System wide



## PROJECT INFORMATION

Project Objective: Rehabilitate aging/failing Collection infrastructure.

## Description and Scope:

This project involves the emergency or high priority replacement of failing sewer mains in various parts of the city. The main replacements are performed manhole to manhole. The work is performed by SAWS Distribution and Collection Operations crews, as requirements arise. The project costs are capitalized.

#### Remarks:

This is an annually recurring project.

## FAILURE ANALYSIS AND RISK RATINGS

Failure Mode: Failure Impact: Failure Root Cause:

Repeated Line Breaks SSO Age/Deterioration

Impact Severity Likelihood of Occurrence Risk Mitigation Risk Exposure
10 10 10 10 1000

FUNDING INFORMATION LandYear: DesignYear: Construction Year

Amounts shown are estimated 2013 costs without SAWS overhead. \$3,325,000



## PROJECT DESCRIPTION

Project: Sanitary Sewer Overflow Rehabilitation 2013

Programmed Amount: \$20,417,400

Core Business Wastewater

Category: Main Replacement - Sewer

Phase: Construction

Council District System wide



## PROJECT INFORMATION

Project Objective: Rehabilitate Pipelines that are experiencing Sanitary Sewer Overflows (SSO)

## Description and Scope:

This project will assess and rehabilitate sanitary sewer pipelines that experience SSOs throughout the service area, and rehabilitate the pipelines using the appropriate method. This is a multiyear project with construction 2011-2020.

	m			

## FAILURE ANALYSIS AND RISK RATINGS

Failure Mode: Failure Impact: Failure Root Cause:

Line Collapse SSO Age/Deterioration

Impact Severity Likelihood of Occurrence Risk Mitigation Risk Exposure
10 10 10 10 1000

FUNDING INFORMATION LandYear: DesignYear: Construction Year

Amounts shown are estimated 0 2013

costs without SAWS overhead. \$0 \$18,000,000



PROJECT DESCRIPTION
Project: Small Diameter Rehabilitation Program
Programmed Amount: \$27,600,308
Core Business Wastewater
Category: Main Replacement - Sewer
Phase: Construction
Council District System wide
PROJECT INFORMATION
Project Objective: Rehabilitate small diameter sanitary sewer pipelines that contribute to Sanitary Sewer Overflows (SSO) because of structural condition.
Description and Scope:
This project will rehabilitate, utilizing the appropriate method, small diameter sanitary sewer mains throughout the service area identified during inspection that contribute to SSOs because of structural condition.
Remarks:

## FAILURE ANALYSIS AND RISK RATINGS

Failure Mode: Failure Impact: Failure Root Cause:

Impact Severity Likelihood of Occurrence Risk Mitigation Risk Exposure

FUNDING INFORMATION LandYear: DesignYear: Construction Year

Amounts shown are estimated 0 0 2013 costs without SAWS overhead.



## PROJECT DESCRIPTION

Project: Large Diameter Rehabilitation Program

Programmed Amount: \$2,552,175

Core Business Wastewater

Category: Main Replacement - Sewer

Phase: Construction

Council District System wide

PROJECT INFORI	MATION
----------------	--------

Project Objective: Rehabilitate large diameter sanitary sewer pipelines that contribute to Sanitary Sewer

Overflows (SSO) because of structural condition.

## Description and Scope:

This project will rehabilitate, utilizing the appropriate method, large diameter sanitary sewer mains throughout the service area identified during inspection that contribute to SSOs because of structural condition.

Remarks:				
FAILURE ANALYSIS	AND RIS	K RATINGS		
Failure Mode:		Failure Impact:	Failure	Root Cause:
Impact Severity	Likeliho	od of Occurrence	Risk Mitigation	Risk Exposure
FUNDING INFORMA	TION	LandYear:	DesignYear:	Construction Year
Amounts shown are est		0	0 2013	
costs without SAWS over		\$0	\$0	\$2,250,000
		•	**	72,200,000



FUNDING INFORMATION

Amounts shown are estimated costs without SAWS overhead.

## 2013 CAPITAL IMPROVEMENTS PROGRAM Project Data Sheet

System	110,0	ot Bata Oncot	
PROJECT DESCRIPT	TON		
Project: Capacity Prog	gram		
Programmed Amount	t: \$2,835,750		
Core Business Waste	ewater		
Category: SSO (EPA)	ſ		
Phase: Construction			
Council District Syste	em wide		
PROJECT INFORMAT	<u>rion</u>		
	deplace or construct sanitary sewe ontribute to Sanitary Sewer Over		pacity constraints that
Description and Sco	pe:		
	or construct sanitary sewer main contribute to SSOs because of a		rea identified during
capacity assessment that	contitute to 5505 because of a	capacity constraint.	
Remarks:			
FAILURE ANALYSIS	AND RISK RATINGS Failure Impact:	Failure D	oot Cause:
i aliule moue.	i anui e impact.	i allule R	oot cause.
Impact Severity	Likelihood of Occurrence	Risk Mitigation	Risk Exposure

LandYear:

0

DesignYear:

0

Construction Year

2013



## PROJECT DESCRIPTION

Project: Manhole Rehabilitation Program
Programmed Amount: \$1,951,616

Core Business Wastewater

Category: Main Replacement - Sewer

Phase: Construction

Council District System wide

D	D	$\sim$		CT	IMI	EO	DI	A A T	TION
г	п	v.	JE		HV	го	R.	иΑι	ION

Project Objective: Rehabilitate manholes that contribute to Sanitary Sewer Overflows (SSO) because of

structural condition.

## Description and Scope:

This project will rehabilitate, utilizing the appropriate method, manholes throughout the service area identified during inspection that contribute to SSOs because of structural condition.

FAILURE ANALYSIS	S AND R	ISK RATINGS			
Failure Mode:	lode: Failure Impact:		Failure Root Cause:		
Impact Severity	Likelihood of Occurrence		Risk Mitigation	Risk Exposure	
FUNDING INFORMA	ATION	LandYear:	DesignYear:	Construction Year	
Amounts shown are estimated		0	0	2013	
costs without SAWS or	erhead.	\$0	\$0	\$1,720,547	

Remarks:



## PROJECT DESCRIPTION

Project: Unspecified Services Engineering Contract Sewer

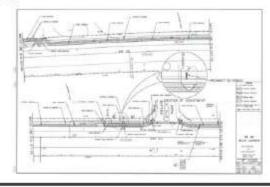
Programmed Amount: \$2,268,600

Core Business Wastewater

Category: Main Replacement - Sewer

Phase: Design

Council District System wide



## PROJECT INFORMATION

Project Objective: Rehabilitate aging/failing Collection infrastructure.

## Description and Scope:

This annual fund will fund design services to repair/replace sewer mains that have experienced cave-ins and overflows. These projects vary in size and location and may require the solicitation of contractor construction services on an urgent basis. These projects will be constructed on an emergency basis to correct unsanitary and potentially hazardous conditions that pose a threat to public health and safety.

#### Remarks:

This is an annually recurring project.

## FAILURE ANALYSIS AND RISK RATINGS

Failure Mode: Failure Impact: Failure Root Cause:

Inadequate Facilities Customer Disatisfaction Other/Deterioration

Impact Severity Likelihood of Occurrence Risk Mitigation Risk Exposure

10 10 10 10 1000

FUNDING INFORMATION LandYear: DesignYear: Construction Year

Amounts shown are estimated 2013 costs without SAWS overhead. \$2,000,000



## PROJECT DESCRIPTION

Project: Open-Cut Sewer Pipe Replacement Contract

Programmed Amount: \$2,268,600

Core Business Wastewater

Category: Main Replacement - Sewer

Phase: Construction

Council District System wide



## PROJECT INFORMATION

Project Objective: Replace aging/failing collection system infrastructure

## Description and Scope:

This contract provides a flexible method to replace several thousand linear feet of various diameter sewer mains system-wide. Provides a mechanism to replace deteriorated small and medium diameter sewer mains quickly by conventional open-cut methods when rehabilitation by pipe-bursting or CIPP is not feasible. The replacement mains will range in size from 8-inches to 33-inches in diameter and will be sufficiently engineered to convey anticipated wastewater flows and maintain system integrity.

## Remarks:

Projects will be tasked by work orders under this contract.

## FAILURE ANALYSIS AND RISK RATINGS

Failure Mode: Failure Impact: Failure Root Cause:

Line Collapse SSO Age/Deterioration

Impact Severity Likelihood of Occurrence Risk Mitigation Risk Exposure

FUNDING INFORMATION LandYear: DesignYear: Construction Year

Amounts shown are estimated 0 2013 costs without SAWS overhead. \$0 \$2,000,000



## PROJECT DESCRIPTION

Project: San Antonio River Outfall Pipeline Rehabilitation

Programmed Amount: \$11,116,140

Core Business Wastewater Category: Collection R&R

Phase: Construction Council District 3

## PROJECT INFORMATION

Project Objective: Rehabilitate or Replace the San Antonio River Outfall (SARO) Pipeline

## Description and Scope:

Remarks:

This project will assess, and either rehabilitate or replace the 48-inch diameter SARO pipeline starting at Henderson Court and ending approximately 5.7 miles downstream at the 90-inch outfall at the decommissioned Salado Creek WRC headworks.

Construction 2013-14 at a total cost of \$16 million.

FAILURE ANALYSIS	AND RISK RATINGS		
Failure Mode:	Failure Impact:	Failur	e Root Cause:
Line Collapse	Line Collapse SSO		Age/Deterioration
Impact Severity	Likelihood of Occurrence	Risk Mitigation	Risk Exposure
10	10	10	1000

FUNDING INFORMATION LandYear: DesignYear: Construction Year

Amounts shown are estimated costs without SAWS overhead.

0 2011 2013

\$0 \$1,000,000 \$9,800,000



## PROJECT DESCRIPTION

Project: Sewer Laterals 2013

Programmed Amount: \$3,346,185

Core Business Wastewater

Category: Main Replacement - Sewer

Phase: Construction

Council District System wide

## PROJECT INFORMATION

Project Objective: Rehabilitate aging/failing Collection infrastructure.

#### Description and Scope:

This is a project performed by SAWS Distribution and Collection Operations construction crews for the replacement of the lateral from the property line to the main, to eliminate or reduce inflow and infiltration of storm water into wastewater mains. This work is generated by the customer calling in with a stoppage and the problem is determined to be outside the property line. This project improves the operational efficiency and reduces the potential and risk of surcharges in the collection system.

Remarks:			

## FAILURE ANALYSIS AND RISK RATINGS

Failure Mode: Failure Impact: Failure Root Cause:

Line Collapse SSO Age/Deterioration

Impact Severity Likelihood of Occurrence Risk Mitigation Risk Exposure
8 8 10 640

FUNDING INFORMATION LandYear: DesignYear: Construction Year

Amounts shown are estimated 2013 costs without SAWS overhead. \$2,950,000



## PROJECT DESCRIPTION

Project: Dos Rios WRC Feasibility and Design for Sludge Conditioning and Dewatering

Programmed Amount: \$1,729,808

Core Business Wastewater Category: Treatment R&R

Phase: Design Council District 3



#### PROJECT INFORMATION

Project Objective: Increase operational reliability and efficiency of the biosolids dewatering process by

replacing unsustainable equipment.

## Description and Scope:

This project includes replacement of the existing twelve (12) 2.0M Belt Filter Presses (BFPs) with 3-belt BFPs or Centrifuges, depending on piloting results. The project will also include replacement of the polymer feed system, sludge feed pumps, macerators, electrical, instrumentation and controls. The existing structure will likely be replaced with a new building designed to minimize or preferably eliminate the need for conveyors. The project will investigate if additional mechanical dewatering capacity is needed to address future flow and loading projections. This project includes evaluation of the existing non-potable water (NPW) system, demolition of the existing elevated NPW storage tank, replacement of the associated pumps, and installation of a new hydropneumatic tank and by-pass line at the Dos Rios WRC.

#### Remarks:

The existing BFPs were originally installed in 1987 and were rehabilitated in the early 2000's. They are now at the end of their useful life. Disposal costs have increased significantly since SAWS now has to landfill nearly 50% of our biosolids. The new NPW system will generate sufficiently high pressure to feed non-potable water to those treatment units that rely heavily on it.

