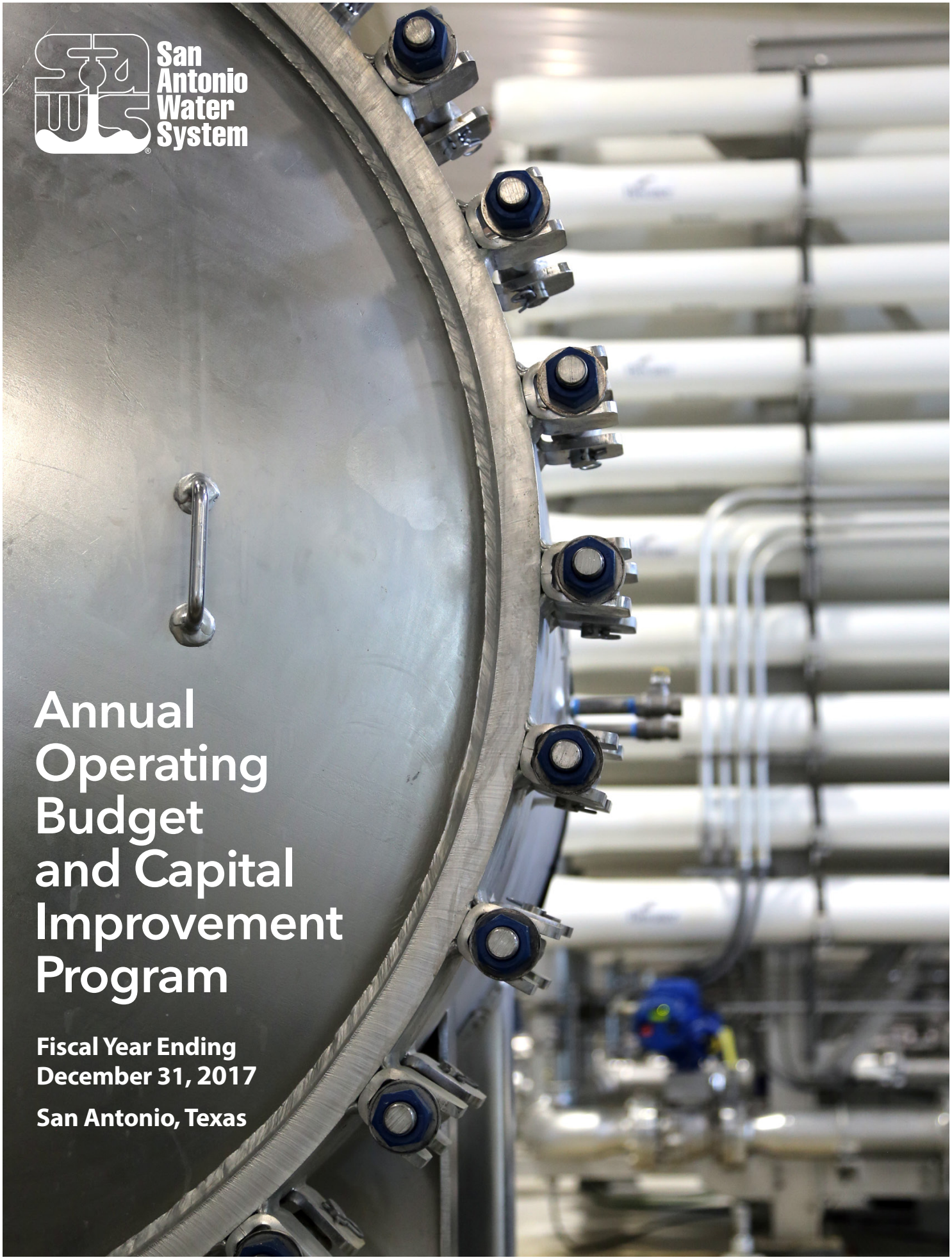

San Antonio Water System

Annual Operating Budget and Capital Improvement Program

Fiscal Year Ending
December 31, 2017

San Antonio, Texas

On the cover: A pretreatment filter, left, removes large particles from raw brackish groundwater before it enters a series of reverse osmosis membranes, right, at the recently opened H_2Oaks Center desalination plant in southern Bexar County.