## FAILURE ANALYSIS AND RISK RATINGS

	Failure Impact:	Failur	e Root Cause:	
ment	Increased Main	tenance	Age/Deterioration	
Likelih	ood of Occurrence 10	Risk Mitigation 10	Risk Exposure 1000	
TION	LandYear:	DesignYear:	Construction Year	
Amounts shown are estimated costs without SAWS overhead.		2013	2014	
	Likelih	ment Increased Main Likelihood of Occurrence 10  TION LandYear: imated 0	Likelihood of Occurrence Risk Mitigation 10 10  TION LandYear: DesignYear: imated 0 2013	



## PROJECT DESCRIPTION

Project: Dos Rios Water Recycling Center (WRC) Aeration and Secondary Settling Tank Improvements

Programmed Amount: \$2,041,740

Core Business Wastewater Category: Treatment R&R

Phase: Design Council District 3



## PROJECT INFORMATION

Project Objective: Rehabilitate First and Second Stage Aeration and Secondary Settling facilities to

improve operational flexibility and address aging infrastructure.

## Description and Scope:

Due to equipment age and corresponding deterioration, this project includes rehabilitation of the Clari-Vac units for secondary settling; replacement of missing or broken diffusers in the Aeration Tanks; rehabilitation of the excess activated sludge pump stations (three total); rehabilitation of the Second Stage return activated sludge pumps and motor bases; and replacement of controls / switchgear throughout the First and Second Stage facilities.

#### Remarks:

Maintaining the biological process is integral to meeting TPDES permit requirements. Without these improvements and modifications, it is becoming increasingly difficult for Dos Rios to meet permit. Of note, spare parts for some of the equipment are no longer available due to age.

## FAILURE ANALYSIS AND RISK RATINGS

Failure Mode: Unsustainable Equipment		Failure Impact:	Failur	e Root Cause:
		Regulatory Non-c	ompliance	Age/Deterioration
Impact Severity Likelih		ood of Occurrence	Risk Mitigation 10	Risk Exposure 810
FUNDING INFORMA	ATION	LandYear:	DesignYear:	Construction Year
Amounts shown are estimated costs without SAWS overhead.		0	2013	2014
COSES WIGHOUT STATES OF	rettreau.	0.2	\$1,800,000	\$18,000,000



## PROJECT DESCRIPTION

Project: Medio Creek WRC Process Piping Improvements and Influent Lift Station Enhancements

Programmed Amount: \$113,430
Core Business Wastewater
Category: Treatment R&R

Phase: Design Council District 4



## PROJECT INFORMATION

Project Objective: Provide a connection between the Mixed Liquor Suspended Solids (MLSS) line from

the new plant to the existing plant.

#### Description and Scope:

The proejet includes construction of approximately 1,100 linear feet of 6-inch DIP to transfer Mixed Liquor Suspended Solids (MLSS) between the "new" plant (Plant 2) and the "old" plant (Plant 1), construction of approximately 250 linear feet of 30-inch CSC from the effluent of the filters at Plant 2 to the influent of the UV system at Plant 1, and evaluate and replace pumps, piping, valves, and controls at the Influent Lift Station.

## Remarks:

The construction of the 6-inch pipeline allows Plant 1 to be re-seeded with MLSS from Plant 2.

- The construction of the 30-inch pipeline allows for diverting the flows from Plant 2 to Plant 1 and provides redundancy to the UV system.
- 3) The existing lift station's pumps, piping, valves, and controls are no longer functioning and their replacement is included within this project scope.

## FAILURE ANALYSIS AND RISK RATINGS

Failure Mode: Equipment Failure		Failure Impact: F Regulatory Non-compliance		re Root Cause:	
				Lack of Redundancy	
Impact Severity Likelih		ood of Occurrence 10	Risk Mitigation 9	Risk Exposure 900	
FUNDING INFORM	ATION	LandYear:	DesignYear:	Construction Year	
Amounts shown are estimated costs without SAWS overhead.		0	2013	2014	
costs without SAWS o	vernead.	0.2	\$100,000	\$1,000,000	



## PROJECT DESCRIPTION

Project: Dos Rios WRC Digester Mixing and System Enhancements - Phase 2

Programmed Amount: \$12,477,300

Core Business Wastewater Category: Treatment R&R

Phase: Construction Council District 3



## PROJECT INFORMATION

Project Objective: Rehabilitate aging/failing treatment infrastructure and increase digestion capacity.

## Description and Scope:

The design will address improvements to four existing digesters at the digester complex including the repair of dome roof seams, roof liner, dome hatches/man-ways, dome pressure/vacuum relief assemblies and three-way valves. The existing digester mixing system will be replaced. Enhancements of up to four existing digester gas meters will be made if necessary. The digester pumping and heat exchanger system will rehabilitated or replaced.

Remarks:			

## FAILURE ANALYSIS AND RISK RATINGS

Failure Mode: Failure Impact: Failure Root Cause:
Unsustainable Equipment Increased Maintenance Age/Deterioration

Impact Severity Likelihood of Occurrence Risk Mitigation Risk Exposure
9 8 9 648

FUNDING INFORMATION LandYear: DesignYear: Construction Year

Amounts shown are estimated 2011 2013 costs without SAWS overhead. \$940.000 \$11,000.000

2013 Annual Budaet



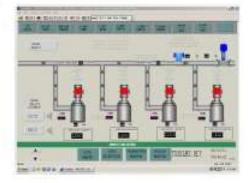
### 2013 CAPITAL IMPROVEMENTS PROGRAM Project Data Sheet

#### PROJECT DESCRIPTION

Project: Dos Rios WRC Instrumentation and Control Upgrade

Programmed Amount: \$236,000
Core Business Wastewater
Category: Treatment R&R

Phase: Design Council District 0



#### PROJECT INFORMATION

Project Objective: Provide design for Dos Rios Upgrades resulting from recommendation from the Producti

#### Description and Scope:

This project will provide for professional engineering design services to upgrade aspects of the existing DCS system(s) at Dos Rios WRC as recommended by the Production and Treatment SCADA Master Plan. These upgrades will position Dos Rios WRC to move toward future standardizations of instrumentation and control systems throughout SAWS as outlined in the Production and Treatment SCADA Master Plan.

#### Remarks:

The Consultant is currently working on the Production and Treatment SCADA Master Plan and a final plan is expected in October 2012.

#### Operating Impact:

#### FAILURE ANALYSIS AND RISK RATINGS Failure Root Cause: Failure Mode: Failure Impact: Equipment Failure Regulatory Non-compliance Failed System Component Impact Severity Likelihood of Occurrence Risk Mitigation Risk Exposure 10 630 FUNDING INFORMATION LandYear: DesignYear: Construction Year Amounts shown are estimated 2013 2014 costs without SAWS overhead. \$0 \$200,000 \$2,000,000



#### PROJECT DESCRIPTION

Project: Leon Creek WRC Aeration System Automation

Programmed Amount: \$311,933

Core Business Wastewater Category: Treatment R&R

Phase: Design Council District 4



#### PROJECT INFORMATION

Project Objective: Automate the existing aeration system associated with aeration tanks and process air

blowers.

#### Description and Scope:

Automate the existing aeration system associated with aeration tanks and process air blowers to supply the optimum amount of air required for the biological process, address energy wasting by preventing excess aeration of the tanks, and provide monitoring capability for operators to effectively control the aeration process.

This project includes automation of the aeration tank / process air blower system at the Leon Creek WRC. The efficiency of the newly installed (Turblex) blowers is better realized if the capability is provided for the blowers to ramp up / down automatically based on the measured oxygen demand along the length of the existing aeration basins and with varying plant flows and wastewater composition. For automation, actuating valves, piping and appurtenances, associated electrical and process instrumentation and control work will be required.

#### Remarks:

The new automated system will prevent excess aeration by providing just the required amount of air and a more balanced distribution of air across the aeration tanks thereby preventing energy wastage, and ensure that the maximum benefit is obtained from the new (Turblex) blowers as intended.

#### FAILURE ANALYSIS AND RISK RATINGS

Failure Mode:		Failure Impact:	Failu	re Root Cause:
Unsustainable Equipment Reg		Regulatory Non-c	ompliance	System Optimization
Impact Severity 6	Likelih	ood of Occurrence 6	Risk Mitigation 6	Risk Exposure 216
FUNDING INFORM	ATION	LandYear:	DesignYear:	Construction Year
Amounts shown are es	799000 CH. TH.	0	2013	2014



### Water Delivery

This page intentionally left blank



#### PROJECT DESCRIPTION

Project: Service Center Facility Project Plan - WD Share

Programmed Amount: \$6,351,400 Core Business Water Delivery

Category: Corporate WD

Phase: Acquisition

Council District System wide

#### PROJECT INFORMATION

Project Objective: Construction of new service center and spoils site.

#### Description and Scope:

SAWS currently has increased risk by having fleet and production on the same site at the NWSC. This project will eliminate risk from code compliance issues at the facilities and decrease risk at production sites by relocating D&C crews away from tanks and wells.

#### Remarks:

Based on previous Operations Research assessment and the addition of the DSP service area, this project will improve D&C response time at all facilities and allow for a master planned realignment that increases efficiencies in projection, RPC, and customer service.

#### FAILURE ANALYSIS AND RISK RATINGS

Failure Mode: Failure Impact: Failure Root Cause:

Impact Severity Likelihood of Occurrence Risk Mitigation Risk Exposure

FUNDING INFORMATION LandYear: DesignYear: Construction Year

Amounts shown are estimated costs without SAWS overhead.

2013
0
0
0
\$5,500,000
\$0
\$0



#### PROJECT DESCRIPTION

Project: IBM Mainframe Upgrade - WD Share

Programmed Amount: \$577,400 Core Business Water Delivery Category: Corporate WD

Phase: Acquisition

Council District System wide

#### PROJECT INFORMATION

Project Objective: Upgrade a legacy system which is no longer supported.

Description and Scope:

New hardware and software to upgrade the system.

#### Remarks:

If the existing mainframe crashes, it can take up to two months to recover.

#### FAILURE ANALYSIS AND RISK RATINGS

Failure Mode: Failure Impact: Failure Root Cause:

Impact Severity Likelihood of Occurrence Risk Mitigation Risk Exposure

FUNDING INFORMATION
Amounts shown are estimated costs without SAWS overhead.

2013
500,000
S0
Construction Year
0
0
\$500,000



#### PROJECT DESCRIPTION

Project: ERSS Customer Information System - WD Share

Programmed Amount: \$577,400 Core Business Water Delivery Category: Corporate WD

Phase: Acquisition

Council District System wide

D	R	O.I	F	CT	IN	F	OR	M	Δ1	Пι	) I	d
	1,	O	_	<b>-</b> 1	-		On	w	$\overline{}$	111	91	٠

Project Objective: Complete the Customer Information System by November 2013.

Description and Scope:

Continuously assess the project to deliver a product which will perform and scale to SAWS expectations and requirements.

R		m	9	r	b	c	
г	c	ш	а	ш	n	Э	۰

#### FAILURE ANALYSIS AND RISK RATINGS

Failure Mode: Failure Impact: Failure Root Cause:

Impact Severity Likelihood of Occurrence Risk Mitigation Risk Exposure

FUNDING INFORMATION LandYear: DesignYear: Construction Year

Amounts shown are estimated costs without SAWS overhead. \$2013 0 0 \$0

\$500,000 \$0 \$0



#### PROJECT DESCRIPTION

Project: CIP Program Management Software

Programmed Amount: \$1,443,500 Core Business Water Delivery

Category: Corporate WD

Phase: Acquisition

Council District System wide

$PRO_s$	JECT	INFO	RMA	TION
---------	------	------	-----	------

Project Objective: Develop software to enable project and program management of CIP projects.

#### Description and Scope:

The \$200 million annual CIP program is currently managed on disconnected spreadsheets, resulting in inefficiency and making it difficult to track the program and understand the impact of changes to multi-year projects. This project will increase the efficiency and quality of program management, and increase the accuracy of project and program tracking and decision making. The project will include a requirements analysis of SAWS CIP program to determine the best tool(s) to manage the program, and evaluate CIPPlanner, Prolog, Skire, and other capital program management software, before implementing a solution.

				•
Remarks:				
Remarks.				
FAILURE ANALYSIS A	ND RISK RATING	<u>68</u>		
FAILURE ANALYSIS A Failure Mode:	ND RISK RATING Failure Im		Failure Root Cause	»:
			Failure Root Cause	»:
Failure Mode:		pact:		
Failure Mode:	Failure Im	pact:		e: Exposure
Failure Mode: Impact Severity L	Failure Im ikelihood of Occ	pact: urrence Risk Mitigati	on Risk E	Exposure
Failure Mode:  Impact Severity L  FUNDING INFORMATI	Failure Im ikelihood of Occ ON LandYea	urrence Risk Mitigati ar: DesignYe	on Risk E ar: Const	
Failure Mode: Impact Severity L	Failure Imiliary Imil	urrence Risk Mitigati ar: DesignYe	on Risk E ar: Const	Exposure
Failure Mode:  Impact Severity L  FUNDING INFORMATI  Amounts shown are estimated.	Failure Imikelihood of Occ ON LandYea ated 2013	urrence Risk Mitigati ar: DesignYe	on Risk E ar: Const	Exposure



#### PROJECT DESCRIPTION

Project: Hidden Springs Water System Improvement

Programmed Amount: \$1,327,332 Core Business Water Delivery Category: Distribution Growth

Phase: Construction Council District 8



#### PROJECT INFORMATION

Project Objective: Increase system fire flow capacity.

#### Description and Scope:

Project installs 870 linear feet of 16-inch water main along Aue Rd. from existing 16-inch main to proposed 12- inch main near the intersection on Aue Rd. and Whistling Wind. (PZ11-17) \$147,526.00 Project installs 1,700 linear feet of 12-inch water main. Along Aue Rd. from proposed 16-inch main to proposed Rocky Hill Booster Station. (PZ11-18) \$227,506.00

Project installs 2,300 linear feet of 12-inch water main. From intersection of Aue Rd. and Whistling Wind along Whistling Wind, Black Creek and easement to proposed Rocky Hill Booster Station. (PZ11-19) \$307,802.00 Project installs 1,200 linear feet of 8-inch water main. From the intersection of Black Creek and Whistling Wind along Whistling Wind (PZ11-20) \$107,062.00

Project installs 930 linear feet of 12-inch water main. Along Rocky Hill from the proposed Rocky Hill Booster Station.

#### Remarks:

Hidden Springs Estates has their own water supply system based on Trinity Aquifer wells. SAWS recently became the owner of this system. In order to provide water service consistent with that provided to the rest of SAWS customers it is necessary to remove this neighborhood's dependence upon Trinity wells and instead connect it to the nearby SAWS infrastructure. In addition to fully incorporating this neighborhood into SAWS system, this construction will make it possible for better supply of water in the area (including possible future interconnection with Dominion).

#### FAILURE ANALYSIS AND RISK RATINGS

Failure Mode: Failure Impact: Failure Root Cause:
Flow/Pressure Problems Jeopardize Life/Safety Undersized Lines

Impact Severity Likelihood of Occurrence Risk Mitigation Risk Exposure
9 9 9 729

FUNDING INFORMATION LandYear: DesignYear: Construction Year

Amounts shown are estimated costs without SAWS overhead.

2012
2012
2013
\$0 \$1,149,404



#### PROJECT DESCRIPTION

Project: Install PRVs With Hidden Springs Water Project

Programmed Amount: \$80,836 Core Business Water Delivery Category: Distribution Growth

Phase: Construction Council District 8



#### PROJECT INFORMATION

Project Objective: Increase system fire flow capacity.

#### Description and Scope:

Project consists of installing Pressure Reducing Valves (PRV) on property and Thermal Expansion Tanks (TET) inside the house of approximately 40 residents within Hidden Springs neighborhood.

The design is being funded through a Work Order on the 2009 Engineering Design Services - Replacements and Improvements, Contract I.

#### Remarks:

The objective is to assure that the increased pressure resulting from the Crescent Park Booster Station (Job # 12-6006) and Hidden Springs Water Project (Job # 11-7003) do not damage residential plumbing in the Hidden Springs neighborhood.

#### FAILURE ANALYSIS AND RISK RATINGS

Failure Mode: Failure Impact: Failure Root Cause:
Flow/Pressure Problems Jeopardize Life/Safety Undersized Lines

Impact Severity Likelihood of Occurrence Risk Mitigation Risk Exposure
9 9 729

FUNDING INFORMATION LandYear: DesignYear: Construction Year

Amounts shown are estimated costs without SAWS overhead.

2012
2011
2013
50
\$70,000



#### PROJECT DESCRIPTION

Project: Water Main Oversizing 2013 Programmed Amount: \$1,154,800 Core Business Water Delivery Category: Distribution Growth

Phase: Construction

Council District System wide



#### PROJECT INFORMATION

Project Objective: Oversize water distribution system for future growth.

#### Description and Scope:

Pay for SAWS proportionate share of the cost of mains which are necessary to serve anticipated growth but are larger than the size main required by a developer customer or single customer. This annual requirement provides funds to oversize various water main installations throughout the service area. Unspecified scope.

Remarks:
----------

#### FAILURE ANALYSIS AND RISK RATINGS

Failure Root Cause: Failure Mode: Failure Impact: Inadequate Capacity Low Flow/Pressure Undersized Lines

Likelihood of Occurrence Risk Mitigation Impact Severity Risk Exposure 10 400

FUNDING INFORMATION LandYear: DesignYear: Construction Year

2013 Amounts shown are estimated costs without SAWS overhead. \$1,000,000



#### PROJECT DESCRIPTION

Project: Dominion Fire Flow Improvement

Programmed Amount: \$3,175,700 Core Business Water Delivery Category: Distribution Growth

Phase: Construction Council District 8



#### PROJECT INFORMATION

Project Objective: Increase system fire flow capacity.

#### Description and Scope:

Project installs 1,750 linear feet of 8-inch water main. Along Galleria from Devonwood and Galleria to the end of Galleria (Included in 2008 WIP as 8-inch, recommending it be changed to a 12-inch for fire protection) (PZ11B-01) \$234.197.00

Project installs 650 linear feet of 8-inch water main. Along Devonwood from Dominion Pump Station south to the end of Devonwood (PZ11B-02) \$57,992.00

Project installs 275 linear feet of 8-inch water main. Through an easement, from Vineyard Dr. to an existing 8-inch main along Admirals Way (PZ11B-03) \$24,535.00

Project installs 2,350 linear feet of 8-inch water main. Along Galleria, Courtenay Lane, an easement and Carriage Hills from Devonwood to the end of Carriage Hills (PZ11B-04) \$209,662.00

Project installs 500 linear feet of 8-inch water main. Through an easement from Carriage Hills to Davenport Lane (PZ11B-05) \$44,609.00

Project installs 350 linear feet of 8-inch water main. Along Davennort Lane from Vineyard Drive to the end of

#### Remarks:

#### FAILURE ANALYSIS AND RISK RATINGS

Failure Mode: Failure Impact: Failure Root Cause:
Flow/Pressure Problems Customer Disatisfaction Undersized Lines

Impact Severity Likelihood of Occurrence Risk Mitigation Risk Exposure
10 3 2 60

FUNDING INFORMATION LandYear: DesignYear: Construction Year

Amounts shown are estimated costs without \$AWS overhead.

2013
2011
2013
\$250,000
\$0
\$2,750,000



#### PROJECT DESCRIPTION

Project: Install PRVs With Dominion Fire Flow Project

Programmed Amount: \$230,960 Core Business Water Delivery Category: Distribution Growth

Phase: Construction Council District 8



#### PROJECT INFORMATION

Project Objective: Increase system fire flow capacity.

#### Description and Scope:

Project consists of installing Pressure Reducing Valves (PRV) on property and Thermal Expansion Tanks (TET) inside the house of approximately 130 residents within Dominion neighborhood.

The design is being funded through a Work Order on the 2009 Engineering Design Services - Replacements and Improvements, Contract II.

#### Remarks:

The objective is to assure that the increased pressure resulting from the Crescent Park Booster Station (Job # 12-6006) and Dominion Fire Flow Improvement project (Job # 11-7004) do not damage residential plumbing in the Dominion neighborhood.

#### FAILURE ANALYSIS AND RISK RATINGS

Failure Mode:	Failure Impact:	Failure Root Cause:
Flow/Pressure Problems	Customer Disatisfaction	Undersized Lines

Impact Severity Likelihood of Occurrence Risk Mitigation Risk Exposure
10 3 2 60

FUNDING INFORMATION LandYear: DesignYear: Construction Year

Amounts shown are estimated costs without SAWS overhead.

2012
2012
2013
2013
2000,000

2013 Annual Budget



# 2013 CAPITAL IMPROVEMENTS PROGRAM Project Data Sheet

#### PROJECT DESCRIPTION

Project: Governmental Water Adjustments
Programmed Amount: \$5,866,384
Core Business Water Delivery
Category: Governmental Water

Phase: Construction

Council District System wide



#### PROJECT INFORMATION

Project Objective: Realign water lines due to conflicts with other agencies work.

#### Description and Scope:

Governmental Program Adjustments consists of projects implemented in conjunction with other government entities, when they implement maintenance and/or capital improvement projects. Through this program, SAWS participates in the relocation and replacement of water facilities, when appropriate or required. Unspecified scope.

#### Remarks:

This is an annually recurring project.

#### FAILURE ANALYSIS AND RISK RATINGS

Failure Mode: Failure Impact: Failure Root Cause:

Service Interruption Excessive Downtime Conflict with City or State

Impact Severity Likelihood of Occurrence Risk Mitigation Risk Exposure

FUNDING INFORMATION LandYear: DesignYear: Construction Year

Amounts shown are estimated 2013 costs without SAWS overhead. \$5,080,000



#### PROJECT DESCRIPTION

Project: Governmental Water Installations

Programmed Amount: \$1,385,760

Core Business Water Delivery

Category: Governmental Water

Phase: Construction

Council District System wide



#### PROJECT INFORMATION

Project Objective: Increase system capacity for future growth.

Description and Scope:

Governmental Program Installations is used to install new mains in conjunction and coordination with Master Plan projects. Unspecified scope.

#### Remarks:

This is an annually recurring project.

#### FAILURE ANALYSIS AND RISK RATINGS

Failure Mode: Failure Impact: Failure Root Cause:

Service Interruption Service Interruption Conflict with City or State

Impact Severity Likelihood of Occurrence Risk Mitigation Risk Exposure

9 9 8 648

FUNDING INFORMATION LandYear: DesignYear: Construction Year

Amounts shown are estimated 2013 costs without SAWS overhead. \$1,200,000



#### PROJECT DESCRIPTION

Project: Governmental Water Replacements

Programmed Amount: \$9,296,140

Core Business Water Delivery

Category: Governmental Water

Phase: Construction

Council District System wide



#### PROJECT INFORMATION

Project Objective: Replace aging/failing Distribution infrastructure.

#### Description and Scope:

Governmental Program Replacements consists of projects implemented in conjunction with other government entities, when they implement maintenance and/or capital improvement projects. Through this program, SAWS participates in the relocation and replacement of water facilities, when appropriate or required. Unspecified scope.

#### Remarks:

This is an annually recurring project.

#### FAILURE ANALYSIS AND RISK RATINGS

Failure Mode: Failure Impact: Failure Root Cause:

Service Interruption Service Interruption Conflict with City or State

Impact Severity Likelihood of Occurrence Risk Mitigation Risk Exposure

9 8 10 720

FUNDING INFORMATION LandYear: DesignYear: Construction Year

Amounts shown are estimated 2013 costs without SAWS overhead. \$8,050,000



#### PROJECT DESCRIPTION

Project: Meter Replacements

Programmed Amount: \$3,933,249
Core Business Water Delivery
Category: Main Replacement - Water

Phase: Construction

Council District System wide



#### PROJECT INFORMATION

Project Objective: Replace aging water meters

#### Description and Scope:

This project will replace aging water meters in a defined geographical area, reducing the amount of unaccounted for water. The old water meters tend to slow down, especially at low flow rates, and underrecord the amount of water used. New water meters will accurately record water usage and increase revenues. The plan is to replace 35,000+ meters in various routes in all districts.

Re	m	-		b	c	٠
Ne	ш	a	ш	Λ	Э	

#### FAILURE ANALYSIS AND RISK RATINGS

Failure Mode: Failure Impact: Failure Root Cause:

Corporate Mandate Failure of Corporate Initiative Corporate Mandate

Impact Severity Likelihood of Occurrence Risk Mitigation Risk Exposure 10 10 10 1000



#### PROJECT DESCRIPTION

Project: Open Cut Water Contract
Programmed Amount: \$1,732,200
Core Business Water Delivery
Category: Main Replacement - Water

Phase: Construction

Council District System wide



#### PROJECT INFORMATION

Project Objective: Replace several thousand feet of various diameter water mains system wide.

#### Description and Scope:

This contract provides a flexible method to replace several thousand feet of various diameter water mains system wide.

R	◠	122	-	v	•	۰
-				n		

### FAILURE ANALYSIS AND RISK RATINGS

Failure Mode: Failure Impact: Failure Root Cause:

Line Collapse Low Flow/Pressure Age/Deterioration

Impact Severity Likelihood of Occurrence Risk Mitigation Risk Exposure 10 10 10 1000

FUNDING INFORMATION LandYear: DesignYear: Construction Year

Amounts shown are estimated costs without SAWS overhead. 0 0 2013
\$0 \$0 \$1,500,000



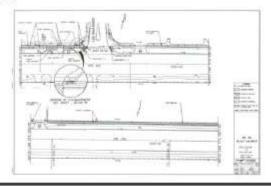
#### PROJECT DESCRIPTION

Project: Unspecified Services Engineering Contract Water

Programmed Amount: \$1,154,800 Core Business Water Delivery Category: Main Replacement - Water

Phase: Design

Council District System wide



#### PROJECT INFORMATION

Project Objective: Rehabilitate aging/failing Distribution infrastructure.