ANNUAL OPERATING BUDGET
AND
CAPITAL IMPROVEMENT PROGRAM
FISCAL YEAR ENDING DECEMBER 31, 2017

DOUGLAS P. EVANSON
SENIOR VICE PRESIDENT / CHIEF FINANCIAL OFFICER

MARY E. BAILEY
VICE PRESIDENT – BUSINESS PLANNING / CONTROLLER

PREPARED BY:
BUSINESS PLANNING DEPARTMENT
- LOUIS LENDMAN, BUDGET MANAGER
- PATRICIA ARRIOLA
- BEN BENZAQUEN
- BRADY HAYNES
- BENJAMIN KIDD
- TAKASHI REINBOLD
- ROBERT WALKER

MARK SCHNUR, PLANNER IV

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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, 2016**. 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.

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CITY OF SAN ANTONIO
MAYOR AND CITY COUNCIL

Ivy R. Taylor
Mayor

Ron Nirenberg
District 8

Joe Krier
District 9

Mike Gallagher
District 10

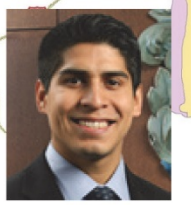
Cris Medina
District 7

Roberto C. Treviño
District 1

Ray Lopez
District 6

Alan E. Warrick, II
District 2

Shirley Gonzales
District 5



Rey Saldaña
District 4

Rebecca Viagran
District 3

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SAN ANTONIO WATER SYSTEM
BOARD OF TRUSTEES

Berto Guerra, Jr.
Chairman

Pat Jasso
Vice Chairman

Ernesto Arrellano, Jr.
Secretary

Louis E. Rowe
Assistant Secretary

Pat Merritt

David McGee

Ivy R. Taylor, ex Officio

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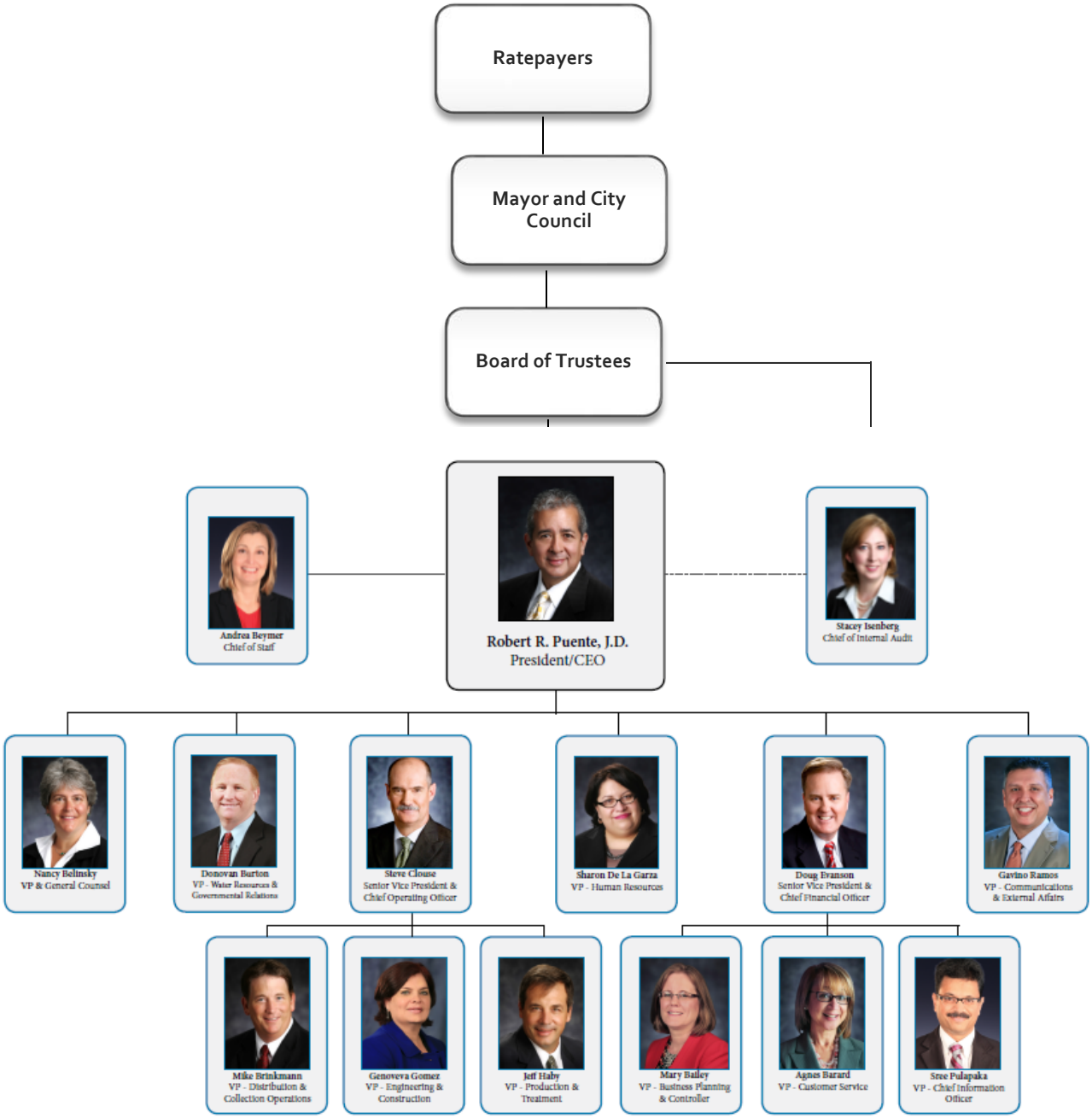
San Antonio Water System
Organization Chart



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MISSION
Sustainable Affordable Water Services

VISION
To Be Leaders in Delivering Responsible Water Services for Life

VALUES
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.

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.

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February 28, 2017

Mr. Berto Guerra, Jr., Chairman
Ms. Pat Jasso, Vice Chairman
Mr. Ernesto Arrellano, Jr., Secretary
Mr. Louis E. Rowe, Assistant Secretary
Ms. Pat Merritt, Trustee
Mr. David McGee, Trustee
Honorable Ivy R. Taylor, Mayor

Honorable Mayor and Trustees:

I am pleased to present the 2017 Annual Operating Budget and Capital Improvement Program of the San Antonio Water System (SAWS), which has been prepared in accordance with the requirements of San Antonio City Ordinance No. 75686. Some of the key objectives of this budget are:

- continued development and acquisition of diverse water supplies to support San Antonio's future growth,
- maintenance and replacement of aging water and sewer infrastructure to include compliance with the consent decree settlement agreement with the U.S. Environmental Protection Agency (EPA) as well as reduce water losses within the system,
- implementation of new technologies to enhance customer contact,
- ensuring appropriate compensation and benefits for SAWS employees including an increase in the minimum living wage to $14 per hour and responsible funding of retirement obligations, and
- full integration of the former Bexar Metropolitan Water District with SAWS through the final integration step of rate parity.

When City Council approved the 2016 rate adjustments in November 2015, they also approved maximum 2017 rate adjustments of 7.9% for the average residential bill contingent upon a review by the City's Public Utilities Office of the final 2017 proposed rate adjustment. As a result of the deliberative process that resulted in the 2017 budget, the required rate adjustment for 2017 was reduced by more than 1% to 6.8% for the average SAWS residential customer, assuming use of 7,092 gallons of water and discharge of 5,668 gallons of wastewater per month. In November 2016, the Public Utilities Office agreed that the revenue requirements for 2017 justified the need for an average rate adjustment of 6.8%. In December 2016 the Board approved the final 2017 budget and rate adjustment. Specifically, percentage increases of 8.6% for water delivery rates, 6.8% for water supply fee rates, 5.6% for wastewater rates, and 7.9% for recycled water rates were approved to support the 2017 Annual Budget. The rate adjustments are projected to generate a total of $38.7 million in additional revenues from the core businesses as follows: Water Supply - $9.2 million, Water Delivery - $17.2 million, and Wastewater - $12.3 million.