#### Description and Scope:

This annual fund will fund design services to repair/replace water mains that have experienced a high rate of main failure. These projects vary in size and location, and may require the solicitation of contractor construction services on an urgent basis. Projects will replace sub-standard or deteriorated water mains requiring immediate replacements.

#### Remarks:

This is an annually recurring project.

#### FAILURE ANALYSIS AND RISK RATINGS

Failure Mode: Failure Impact: Failure Root Cause:

Service Interruption Customer Disatisfaction Other/Deterioration

Impact Severity Likelihood of Occurrence Risk Mitigation Risk Exposure

10 10 10 10 1000

FUNDING INFORMATION LandYear: DesignYear: Construction Year

Amounts shown are estimated 2013 costs without SAWS overhead. \$1,000,000



#### PROJECT DESCRIPTION

Project: Main Replacements - Water - SAWS Crews

Programmed Amount: \$11,548

Core Business Water Delivery

Category: Main Replacement - Water

Phase: Construction

Council District System wide



#### PROJECT INFORMATION

Project Objective: Rehabilitate aging/failing Distribution infrastructure.

#### Description and Scope:

CIP funds transferred to Distribution and Collection Operations for the replacement of failing water mains, emergencies or otherwise, in various parts of the city. The work is performed by in-house construction crews. Unspecified scope.

#### Remarks:

This is an annually recurring project.

#### FAILURE ANALYSIS AND RISK RATINGS

Failure Mode: Failure Impact: Failure Root Cause:

Repeated Line Breaks Increased Maintenance Age/Deterioration

Impact Severity Likelihood of Occurrence Risk Mitigation Risk Exposure
9 8 10 720

FUNDING INFORMATION LandYear: DesignYear: Construction Year

Amounts shown are estimated 2013 costs without SAWS overhead. \$10,000



#### PROJECT DESCRIPTION

Project: Valves, Services and Meters
Programmed Amount: \$4,850,160
Core Business Water Delivery
Category: Main Replacement - Water

Phase: Construction

Council District System wide



#### PROJECT INFORMATION

Project Objective: Replace obsolete or unsustainable Distribution systems or equipment.

#### Description and Scope:

This project provides for the installation or replacement of unserviceable valves, services, meters, fire hydrants, and other water system appurtenances. The work is performed by SAWS Distribution and Collection Operations crews, as requirements arise. The project costs are capitalized. Customer service.

#### Remarks:

This is an annually recurring project.

#### FAILURE ANALYSIS AND RISK RATINGS

Failure Mode: Failure Impact: Failure Root Cause:

Unsustainable Equipment Service Interruption Critical Equipment Failure

Impact Severity Likelihood of Occurrence Risk Mitigation Risk Exposure

9 8 576

FUNDING INFORMATION LandYear: DesignYear: Construction Year

Amounts shown are estimated 2013 costs without SAWS overhead. \$4,200,000



#### PROJECT DESCRIPTION

Project: Chlorine System Upgrades
Programmed Amount: \$692,880
Core Business Water Delivery
Category: Production R&R

Phase: Design

Council District System wide



#### PROJECT INFORMATION

Project Objective: Improve safety of chlorine systems at primary pump stations.

#### Description and Scope:

The purpose of the chlorine upgrade project is to provide scales for chlorine containers for facilities which do not currently have scales and are not planned for upgrade in the next several years. The project will also provide scrubbers or other type of secondary containment at our primary pump station chlorine buildings to minimize the risk to the public in case of an accidental release of chlorine from one of these sites. The project will include the following 8 pump stations: 34th Street, Artesia, Maltsberger, Marbach, Micron, Randolph, Seale and Wurzbach. This project is required to meet TCEQ requirements and avoid future notices of violation. Project will also minimize the risk associated with any possible chlorine leak.

#### Remarks:

This project will upgrade the four remaining sites that were not included in the 2012 project: 34th Street, Maltsberger, Marbach, and Wurzbach. The original program was to systematically rehabilitate all of our primary pump stations and part of this upgrade included adding scales, buildings, and scrubber systems for chlorine. Because of the limited CIP funding this will occur over a much longer time frame than originally anticipated. We had committed to TCEQ that chlorine scales would be added to our Primary Pump stations by 2014 during the 2007 inspection.

Immact/Piel Accacement

Regulatory Compliance

### FAILURE ANALYSIS AND RISK RATINGS Failure Mode: Failure Impact:

e Impact: Failure Root Cause:

Jeopardize Life/Safety System Improvement

Impact Severity Likelihood of Occurrence Risk Mitigation Risk Exposure
10 10 10 10 1000

FUNDING INFORMATION LandYear: DesignYear: Construction Year

Amounts shown are estimated costs without SAWS overhead. \$0 \$600,000 \$6,000,000



#### PROJECT DESCRIPTION

Project: Tank Mixing Systems - Shields/Cross Mountain

Programmed Amount: \$1,154,800
Core Business Water Delivery
Category: Production R&R

Phase: Construction Council District 8

#### PROJECT INFORMATION

Project Objective: Addition of a tank mixing and aeration system to reduce TTHM levels.

#### Description and Scope:

Addition of a tank mixing and aeration system to Shields GST and Cross Mountain EST to reduce trihalomethane TTHM levels by a minimum of 30%.

#### Remarks:

Compliance monitoring for the Stage 2 DBP rule began in April 2012 and requires that each sampling point in our distribution system have annual average THM levels beloc the MCL of 80 micrograms/liter. The water age in our distribution system after the Winwood Tank (GBRA surface water take point) contributes to THM levels that can exceed the MCL. Reducing the THM levels at tanks with low turnover will correct this problem.

#### FAILURE ANALYSIS AND RISK RATINGS

Failure Mode: Failure Impact: Failure Root Cause:

Impact Severity Likelihood of Occurrence Risk Mitigation Risk Exposure

FUNDING INFORMATION LandYear: DesignYear: Construction Year

Amounts shown are estimated costs without SAWS overhead.

0 0 2013

\$0 \$1,000,000



#### PROJECT DESCRIPTION

Project: Winwood Disinfectant Treatment Process Change (MIOX)

Programmed Amount: \$577,400
Core Business Water Delivery
Category: Production R&R

Phase: Construction Council District 8

Г	P	0	IE	CT	IIM	EO	DI	A A T	TON
г	''	v	JE	u	HV	гυ	KI	пАІ	ION

Project Objective: Change in disinfection tratement process (MIOX) for Winwood facility will reduce

formation of disinfection by-products.

#### Description and Scope:

Two projects were added to help us reduce total trihalomethane (TTHM) levels in the areas on the northwest side of town where we integrate water from Western Canyon (GBRA). This one entails replacement of the gaseous chlorine feed system at Winwood with a mixed oxidants (MIOX) system, which is a compatible disinfectant.

Remarks:				
FAILURE ANALYSIS	AND DI	L DATINGS		
FAILURE ANALYSIS	AND RE	SK RATINGS		
Failure Mode:		Failure Impact:	Failure	Root Cause:
Impact Severity	Likeliho	od of Occurrence	Risk Mitigation	Risk Exposure
FUNDING INFORMA	TION	LandYear:	DesignYear:	Construction Year
Amounts shown are esti costs without SAWS over		0	0	2013



#### PROJECT DESCRIPTION

Project: Water Production Facility Upgrades Program Phase 8 - Nacogdoches

Programmed Amount: \$15,012,400
Core Business Water Delivery
Category: Production R&R

Phase: Construction Council District 10



#### PROJECT INFORMATION

Project Objective: Multi-year program to rehabilitate Primary and Booster water production pump stations.

#### Description and Scope:

Phase 8 of multi-year program to rehabilitate Primary and Booster water production pump stations. Project will rehabilitate aging, obsolete and unserviceable equipment and components, including the upgrade of chlorination facilities at the primary stations to bring them into compliance with current Fire Codes, as well as OSHA, TCEQ and AWWA standards and requirements.

#### Remarks:

Project includes the replacement of all electrical switchgear, chlorination and fluoridation equipment, miscellaneous valves, piping and other items.

Project also includes the installation of a new 7.5 mgd ground storage tank and two (2) additional high service pumps to prevent the elevated tanks in PZ 9 from draining too quickly.

#### FAILURE ANALYSIS AND RISK RATINGS

Failure Mode:	Failure Impact:	ailure Root Cause:		
Unsustainable Equipment	Low Flow/Pressure	Age/Deterioration		
Participation and Company of the Com	A CONTRACTOR OF THE PROPERTY O	ALTONIA MINISTRA CARACTERIA DE CONTRA		

Impact Severity Likelihood of Occurrence Risk Mitigation Risk Exposure 10 10 10 100 1000

FUNDING INFORMATION	LandYear:	DesignYear:	Construction Year	
Amounts shown are estimated costs without SAWS overhead.	0	2012	2013	
	\$0	\$1,300,000	\$13,000,000	



#### PROJECT DESCRIPTION

Project: Water Production Facility Upgrades Program Phase 4a - Basin

Programmed Amount: \$4,619,200 Core Business Water Delivery Category: Production R&R

Phase: Design Council District 1



#### PROJECT INFORMATION

Project Objective: Multi-year program to rehabilitate Primary and Booster water production pump stations.

#### Description and Scope:

Phase IVa of multi-year program to rehabilitate Primary and Booster water production pump stations. Project will rehabilitate aging, obsolete and unserviceable equipment and components, including the upgrade of chlorination facilities at the primary stations to bring them into compliance with current Fire Codes, as well as OSHA, TCEQ and AWWA standards and requirements.

Re	 CE II	n	3	

#### FAILURE ANALYSIS AND RISK RATINGS

Failure Mode: Failure Impact: Failure Root Cause:

Unsustainable Equipment Low Flow/Pressure Age/Deterioration

Impact Severity Likelihood of Occurrence Risk Mitigation Risk Exposure
9 8 9 648

FUNDING INFORMATION LandYear: DesignYear: Construction Year

Amounts shown are estimated 0 2012 2013 costs without SAWS overhead. \$0 \$475,000 \$4,000,000



### Water Supply

This page intentionally left blank



#### PROJECT DESCRIPTION

Project: San Jose and Brooks Recycled Water Pump Station and Ground Storage Tank

Programmed Amount: \$1,367,883 Core Business Water Supply Category: Recycled Water

Phase: Construction Council District 3



#### PROJECT INFORMATION

Project Objective: Build RW Pump Station and Ground Storage Tank

#### Description and Scope:

The SARA river improvement includes construction of a recycle water line extension under the San Antonio River from the existing recycled water line on Riverside Dr. to Mission County Park. This separate project will provide the infrastructure to support recycled water service to the three customers at the Mission Park Redevelopment Area. Per Master Planning modeling efforts, the recycled water line to Riverside Golf Course does not have sufficient pressure (or capacity) to supply the Mission Park Redevelopment Area and the Golf Course. This tank will address the capacity issue, and the booster pumps will address the pressure issue. Brooks Pump station currently feeds the Riverside golf course and will soon provide for the development at the San Jose site which is situated near the Riverside golf course.

#### Remarks:

This project is being programmed to coincide with completion of Brooks Recycled Water Pump Station Upgrade Project. Recycled Operations is securing contracts with the three customers. (by August 31, 2013). Construction needs to begin in 2012 to meet that schedule. Recycle Operations is securing contracts with the three customers.

#### FAILURE ANALYSIS AND RISK RATINGS

Failure Mode: Failure Impact: Failure Root Cause:

Inadequate Capacity Low Flow/Pressure System Improvement

Impact Severity Likelihood of Occurrence Risk Mitigation Risk Exposure
10 10 10 10 1000

FUNDING INFORMATION LandYear: DesignYear: Construction Year

Amounts shown are estimated costs without SAWS overhead.

\$0 2012 2013 \$0 \$125,000 \$990,000



#### PROJECT DESCRIPTION

Project: Recycle Customer Lines
Programmed Amount: \$1,381,700
Core Business Water Supply
Category: Recycled Water

Phase: Construction

Council District System wide



#### PROJECT INFORMATION

Project Objective: Increase use of Recycled Water

Description and Scope:

Economic incentives provided to encourage greater use of recycled water.