The 2017 budget balances revenue requirements for the fiscal year ending December 31, 2017 with available revenues and other funding sources. Highlights of the 2017 Budget include:

- Budgeted billed water usage of 64.8 billion gallons, which is a 2% increase from the 63.5 billion gallons forecasted for the 2016 annual budget. The increase in assumed usage is the result of stronger than

expected customer growth during 2016 and projected customer growth for 2017 more than offsetting a slight decline in projected per-customer usage.

- Water customer growth of 1.4% and wastewater growth of 1.6% for a combined growth of 1.5%
- Total Sources of Funds of $720.7 million, which is $42.9 million or 6.3% higher than the 2016 Sources of Funds and supports the following Uses of Funds:
  - Operations and maintenance costs of $324.9 million
  - Debt service and related expenses totaling $224.1 million
  - Transfers to the City of San Antonio of $16.8 million
  - Transfers to the Renewal & Replacement Funds of $154.9 million
- Capital Improvement Program totaling $367.5 million

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 2017 Annual Operating Budget and Capital Improvement Program will allow the San Antonio Water System to continue providing high quality water, wastewater, recycled water, and chilled water services at reasonable costs, while also maintaining a healthy financial position.

Respectfully submitted,

Douglas P. Evanson
Senior Vice President/Chief Financial Officer

Budget Summary

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BUDGET SUMMARY

OVERVIEW

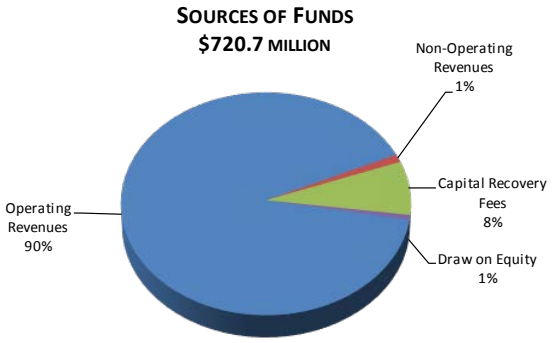
The Adopted Budget for 2017 presents a comprehensive projection of San Antonio Water System (SAWS) operations from January 1, 2017 through December 31, 2017. This budget summary describes the key recommendations encompassing the Adopted Budget for 2017.

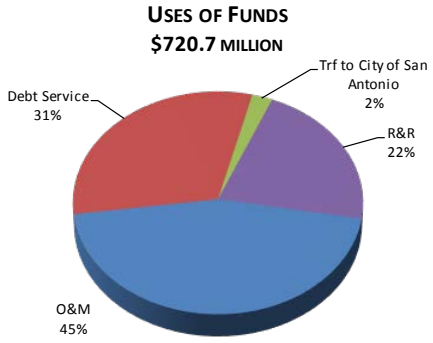
The Board of Trustees adopted a combined 6.8% rate adjustment in water delivery, water supply and wastewater rates in December 2016 to support the requirements of the 2017 budget. A summary of these requirements as well as the sources of funding to meet these requirements is provided in the table below:

	$ in Millions			
	2016 Amended	2017 Budget	Change	% Change
Sources of Funds				
Operating Revenues	$ 613.7	$ 651.7	$ 38.0	6.2%
Non-Operating Revenues	5.7	8.0	2.3	40.4%
Draw on Equity	1.4	4.9	3.5	250.0%
Capital Recovery Fees	57.0	56.1	(0.9)	-1.6%
Total	**$ 677.8**	**$ 720.7**	**$ 42.9**	**6.3%**
Uses of Funds				
Operations and Maintenance	$ 313.7	$ 324.9	$ 11.2	3.6%
Debt Service and Expenses	210.5	224.1	13.6	6.5%
Transfer to City of San Antonio	13.9	16.8	2.9	20.9%
Available for Renewal and Replacement - Restricted	59.7	56.4	(3.3)	-5.5%
Available for Renewal and Replacement - Unestricted	80.0	98.5	18.5	23.1%
Total	**$ 677.8**	**$ 720.7**	**$ 42.9**	**6.3%**

The 2017 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. Some of the key objectives of this budget are:

- continued development and acquisition of diverse water supplies to support San Antonio's future growth,
- maintenance and replacement of aging water and sewer infrastructure to include compliance with the consent decree settlement agreement with the U.S. Environmental Protection Agency (EPA) as well as to reduce water losses within the system,
- implementation of new technologies to enhance customer contact,
- ensuring appropriate compensation and benefits for SAWS employees including an increase in the minimum living wage to $14 per hour and responsible funding of retirement obligations, and
- full integration of the former Bexar Metropolitan Water District with SAWS through the final integration step of rate parity.