R	e	m	а	r	k	s	
	-		٠.		•	_	۰

#### FAILURE ANALYSIS AND RISK RATINGS

Failure Mode: Failure Impact: Failure Root Cause:

Corporate Mandate Failure of Corporate Initiative System Optimization

Impact Severity Likelihood of Occurrence Risk Mitigation Risk Exposure

9 9 9 729

FUNDING INFORMATION LandYear: DesignYear: Construction Year

Amounts shown are estimated 2013 costs without SAWS overhead. \$1,000,000



#### PROJECT DESCRIPTION

Project: Desalination: Construction Manager at Risk (Construction Services)

Programmed Amount: \$98,034,496 Core Business Water Supply Category: Water Resources

Phase: Construction

Council District System wide



#### PROJECT INFORMATION

Project Objective: Increase water supply.

#### Description and Scope:

The Scope of Work will include construction of the remainder of the brackish production wells, well field collection system, reverse osmosis treatment plant, concentrate disposal pipelines, injection facilities/wells, electrical, and SCADA systems.

#### Remarks:

\$15 million in 2012 and \$74 million in 2013.

Increase non-Edwards Aquifer supplies in accordance with goals outlined in 50-year water resource plan.

#### FAILURE ANALYSIS AND RISK RATINGS

Failure Mode: Failure Impact: Failure Root Cause:

None Failure of Corporate Initiative System Optimization

Impact Severity Likelihood of Occurrence Risk Mitigation Risk Exposure

FUNDING INFORMATION LandYear: DesignYear: Construction Year

Amounts shown are estimated 2013 costs without SAWS overhead.

\$84,280,000



#### PROJECT DESCRIPTION

Project: Desalination: Legal
Programmed Amount: \$116,320
Core Business Water Supply
Category: Water Resources

Phase: Acquisition

Council District System wide



#### PROJECT INFORMATION

Project Objective: Increase available water supply.

#### Description and Scope:

The legal services required are associated with land purchase, easement acquisition, acquisition of groundwater rights, and development of an alternative procurement service contract for the desalination project.

#### Remarks:

Increase non-Edwards Aquifer supplies in accordance with goals outlined in 50-year water resource plan.

#### FAILURE ANALYSIS AND RISK RATINGS

Failure Mode: Failure Impact: Failure Root Cause:

None Failure of Corporate Initiative System Optimization

Impact Severity Likelihood of Occurrence Risk Mitigation Risk Exposure

FUNDING INFORMATION LandYear: DesignYear: Construction Year

Amounts shown are estimated costs without SAWS overhead. 2013 0 \$100,000 \$0



#### PROJECT DESCRIPTION

Project: Edwards Aquifer Acquisitions Contract Advisory Services

Programmed Amount: \$64,921 Core Business Water Supply Category: Edwards Aquifer

Phase: Acquisition

Council District System wide



Construction Year

#### PROJECT INFORMATION

Project Objective: Increase Edwards Aquifer Supply.

#### Description and Scope:

Legal assistance and title fees to support the acquisition of Edwards Aquifer groundwater rights through agricultural conservation and purchases of authorized withdrawal permits.

#### Remarks:

Increase non-Edwards Aquifer supplies in accordance with goals outlined in 50-year water resource plan

#### FAILURE ANALYSIS AND RISK RATINGS

Failure Mode: Failure Impact: Failure Root Cause:

None Failure of Corporate Initiative System Optimization

Impact Severity Likelihood of Occurrence Risk Mitigation Risk Exposure

FUNDING INFORMATION LandYear: DesignYear:

Amounts shown are estimated 2013 costs without SAWS overhead.

\$64,438



#### PROJECT DESCRIPTION

Project: Edwards Aquifer Water Rights Programmed Amount: \$10,981,750

Core Busines Water Supply Category: Edwards Aquifer

Phase: Acquisition

Council District System wide



#### PROJECT INFORMATION

Project Objective: Consolidate Edwards Water Rights

#### Description and Scope:

Purchase 2,180 acre-feet of Edwards Aquifer Water Rights at \$5,000 per acre-foot, and acquire title insurance for the purchases.

#### Scope:

The additional 2,180 acre-feet are needed to help off-set permitted supply gaps identified in the 50-year Water Management Plan.

#### FAILURE ANALYSIS AND RISK RATINGS

Failure Mode: Failure Impact: Failure Root Cause:

Impact Severity Likelihood of Occurrence Risk Mitigation Risk Exposure

FUNDING INFORMATION LandYear: DesignYear: Construction Year

Amounts shown are estimated costs without SAWS overhead. \$10,900,000 \$0 \$0



#### PROJECT DESCRIPTION

Project: Integration: Construction Management & Inspection

Programmed Amount: \$5,816,000
Core Business Water Supply
Category: Water Resources

Phase: Construction

Council District System wide

#### PROJECT INFORMATION

Project Objective: Increase Available Water Supply

Description and Scope:

Construction management and field inspection services for integration pipeline projects.

#### Remarks:

\$2M in 2013 and \$3M in 2014

#### FAILURE ANALYSIS AND RISK RATINGS

Failure Mode: Failure Impact: Failure Root Cause:

None Failure of Corporate Initiative System Optimization

Impact Severity Likelihood of Occurrence Risk Mitigation Risk Exposure

FUNDING INFORMATION LandYear: DesignYear: Construction Year

Amounts shown are estimated 0 0 2013 costs without SAWS overhead. \$0 \$0 \$5,000,000



#### PROJECT DESCRIPTION

Project: Regional Carrizo: Well Mitigation Programmed Amount: \$1,138,354

Core Business Water Supply Category: Water Resources

Phase: Construction
Council District OCL

#### PROJECT INFORMATION

Project Objective: Increase Available Water Supply

#### Description and Scope:

Mitigate impacts on wells in the project area. The payments are planned as follows:

- Gonzales County underground Water Conservation District Mitigation payment \$350,640 (required with issuance of a final permit).
- Mediation settlement payment to the City of Nixon \$328,000.00 (required to obtain Gonzales Permit and payable prior to production from wells in late 2013).
- Mediation mitigation settlement with City of Nixon to mitigate 3 municipal wells \$300,000.00 (part of mediated settlement for permit.

#### Remarks:

Increase non-Edwards Aquifer supplies in accordance with goals outlined in 50-year water resource plan.

#### FAILURE ANALYSIS AND RISK RATINGS

Failure Mode: Failure Impact: Failure Root Cause:

None Failure of Corporate Initiative System Optimization

Impact Severity Likelihood of Occurrence Risk Mitigation Risk Exposure

FUNDING INFORMATION LandYear: DesignYear: Construction Year

Amounts shown are estimated costs without SAWS overhead. 2013 0 \$978.640 \$0



### Heating & Cooling

This page intentionally left blank



#### PROJECT DESCRIPTION

Project: Chilled Water Distribution Loop Isolation Valves and Meter Upgrades

Programmed Amount: \$93,025

Core Business Heating & Cooling

Category: Heating & Cooling R&R.

Phase: Design Council District 1



#### PROJECT INFORMATION

Project Objective: Provide isolation valves to isolate lines during repairs for operational flexibility and

minimize disruption to customers on the same feed line.

#### Description and Scope:

Evaluate and design for the installation of isolation valves to the chilled water distribution lines for the purposes of isolating pipelines during repairs and minimizing disruption and impact to customers on the same distribution feed line.

Evaluate and design for the installation of new flow meters for the chilled water and steam systems. Measurements from the flow meters are used to calculate system efficiencies and for customer billing. The accuracy of these meters is essential to the proper operation of the SAWS heating and cooling system and for customer billing. Replace existing flow meters to provide for proper operation of the SAWS heating and cooling system as well as increase the accuracy of customer billing.

#### Remarks:

\*\* Chilled Water Distribution Loop Isolation Valves - In addition to \$373,200 for new valves, EEA highly recommending exercising / repairing existing isolation valves.

#### FAILURE ANALYSIS AND RISK RATINGS

Failure Mode: Failure Impact: Failure Root Cause:

Impact Severity Likelihood of Occurrence Risk Mitigation Risk Exposure

FUNDING INFORMATION LandYear: DesignYear: Construction Year

Amounts shown are estimated costs without SAWS overhead.

0 2013 2014



#### PROJECT DESCRIPTION

Project: Heating and Cooling Governmental Projects

Programmed Amount: \$5,952,271
Core Business Heating & Cooling
Category: Heating & Cooling R&R

Phase: Construction Council District 1



#### PROJECT INFORMATION

Project Objective: Replace or adjust heating and cooling facilities in connection with another agency's

projects.

#### Description and Scope:

City projects (Market Street, Hemisfair Park Area Streets, and the HBG Convention Center Expansion) require the replacement and adjustment of chilled water and steam facilities. Steam mains require replacement due to deterioration. Chilled water mains require adjustment due to conflicts with the City's proposed construction,

FAILURE ANALYSI	S AND RI	SK RATINGS					
Failure Mode:		Failure Impact:	Failure Root Cause:				
Service Interruption Excessive		Excessive Dov	vntime	Conflict with City or State			
Impact Severity	Likelih	ood of Occurrence	Risk Mitigation	Risk Exposure			
9		10	10	900			
FUNDING INFORM	ATION	LandYear:	DesignYear:	Construction Year			
Amounts shown are estimated		0		2013			
costs without SAWS o	verhead.	50		\$4.761.817			

Remarks:



#### PROJECT DESCRIPTION

Project: Heating and Cooling System Infrastructure 2013

Programmed Amount: \$125,000
Core Business Heating & Cooling
Category: Heating & Cooling

Phase: Construction Council District 1.2



#### PROJECT INFORMATION

Project Objective: Heating & Cooling Infrastructure Repair and Rehabilitation

Description and Scope:

Annual requirement for emergency repair and/or replacement of Heating & Cooling related capital assets; including distribution mains and chilled water and steam equipment and facilities. Projects vary in size and location. Unspecified scope.

R				

#### FAILURE ANALYSIS AND RISK RATINGS

Failure Mode: Failure Impact: Failure Root Cause:

Equipment Failure Service Interruption Failed System Component

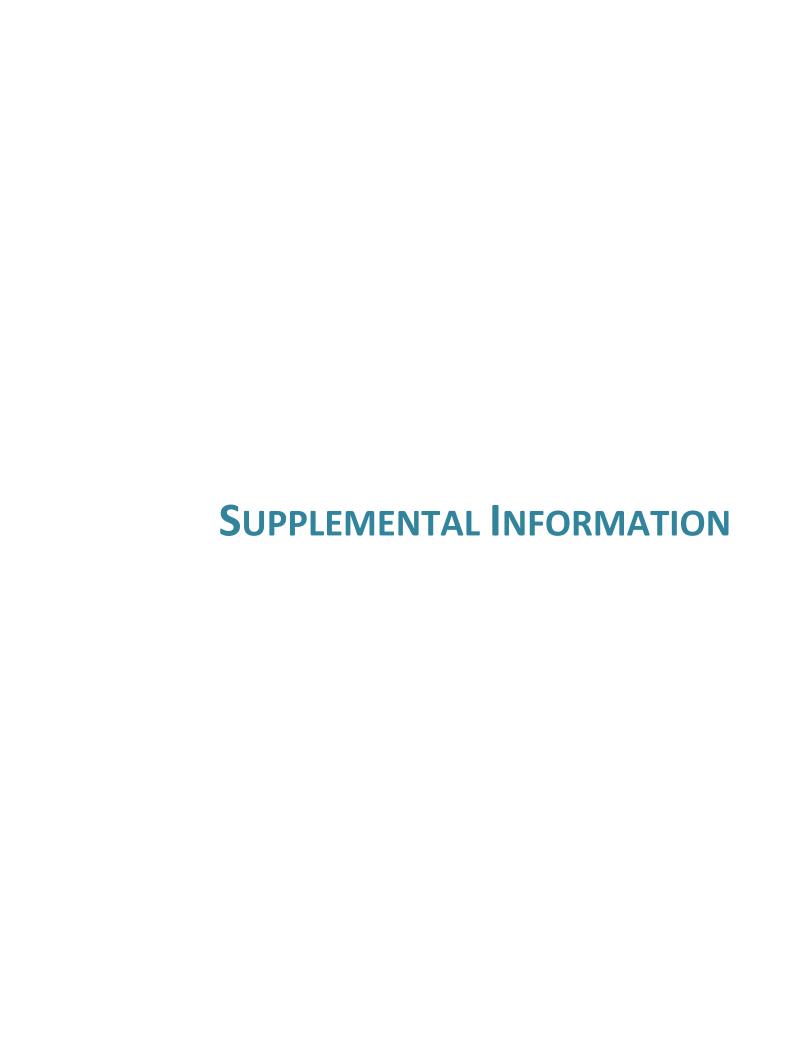
Impact Severity Likelihood of Occurrence Risk Mitigation Risk Exposure

0 10 10 1000

FUNDING INFORMATION LandYear: DesignYear: Construction Year

Amounts shown are estimated 2013 costs without SAWS overhead. \$100,000

This page intentionally left blank



This page intentionally left blank

#### **SUPPLEMENTAL INFORMATION**

#### STATISTICAL SECTION

Revenue Capacity - Water Production, Water Usage and Wastewater Treated

						Total Direct Rate			
	Gallons of	Gallons of	Gallons of	Average	Gallons of	W	ater	Se	ewer
Fiscal	Water	Water	Water	Percent	Wastewater	Base	Usage	Base	Usage
Year	Production (b)	Usage	Unbilled	Unbilled	Treated (c)	Rate (d)	Rate (e)	Rate (f)	Rate (g)
2012	66,596	55,320	11,276	16.93%	49,055	\$7.31	\$20.24	\$9.92	\$ 12.24
2011	70,699	59,133	11,566	16.36%	49,918	7.10	18.10	8.73	10.78
2010 (a)	61,272	52,578	8,694	14.19%	48,152	7.10	18.10	8.73	10.78
2009	62,649	55,295	7,354	11.74%	51,987	6.77	20.04	7.76	9.63
2008	67,523	58,828	8,695	12.88%	50,347	6.56	19.92	7.37	9.14
2007	55,043	49,511	5,532	10.05%	49,217	6.56	19.59	7.37	9.14
2006	63,388	57,724	5,664	8.94%	53,270	6.56	19.69	7.37	9.14
2005	58,990	55,005	3,985	6.76%	49,287	6.11	18.42	7.33	9.10
2004	51,231	49,367	1,864	3.64%	49,592	5.61	15.47	6.60	8.19
2003	55,039	50,575	4,464	8.11%	49,669	5.61	13.20	5.70	7.14

- (a) Reflects rate increase and rate restructuring for water usage beginning in November 2010. Prior to November, Water Base Rate (including TCEQ fees) was \$6.96, Water Usage Rate was \$20.52, Sewer Base Rate (including TCEQ fees) was \$7.81 and Sewer Usage Rate was \$9.63.
- (b) Pumpage is total potable water production less Aquifer Storage and Recovery recharge
- (c) Represents amounts billed to customers. Residential Class customers are billed based on water usage during a consecutive three month billing period from November through March. All other customer classes are billed for wastewater treatment based on actual water usage during each monthly billing period.
- (d) Rate shown is for 5/8" meters. See Schedule 8 for the rates of other meter sizes.
- (e) Represents standard (non-seasonal) usage charge for monthly residential water usage of 7,788 gallons per month. Includes water supply and EAA fees.
- (f) Minimum service availability charge (includes charge for first 1,496 gallons)
- (g) Represents usage charge for a residential customer based on winter average water consumption of 6,178 gallons per montl

# Number of Customers (Average number billed)

	•				Fisca	l Year				
	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003
Water Sales (a):										
Residential Class	339,204	335,280	331,853	327,610	323,754	318,270	308,807	298,271	289,458	282,016
General Class	23,582	23,369	23,225	23,242	23,104	22,943	22,662	22,384	22,092	21,894
Wholesale Class	8	7	7	7	7	7	7	6	6	7
Total Water	362,794	358,656	355,085	350,859	346,865	341,220	331,476	320,661	311,556	303,917
Irrigation Class (b)	8,633	8,479	8,350	8,202	7,940	7,602	7,232	6,883	6,522	6,283
Wastewater Sales:										
Residential Class	383,553	378,380	373,755	368,948	361,966	352,038	338,693	326,516	316,498	313,042
General Class	24,824	24,550	24,407	24,285	23,999	23,604	23,408	23,016	22,590	22,386
Wholesale Class	12	12	7	12	13	11	12	12	12	11
Total Wastewater	408,389	402,942	398,169	393,245	385,978	375,653	362,113	349,544	339,100	335,439
	,	,	•	,	•	,	,	,	•	•
Conservation - Residentia	23 804	33,708	21,791	26,665	29,973	15,548	31,716	27,963	18,754	22,177
conservation Residential		33,700	,,,	_5,005	25,575	10,040	52,710	_,,505	20,754	,_,,
Recycled Water Sales	92	80	81	86	76	71	69	56	51	33
necycled water bares	32	00	01	00	70	, ,	05	50	31	33

- (a) Water Supply and EAA fees are billed to a water customers with water usage.
- (b) Represents the number of customers included in Residential, General and Wholesale Classes which also have irrigation meters.
- (c) The residential class rate applied to monthly residential usage in excess of 17,205 gallons is designated as Conservation Fees. These customers are included in the residential class for water sales.

### **STATISTICAL SECTION (CONTINUED)**

Sales by Source (\$ in thousands)

	Fiscal Year									
	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003
Water Sales:	472.520	470.000	466.440	465.000	450 545	455.005	465.003	450.054	444.000	44-44-
Residential Class	\$72,620	\$79,332	\$66,410	\$65,333	\$68,516	\$56,096	\$65,927	\$58,351	\$44,829	\$45,147
General Class	35,504	33,571	32,326	32,943	32,330	29,313	31,606	28,613	24,006	23,219
Wholesale Class	1,255	234	136	204	179	120	145	182	114	143
Irrigation Class (a)	11,164	11,722	12,909	12,176	16,124	10,659	12,541	11,723	8,210	8,666
Total Water	120,543	124,859	111,781	110,656	117,149	96,188	110,219	98,869	77,159	77,175
Water Supply Fees (b)										
Residential Class	44,163	51,696	45,312	45,909	49,042	39,081	48,403	42,283	28,623	23,290
General Class	32,537	31,586	29,764	30,403	30,140	28,105	29,531	27,036	19,945	16,410
Wholesale Class	2,294	202	158	178	160	132	166	165	104	116
Irrigation Class	12,058	13,029	7,154	6,288	8,016	5,285	6,154	5,741	3,559	2,824
Total Water Supply Fees	91,052	96,513	82,388	82,778	87,358	72,603	84,254	75,225	52,231	42,640
EAA Pass-through fees (c)										
Residential Class	10,841	4,767	5,423	3,605	5,893	3,561	4,925	4,818	3,304	3,247
General Class	7,352	2,930	3,648	2,387	3,622	2,560	3,005	3,080	2,303	2,288
Wholesale Class	509	18	19	14	19	12	17	19	12	16
Irrigation Class	1,242	540	765	494	963	481	626	654	411	394
Total Pass-through fees	19,944	8,255	9,855	6,500	10,497	6,614	8,573	8,571	6,030	5,945
Conservation Fees:										
Residential Class	2,986	3,682	2,814	2,962	2 662	1,986	1 112	3,291	2,411	2,411
General Class		-	-		3,663		4,112	-	-	
Total Conservation	7,040	6,702	4,461	4,008	3,938	3,957	3,637	3,968	3,558	3,519
Total Conservation	10,026	10,384	7,275	6,970	7,601	5,943	7,749	7,259	5,969	5,930
Wastewater Sales:										
Residential Class	98,674	88,702	79,118	81,202	75,752	72,212	72,901	63,605	55,763	48,649
General Class	54,175	48,271	41,768	41,343	40,034	38,554	38,325	37,342	31,622	28,410
Wholesale Class	6,761	6,105	5,044	5,225	5,281	6,469	6,704	6,435	5,695	4,693
Surcharge	5,134	4,815	4,861	4,648	4,614	4,409	4,271	4,081	4,019	4,075
Total Wastewater	164,744	147,893	130,791	132,418	125,681	121,644	122,201	111,463	97,099	85,827
TCEQ Pass-through fees (d)										
Water customers	1,064	1,178	964	-	-	-	-	-	-	-
Wastewater customers	411	464	280	-	-	-	-	-	-	
	1,475	1,642	1,244	-	-	-	-	-	-	-
Recycled Water Sales	5,074	5,068	3,955	4,393	4,287	3,244	3,795	3,100	2,669	2,455
Stormwater Fees	4,558	4,158	3,745	3,358	3,037	3,056	3,056	2,938	2,746	2,400
Chilled Water & Steam	12,485	11,715	12,337	12,714	12,758	13,101	13,243	13,371	12,028	12,193
Miscellaneous Fees and Charges	12,427	10,193	8,872	9,266	9,541	7,944	8,204	7,374	6,756	6,519
Provision for Uncollectible Accounts	(3,800)	(2,811)	(3,463)	(3,711)	(3,288)	(2,619)	(2,638)	(1,637)	(1,415)	(1,260)
Total Operating Revenue	\$438,528	\$417,869	\$368,780	\$365,342	\$374,621	\$327,718	\$358,656	\$326,533	\$261,272	\$239,824

<sup>(</sup>a) Effective December 1, 2000, an irrigation rate class was approved for water service provided through separate irrigation meters.

<sup>(</sup>b) Effective December 1, 2000, a water supply fee was approved on all potable water service.

<sup>(</sup>c) EAA pass-through fees are designed to recoup fees charged by Edwards Aquifer Authority (EAA). The fee is charged based on water usage. Any previous over or under recovery of fees in considered in determining the fees to be charged each year.

<sup>(</sup>d) TCEQ pass-through fees are designed to recoup fees charged by the Texas Commission on Environmental Quality (TCEQ). Fee is a per customer charge.

### **STATISTICAL SECTION (CONTINUED)**

Sales in Gallons (Gallons billed, in millions)

_					Fiscal	Year				
_	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003
Water Sales (a):										
Residential Class	30,070	34,153	28,932	30,667	33,025	26,651	33,162	30,917	27,054	27,624
General Class	20,393	20,986	19,465	20,309	20,297	19,166	20,232	19,769	18,851	19,464
Wholesale Class	1,412	128	101	119	108	90	114	121	98	137
Irrigation Class	3,445	3,866	4,080	4,200	5,398	3,604	4,216	4,198	3,364	3,350
Total Water	55,320	59,133	52,578	55,295	58,828	49,511	57,724	55,005	49,367	50,575
Wastewater Sales:										
Residential Class	26,572	27,371	26,746	29,825	28,148	27,383	28,859	25,293	25,421	24,860
General Class	20,066	20,134	20,002	20,338	20,352	19,634	21,967	22,262	21,800	22,249
Wholesale Class	2,417	2,413	1,404	1,824	1,847	2,200	2,444	1,732	2,371	2,560
Total Wastewater	49,055	49,918	48,152	51,987	50,347	49,217	53,270	49,287	49,592	49,669
Conservation - Residential	3,026	4,106	2,935	3,469	3,948	2,432	4,276	3,613	2,634	2,636
Recycled Water Sales	18,129	18,990	14,968	16,321	16,559	14,148	14,836	14,048	13,626	13,643

<sup>(</sup>a) Water Supply and EAA fees are billed based on the gallons billed for water sales.

<sup>(</sup>b) Gallons billed for conservation are included in the gallons billed for water sales.

### **STATISTICAL SECTION (CONTINUED)**

### Ten Largest Customers - Water

(For Fiscal Year Ended December 31, 2012)

Customer	Principal Business	Usage (million gallons)	%	Revenue (a) (in thousands)		%	
Fiscal Year Ended December 31, 2012:							
CITY OF SAN ANTONIO	Municipal Entity	540	0.98	\$	2,716	1.12	
SAN ANTONIO HOUSING AUTHORITY	Public Housing	493	0.89		1,866	0.77	
HEB GROCERY	Grocery	468	0.85		1,822	0.75	
BEXAR COUNTY	<b>County Government</b>	310	0.56		1,119	0.46	
NORTHSIDE INDEPENDENT SCHOOL DISTRICT	School System	256	0.46		1,118	0.46	
CPS ENERGY	Public Power Utility	288	0.52		1,019	0.42	
SAN ANTONIO INDEPENDENT SCHOOL DISTRICT	School System	161	0.29		792	0.33	
MAXIM INTEGRATED PRODUCT INC.	Electronics	238	0.43		765	0.32	
UNIVERSITY OF TEXAS AT SAN ANTONIO	University	203	0.37		728	0.30	
NORTHEAST INDEPENDENT SCHOOL DISTRICT	School System	162	0.29		721	0.30	
Subtotal (10 largest)		3,119	5.64		12,666	5.22	
Balance from Other Customers		52,201	94.36		229,963	94.78	
Total		55,320	100.00	\$	242,629	100.00	

#### **Ten Largest Customers - Wastewater**

(For Fiscal Year Ended December 31, 2012)