O&M Budget Highlights

The 2017 O&M budget totals $324.9 million, or 3.6%, compared to $313.7 million in 2016. The table below highlights the major changes between the 2016 and 2017 O&M budgets.

	$ in Millions	
2016 O&M Budget		$ 313.7
Additional Positions	$ 2.2	
Water supply project support	6.0	
Other O&M Changes, net	3.0	
Net Increase in O&M		11.2
2017 O&M Budget		**$ 324.9**

The Adopted budget for 2017 includes funds for 39 additional full-time equivalents (FTE) positions. These new positions provide additional resources that primarily support improved customer service metrics related to call center response and meter reading.

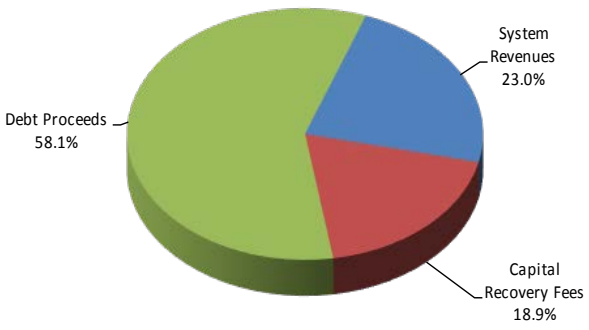
Additional O&M funds have also been provided in 2017 related to several water supply projects. The brackish groundwater desalination became operational in late 2016. The expected full year operating costs of the plant increased O&M expenses by $2.9 million in 2017. An additional 2,500 acre feet of water will also be purchased from the Schertz Sequin Local Government Corporation in 2017 at a cost of $2.4 million. Finally, an additional $0.7 million has been budgeted in 2017 to adequately monitor the construction of the Vista Ridge pipeline.

Other O&M cost increases total $3 million and include funds to provide for subsurface water infrastructure condition assessment, customer service technology enhancements including improvements in customer engagement channels such as web chat and voice and text messaging, and an increase in the minimum living wage to $14 per hour.

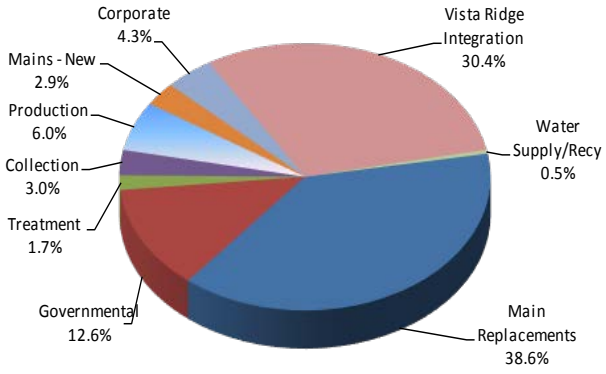
Capital Improvement Program (CIP) Highlights

The projected 2017 Capital Improvement Program (CIP) totals $367.5 million. Approximately 40% of the 2017 CIP is related to improvements necessary to comply with the EPA Consent Decree. Another 30% of the 2017 CIP relates to water system improvements that will be necessary to receive and distribute the 50,000 acre feet of water expected to be received from Vista Ridge beginning in 2020. The remainder of the 2017 CIP focuses primarily on water main replacements and improvements to production and treatment facilities.

Sources of Funds
2017 CIP Funding
$367.5 Million



Uses of Funds
2017 CIP by Category
$367.5 Million



FIVE YEAR CIP PROJECTION BY CATEGORY

Over the next five years, SAWS expects to invest more than $1.6 billion in capital improvements, the majority of which will be focused on improvements to our wastewater system in support of our obligations under the EPA Consent Decree.