		Usage			Total evenue	
Customer	Principal Business	(million gallons)	%	% (in thousands)		%
Fiscal Year Ended December 31, 2012:						
HEB GROCERY	Grocery	419	0.90	\$	1,904	1.20
SAN ANTONO HOUSING AUTHORITY	Public Housing	491	1.05		1,281	0.81
L & H PACKING COMPANY	Beef Processor	150	0.32		762	0.48
BEXAR COUNTY	County Government	248	0.53		716	0.45
TOYOTA	Automobile Manufacturer	212	0.45		578	0.36
MAXIM INTEGRATED PRODUCT, INC.	Electronics	214	0.46		555	0.35
CITY OF SAN ANTONIO	Municipal Entity	193	0.41		534	0.34
OAK FARMS DAIRY	Dairy Producer	52	0.11		448	0.28
NORTHSIDE INDEPENDENT SCHOOL DISTRICT	School System	145	0.31		392	0.25
AMERICAN OPPORTUNITY FOR HOUSING	Housing Services	147	0.32		383	0.24
Subtotal (10 largest)		2,271	4.87		7,553	4.77
Balance from Other Customers		44,367	95.13		150,841	95.23
Total		46,638	100.00	\$	158,394	100.00

#### **WATER AND SEWER RATE SCHEDULES**

## RESIDENTIAL CLASS WATER AND SEWER RATE SCHEDULES SAN ANTONIO WATER SYSTEM

San Antonio, Texas

Effective for Consumption on or about March 1, 2013

The Service Availability Charge (minimum bill) for all residential water service **INSIDE THE CTTY LIMITS** of San Antonio furnished through meters of the following sizes together with the Monthly Volume Charge measured per 100 gallons of water usage in every instance of service for each month or fraction thereof shall be as follows:

#### MONTHLY SERVICE A VAILABILITY CHARGE

#### MONTHLY VOLUME CHARGE

		<u>Usage Blocks</u>	Rate Per 100 Gallons			
Meter Size	Service Availability Charge	<u>Gallons</u>	Standard	Seasonal		
5/8"	\$7.14	First 5,985	\$0.0948	\$0.0948		
3/4"	10.01	Next 6,732	0.1372	0.1492		
1"	15.75	Next 4,488	0.1935	0.2219		
1-1/2"	30.09	Over 17,205	0.3388	0.4597		
2"	47.28					
3"	87.44	The Volume Charg	ge "Seasonal" Ra	te Per 100		
4"	144.78	Gallons shall be a	pplied to all billin	gs		
6"	288.17	beginning on or a	-	U		
8"	460.22	five complete billi	U			
10"	660.95	September 30 of each year. At all other times the Volume Charge "Standard" Rate Per 100				
12"	1,234.47	Gallons shall be u	tilized.			

The Service Availability Charge (minimum bill) for all residential water service **OUTSIDE THE CITY LIMITS** of San Antonio furnished through meters of the following sizes together with the Monthly Volume Charge measured per 100 gallons for water usage in every instance of service for each month or fraction thereof shall be as follows:

#### MONTHLY SERVICE AVAILABILITY CHARGE

#### MONTHLY VOLUME CHARGE

		Usage Blocks	Rate Per 100	Gallons
Meter Size	Service Availability Charge	<u>Gallons</u>	Standard	Seasonal
5/8"	\$9.29	First 5,985	\$0.1234	\$0.1234
3/4"	13.02	Next 6,732	0.1784	0.1940
1"	20.47	Next 4,488	0.2516	0.2885
1-1/2"	39.12	Over 17,205	0.4405	0.5975
2"	61.48			
3"	113.68	The Volume Charg	ge "Seasonal" Ra	te Per 100
4"	188.23	Gallons shall be a	pplied to all billin	gs
6"	374.62	beginning on or a	-	U
8"	598.30	five complete billi September 30 of e	0	
10"	859.24	the Volume Charg	•	
12"	1,604.82	Gallons shall be u		

#### SEWER

Sewer service charges for all metered residential connections are computed on the basis of average water usage for 90 days during three consecutive billing periods beginning after November 15 and ending on or about March 15 of each year and are billed according to the rate schedules below.

#### INSIDE CITY LIMITS (ICL)

Monthly Service Availability Charge (includes first 1,496 gallons) -\$11.49

Over 1,496 gallons - \$0.3047 per 100 gallons.

Customers who do not have a record of winter water usage or an interim average will be billed an Unaveraged or Unmetered Residential Charge of \$32.00 per month.

#### OUTSIDE CITY LIMITS (OCL)

Monthly Service Availability Charge (includes first 1,496 gallons) - \$13.81

Over 1,496 gallons - \$0.3656 per 100 gallons.

Customers who do not have a record of winter water usage or an interim average will be billed an Unaveraged or Unmetered Residential Charge of \$38.41 per month.

## GENERAL CLASS WATER AND SEWER RATE SCHEDULES SAN ANTONIO WATER SYSTEM

San Antonio, Texas Effective for Consumption on or about March 1, 2013

The Service Availability Charge (minimum bill) for all general water service **INSIDE THE CITY LIMITS** of San Antonio furnished through meters of the following sizes together with the Monthly Volume Charge measured per 100 gallons for water usage in every instance of service for each month or fraction thereof shall be as follows:

MONTHLY	
SERVICE AVAILABILITY CHARGE	MONTHLY VOLUME CHARGE

		<u>Usage Blocks</u> ,	
Meter Size	Service Availability Charge	<u>Gallons</u>	Rate Per 100 Gallons
5/8"	\$9.92	Base*	\$0.1148
3/4"	14.18	>100-125% of Base	0.1372
1"	22.68	>125-175% of Base	0.1924
1-1/2"	43.95	>175% of Base	0.2818
2"	69.48		
3"	129.04		
4"	214.13	*The Base Use is defi	ined as 100% of the Annual
6"	426.86	Average Consumption	
8"	682.12		
10"	979.93		
12"	1,830.83		

The Service Availability Charge (minimum bill) for all general water service **OUTSIDE THE CITY LIMITS** of San Antonio furnished through meters of the following sizes together with the Monthly Volume Charge measured per 100 gallons for water usage in every instance of service for each month or fraction thereof shall be as follows:

MONTHLY	
SERVICE A VA II A BII ITV CHA PCE	MONTHLY VOLUME CHARGE

		Usage Blocks,	
Meter Size	Service Availability Charge	<u>Gallons</u>	Rate Per 100 Gallons
5/8"	\$12.89	Base*	\$0.1492
3/4"	18.43	>100-125% of Base	0.1783
1"	29.48	>125-175% of Base	0.2501
1-1/2"	57.14	>175% of Base	0.3662
2"	90.33		
3"	167.76		
4"	278.37	*The Base Use is defi	ned as 100% of the Annual
6"	554.91	Average Consumption	
8"	886.76		
10"	1,273.92		
12"	2,380.08		

#### SEWER

OUTSIDE CITY I MITS (OCL)

Sewer service charges are computed from the water usage schedules below for all metered connections.

INCIDE CITYLIMITE (ICL)

INSIDE CIT Y LIMITS (ICL)	OUTSIDE CITY LIMITS (OCL)		
Monthly Service Availability Charge (includes first 1,496 gallons) - \$11.49	Monthly Service Availability Charge (includes first 1,496 gallons) - \$13.81		
Over 1,496 gallons - \$0,3047 per 100 gallons.	Over 1,496 gallons - \$0,3656 per 100 gallons.		

## WHOLESALE CLASS WATER AND SEWER RATE SCHEDULES SAN ANTONIO WATER SYSTEM

San Antonio, Texas Effective for Consumption on or about March 1, 2013

The Service Availability Charge (minimum bill) for all wholesale water service **INSIDE THE CITY LIMITS** of San Antonio furnished through meters of the following sizes together with the Monthly Volume Charge measured per 100 gallons for water usage in every instance of service for each month or fraction thereof shall be as follows:

#### MONTHLY SERVICE A VAILA BILITY CHARGE

#### MONTHLY VOLUME CHARGE

		<u>Usage Blocks</u> ,	
Meter Size†	Service Availability Charge	<u>Gallons</u>	Rate Per 100 Gallons
6"	\$288.17	Base*	\$0.0796
8"	460.22	>100-125% of Base	0.1196
10"	660.95	>125-175% of Base	0.1727
12"	1,234.47	>175% of Base	0.2442

\*The Base Use is defined as 100% of the Annual Average Consumption

The Service Availability Charge (minimum bill) for all wholesale water service **OUTSIDE THE CITY LIMITS** of San Antonio furnished through meters of the following sizes together with the Monthly Volume Charge measured per 100 gallons for water usage in every instance of service for each month or fraction thereof shall be as follows:

## MONTHLY SERVICE AVAILABILITY CHARGE

#### MONTHLY VOLUME CHARGE

		Usage Blocks,	
Meter Size†	Service Availability Charge	<u>Gallons</u>	Rate Per 100 Gallons
6"	\$374.62	Base*	\$0.1035
8"	598.30	>100-125% of Base	0.1555
10"	859.24	>125-175% of Base	0.2245
12"	1,604.82	>175% of Base	0.3174

\*The Base Use is defined as 100% of the Annual Average Consumption

#### SEWER

#### INSIDE CITY LIMITS (ICL)

0.2746 Monthly Volume Charge per 100 gallons of contributed wastewater. (2.06 per 100 cubic feet)

#### OUTSIDE CITY LIMITS (OCL)

\$134.93 Monthly Service Availability Charge plus \$0.3297 Monthly Volume Charge per 100 gallons of contributed wastewater. (\$2.47 per 100 cubic feet)

<sup>†</sup> Wholesale water service will not be provided through a meter smaller than 6" in order to comply with fire-flow requirements and the "Criteria for Water Supply and Distribution in the City of San Antonio and its Extraterritorial Jurisdiction."

## IRRIGATION CLASS WATER AND SEWER RATES CHEDULES SAN ANTONIO WATER SYSTEM

San Antonio, Texas

Effective for Consumption on or about December 1, 2011

The Service Availability Charge (minimum bill) for all irrigation water service **INSIDE THE CITY LIMITS** of San Antonio furnished through meters of the following sizes together with the Monthly Volume Charge measured per 100 gallons for water usage in every instance of service for each month or fraction thereof shall be as follows:

#### MONTHLY SERVICE AVAILABILITY CHARGE

#### MONTHLY VOLUME CHARGE

		Usage Blocks,		
Meter Size	Service Availability Charge	<u>Gallons</u>	<u>Standard</u>	Seasonal
5/8"	\$9.92	0 Gallons	\$0.0000	\$0.0000
3/4"	14.18	Next 6,732	0.1613	0.1613
1"	22.68	Next 10,473	0.1935	0.2246
1-1/2"	43.95	Over 17,205	0.3388	0.4650
2"	69.48			
3"	129.04	The Volume Charge	"Seasonal"	
4"	214.13	Rate Per 100 Gallons		
6"	426.86	applied to all billings	0 0	
8"	682.12	or about May 1 and five complete billing	U	
10"	979.93	about September 30		
12"	1,830.83	At all other times the	-	
		Charge "Standard" l	Rate Per 100	
		Gallons shall be utili	zed.	

The Service Availability Charge (minimum bill) for all irrigation water service **OUTSIDE THE CITY LIMITS** of San Antonio furnished through meters of the following sizes together with the Monthly Volume Charge measured per 100 gallons for water usage in every instance of service for each month or fraction thereof shall be as follows:

#### MONTHLY SERVICE A VAILA BILITY CHARGE

#### MONTHLY VOLUME CHARGE

		Usage Blocks,		
Meter Size	Service Availability Charge	<u>Gallons</u>	Standard	Seasonal
5/8"	\$12.89	0 Gallons	\$0.0000	\$0.0000
3/4"	18.43	Next 6,732	0.2097	0.2097
1"	29.48	Next 10,473	0.2515	0.2920
1-1/2"	57.14	Over 17,205	0.4405	0.6045
2"	90.33			
3"	167.76	The Volume Charge "	Seasonal"	
4"	278.37	Rate Per 100 Gallons		
6"	554.91	applied to all billings or about May 1 and e	2 2	
8"	886.76	five complete billing i	U	
10"	1,273.92	about September 30 c		
12"	2,380.08	At all other times the Charge "Standard" R Gallons shall be utiliz	Volume ate Per 100	

# WATER SUPPLY FEE SCHEDULE SAN ANTONIO WATER SYSTEM

San Antonio, Texas
Effective for Consumption on or about March 1, 2013

The Water Supply Fee assessed on all potable water service for water usages in every instance of service for each month or fraction thereof shall be as follows:

		Fee to be
	Usage Blocks,	Assessed
Rate Class	Gallons	(per 100 gallons)
Residential	First 5,985	\$0.1080
	Next 6,732	\$0.1562
	Next 4,488	\$0.2204
	Over 17,205	\$0.3857
General	Base*	\$0.1661
	>100-125% of Base	\$0.1661
	>125-175% of Base	\$0.1661
	>175% of Base	\$0.1661
Wholesale	Base*	\$0.1661
	>100-125% of Base	\$0.1661
	>125-175% of Base	\$0.1661
	>175% of Base	\$0.1661
Irrigation	0 Gallons	\$0.0000
-	Next 6,732	\$0.1661
	Next 10,473	\$0.2204
	Over 17,205	\$0.4183

<sup>\*</sup>The Base Use is defined as 100% of the Annual Average Consumption

# RECYCLED WATER RATE SCHEDULES SAN ANTONIO WATER SYSTEM

San Antonio, Texas

Effective for Consumption on or about December 1, 2011

The Monthly Service Availability Charge (minimum bill) for all recycled water service furnished through meters of the following sizes together with the Monthly Volume Charge measured per 100 gallons for water usage in every instance of service for each mo

#### EDWARDS EXCHANGE CUSTOMERS

#### 4ONTHLY SERVICE AVAILABILITY CHARG

#### MONTHLY VOLUME CHARGE

			Rate Per 1	00 Gallons
Meter Size	Service Availability Charge	Usage Blocks	Standard	Seasonal
5/8"	\$9.04	Transferred Amount	\$0.0238	\$0.0238
3/4"	11.76			
1"	15.31	All in excess of		
1-1/2"	24.35	transferred ammount	0.0892	0.0948
2"	35.61			
3"	94.71			
4"	140.77	The Volume Charge "Se	easonal" Rate	Per 100
6"	268.54	Gallons shall be applied	to all billings	beginning
8"	404.78	on or about May 1 and	ending after f	ive
10"	555.04	complete billing months	on or about !	September
12"	684.83	30 of each year. At all of	other times the	e Volume
		Charge "Standard" Rate	e Per 100 Gallo	ns shall be

#### NON EDWARDS EXCHANGE CUSTOMERS

#### 40NTHLY SERVICE AVAILABILITY CHARG

#### MONTHLY VOLUME CHARGE

			Rate Per 1	Rate Per 100 Gallons	
Meter Size	Service Availability Charge	Usage Blocks	Standard	Seasonal	
5/8"	\$9.04	First 748,000	\$0.0955	\$0.1026	
3/4"	11.76				
1"	15.31	Over 748,000	0.0975	0.1036	
1-1/2"	24.35				
2"	35.61				
3"	94.71				
4"	140.77	The Volume Charge "Seasonal" Rate Per 100			
6"	268.54	Gallons shall be applied to all billings beginning			
8"	404.78	on or about May 1 and ending after five			
10"	555.04	complete billing months on or about September			
12"	684.83	30 of each year. At	all other times the	Volume	
		Charge "Standard" Rate Per 100 Gallons shall be			

#### **GLOSSARY**

Acre-Foot The volume of water that would cover one acre to a depth of one foot. It is

equal to 325,851 gallons.

Affordability Discount Customer assistance program designed to provide a discount to customers

who meet income eligibility requirements.

Annual Budget A financial plan for a specified period of time (fiscal year) that assigns

resources to each activity in sufficient amounts so as to reasonably expect

accomplishment of the objectives in the most cost effective manner.

Aquifer A wet underground layer of water-bearing permeable rock or

unconsolidated materials (gravel, san, or silt) from which groundwater can

be usefully extracted using a water well.

Aquitard A bed of low permeability along an aquifer

Balanced Budget A budget in which planned revenues generated from various user fees and

receipts are sufficient to fund planned expenditures.

Board of Trustees of the San Antonio Water System

Bonds City of San Antonio, Texas Water System Revenue and Refunding Bonds

Brackish Groundwater Either slightly or moderately saline water containing between 1,000 and

10,000 milligrams per liter (mg/L) of total dissolved solids (TDS).

Build America Bonds Taxable municipal bonds that carry special tax credits and federal subsidies

for either the bond issuer or the bondholder. Build America Bonds were created under the American Recovery and Reinvestment Act on February

17, 2009.

Capital Improvement

Program

The Capital Improvement Program (CIP) is a planning and budgeting tool that provides information about SAWS' infrastructure needs. It identifies facility and equipment requirements for sustaining, restoring and modernizing the facilities and infrastructure that support water supply and delivery, wastewater collection and treatment, and heating and cooling requirements in the SAWS service area. It also prioritizes and schedules them for funding and implementation through a multi-year plan.

Capital Expenditure An expenditure that:

- results in additions or improvements of a permanent nature
- is in an amount exceeding \$5,000
- adds value and has a useful life of more than one year
- prolongs the life of the improved or enhanced property
- is necessary to establish or implement the use of a capital asset such that the modification of other existing assets makes the new asset operational.

City The City of San Antonio (COSA), located in the State of Texas.

City Council The current elected officials of the City of San Antonio, as set forth in the

City's Charter. Unless otherwise stated, the Mayor is considered part of the

City Council.

Commercial Paper See "Tax Exempt Commercial Paper"

CPS Energy Municipally owned utility providing electric and gas to the San Antonio and

Bexar County area - formerly City Public Service (CPS).

**CPS Contract** 

Or

**CPS Energy Contract** 

The Wastewater Contract executed on September 15, 1990 between the Alamo Conservation and Reuse District and the City Public Service Board of

San Antonio.

Cured-in-place pipe (CIPP) A cured-in-place pipe (CIPP) is one of several trenchless rehabilitation

methods used to repair existing pipelines. CIPP is a jointless, seamless, pipe-within-a-pipe with the capability to rehabilitate pipes ranging in diameter from 0.15 - 2.8 meter (6"-110"). As one of the most widely used rehabilitation methods CIPP has application in water, sewer, gas, and

chemical pipelines

Debt All indebtedness payable from Pledged Revenues and/or Net Revenues

incurred or assumed by the City for borrowed money and all other SAWS financing obligations payable from Pledged Revenues and/or net Revenues that, in accordance with generally accepted accounting principles, are

shown on the liability side of a balance sheet.

Debt Service Requirements As of any particular date of computation, with respect to any obligation

and with respect to any obligations and with respect to any period, the aggregate of the amounts to be paid or set aside by the City as of such date or in such period for the payment of the principal of, premium, if any, and

interest (to the extent not capitalized) on such obligations.

**District Special Project** 

(DSP)

Former Bexar Metropolitan Water District

Encumbrance Amount for which there is a legal obligation to spend in the future. A

purchase order is a typical encumbrance transaction

Edwards Aguifer HCP Edwards Aguifer Habitat Conservation Plan

Failure Impact The impact on the customer

Failure Mode The manner by which a failure is observed; it generally describes the way

the failure occurs.

Failure Root Cause Defects in design, process, quality, or part application, which are the

underlying cause of the failure or which initiate a process which leads to

failure.

2013 Annual Budget

Fiscal Year

The twelve month accounting period used by SAWS in connection with the operation of the System, currently ending on December 31 of each year, which may be any twelve consecutive month period established by the Board, but in no event may the Fiscal Year be changed more than one time in any three calendar year period.

**Gross Revenues** 

All revenue during such period in respect or on account of the operation or ownership of the System, excluding refundable meter deposits, restricted gifts, grants in aid of construction, any amounts payable to the united Stats as rebate, any impact fees charged by the System, payments received pursuant to the CPS Contract together with earnings and interest thereon, and earnings and income derived from the investment or deposit of money in the Construction Fund.

**Junior Lien Obligations** 

Bonds, Previously Issued Junior Lien Obligations, and any Additional Junior Lien Obligations hereafter issued by the City, or bonds issued to refund any of the foregoing (as determined within the sole discretion of the City Council in accordance with applicable law) if issued in a manner so as to be payable from and equally and ratably secured by a junior lien on and pledge of SAWS' Net Revenues

**Net Revenues** 

Gross Revenues of the System, with respect to any period, after deducting the System's Operating and Maintenance Expenses during such period.

Operating and Maintenance Expense

All current expenses of operating and maintaining the System not paid from the proceeds of any Debt, including:

- (1) The cost of all salaries, labor, materials, repairs, and extensions necessary to render efficient service, but only if, in the case of repairs and extensions, that are, in the judgment of the Board, necessary to maintain operation of the System and render adequate service to the City and the inhabitants thereof and other customers of the System, or are necessary to meet some physical accident or condition which would otherwise impair the payment of Debt,
- 2) Payments to pension, retirement, health hospitalization, and other employee benefit funds for employees of the Board engaged in the operation or maintenance of the System,
- (3) Payments under contracts for the purchase of water supply, treatment of sewage, or other materials, goods or services for the System to the extent authorized by law and the provisions of such contract,
- (4) Payments to auditors, attorneys, and other consultants incurred in complying with the obligations of the City or the Board,
- (5) The payments made on or in respect of obtaining and maintaining any Credit Facility, and
- (6) Any legal liability of the City or the Board arising out of the operation, maintenance, or condition of the System, but excluding any allowance for depreciation, property retirement, depletion, obsolescence, and other items not requiring an outlay of cash and any interest on the Bonds or any Debt

Ordinance

Ordinance No. 75686 adopted by the City Council on April 30, 1992.

Pledged Revenues

The Net Revenues, plus any additional revenues, income, receipts, or other resources, including, without limitation any grants, donations, or income received or to be received or to be received from the United States Government, or any other public or private source, whether pursuant to an agreement or otherwise, which hereafter are pledged by the City to the payment of the Senior Lien Obligations, and excluding those revenues excluded from Gross Revenues.

Potable Water

Water fit to drink.

Senior Lien Obligations

The outstanding and unpaid obligations of the City that are payable solely from and equally and ratably secured by a prior and first lien on and pledge of the Pledged Revenues of the System.

Sanitary Sewer Overflow (SSO)

A condition whereby untreated sewage discharged into the environment prior to reaching sewage treatment facilities

Strategic Plan

Strategic plan is a process of identifying corporate goals and priorities. The Strategic Plan becomes a management tool used to help an organization ensure that members of the organization are working toward the same goals, and to assess and adjust the organization's direction in response to a changing environment. Strategic planning is a disciplined effort to produce fundamental decisions and actions that shape and guide what an organization is, what it does, and why it does it, with a focus on the future.

Subordinate Lien Obligations

The currently outstanding and unpaid obligations of the City that are payable wholly or in part from a lien on and pledge of the Net Revenues that is subordinate and inferior to the pledge thereof securing payment of the currently outstanding Senior Lien Obligations and the Junior Lien Obligations.

Swap

An exchange of streams of payments over time according to specified terms. The most common type is an interest rate swap, in which one party agrees to pay a fixed interest rate in return for receiving an adjustable rate from another party.

Tax Exempt Commercial Paper

An unsecured, short-term debt instrument maturing between 1 and 270 days, that provides the debt holders (bondholders) exemption from at least some taxes on the earnings at a local, state or federal level, or a combination thereof. The debt is usually issued at a discount, reflecting prevailing market interest rates. Tax-Exempt commercial paper is typically backed only by the issuer's promise to pay the face amount on the maturity date specified on the note.

Water Supply Fee

A consumption based fee that funds the acquisition of new water sources to reduce San Antonio's dependence on the Edwards Aquifer.

#### **GLOSSARY OF ABBREVIATIONS**

ASR Aquifer Storage and Recovery

AWC Average Winter Consumption

BGD Brackish Groundwater Desalination

BMA Bexar Medina-Atascosa Water Control and Improvement District

BMWD Bexar Metropolitan Water District

CCN Certificate of Convenience and Necessity

CIP Capital Improvement Program

CIPP Cured in place pipe

COSA or CSA City of San Antonio

CPS City Public Service Energy

CRWA Canyon Regional Water Regional Authority

DFC Desired Future Conditions

DSP District Special Project

EAA Edwards Aquifer Authority

EAHCP Edwards Aquifer Habitat Conservation Plan

EARIP Edwards Aquifer Recovery Implementation Program

EMT SAWS Executive Management Team

EPA Environmental Protection Agency

ERSS Enterprise Resource Software System

FMEA Failure Methods and Effects Analysis

GASB Government Accounting Standards Board

GBRA Guadalupe-Blanco River Authority

GFOA Government Finance Officers Association

GIS Geographic Information System

GMA-13 Groundwater Management Area 13

GPCD Gallons per capita per day

HCP (EAHCP) Edwards Aquifer Habitat Conservation Plan

LCRA Lower Colorado River Authority

MSA Metropolitan Statistical Area

MYFP Multi-year financial plan

O&M Operations and Maintenance

OPEB Other post-employment benefits

RFCSP Request for Competitive Sealed Proposal

R&R Renewal and Replacement

SAWS San Antonio Water System

SMWB Small, Minority and Women-Owned Business

SSLGC Schertz-Seguin Local Governmental Corporation

SSO Sanitary sewer overflow

TCEQ Texas Commission on Environmental Quality

TECP Tax exempt commercial paper

TWDB Texas Water Development Board

WRC Water Recycling Center

WSC Water Supply Corporation