($ in millions)

Core Business/ Category	2017	2018	2019	2020	2021	Total 2017-2021
Water Delivery						
Corporate - WD	$ 6.2	$ 0.2	$ 0.2	$ 0.2	$ 7.4	$ 14.2
Governmental	26.0	22.7	32.9	39.9	36.6	158.1
Mains - New	9.4	16.5	4.9	13.6	20.0	64.4
Main Replacements - Water	11.6	20.9	16.2	20.8	17.1	86.6
Production	22.0	66.4	19.0	37.7	20.2	165.3
Water Delivery Total	**75.1**	**126.7**	**73.2**	**112.2**	**101.2**	**488.4**
Wastewater						
Corporate - WW	9.5	0.2	0.2	0.2	7.2	17.3
Governmental	20.3	24.8	26.3	36.9	35.3	143.6
Main Replacements - Sewer	130.3	113.7	123.3	103.6	93.6	564.5
Mains - New	1.2	2.9	9.7	1.3	1.3	16.4
Collection Facilities	11.2	6.6	2.0	7.0	21.6	48.4
Treatment	6.4	19.5	30.3	25.5	53.2	134.9
Wastewater Total	**178.8**	**167.7**	**191.7**	**174.4**	**212.2**	**924.8**
Water Resources						
Regional Carrizo	1.3	-	-	-	-	1.3
Desalination	-	-	-	11.6	-	11.6
ASR	-	-	-	2.4	-	2.4
Corporate - WR	0.2	0.6	0.6	0.6	0.6	2.6
Vista Ridge Integration	111.8	0.2	2.7	-	-	114.7
WRIP	-	29.2	47.1	7.8	-	84.1
Water Resources Total	**113.3**	**30.0**	**50.4**	**22.5**	**0.6**	**216.8**
Recycled Water	**0.3**	**0.3**	**0.3**	**0.3**	**0.3**	**1.4**
Chilled Water	**-**	**1.7**	**0.1**	**5.7**	**-**	**7.5**
Grand Total	**$ 367.5**	**$ 326.5**	**$ 315.6**	**$ 315.1**	**$ 314.3**	**$ 1,639.0**

IMPACT ON RATES

2017 RATE ADJUSTMENT

To support the requirements of the 2017 budget, a 6.8% rate adjustment is required for the average residential customer (assumes 7,092 gallons of water and 5,668 gallons wastewater per month).

While the combined water delivery, water supply and wastewater rate adjustment for the average residential customer is 6.8%, separate, individual rate adjustments are needed for each of the SAWS core businesses as shown in the table below. The rate adjustment for recycled water service is not factored into the combined adjustment for the average residential customer.

Rate Category	2017 Rate Request
Wastewater	5.6%
Water Delivery	8.6%
Water Supply	6.8%
Total	6.8%
Recycled	7.9%

Average based on 7,092 gals water/ 5,668 gals sewer usage before EAA and TCEQ pass-through. Excludes COSA Storm water fees

Recycled Rates adjusted for the weighted average increase in potable water rates (Water Delivery & Water Supply)

Customers in former BexarMet service areas will see water rate adjustments for the first time since 2010. Now that the former utility has been fully integrated into SAWS, customers in those areas will begin paying SAWS rates for water service beginning in January 2017.

The average residential customer in former BexarMet areas will see an increase of 7.7% in their monthly water and sewer bill. However, customers who use 2,992 gallons a month or less will likely see a decrease of more than 3 percent.

COMMUNITY PROFILE

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COMMUNITY PROFILE

Beyond its role as a significant population and business center within 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, the county seat of Bexar County (pronounced "bear"), is located in south central Texas. The city encompasses a total geographic area of 486 square miles 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

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 are relatively uncommon. Mild weather prevails during the winter months, with temperatures below freezing occurring on an average of about 20 days per year. Average yearly long-term rainfall is approximately 32 inches. The extremes vary from 10.11 inches in 1917 to 52.28 inches in 1973.

POPULATION

According to 2016 estimates by the US Census Bureau, 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) historically has consisted of Atascosa, Bandera, Bexar, Comal, Guadalupe, Kendall, Medina, and Wilson counties. Prior to the

2010 US census, the city of New Braunfels was included in the MSA. The San Antonio-New Braunfels MSA is estimated to contain 2.43 million people as of the year 2016. San Antonio's MSA ranks twenty-fifth among national MSAs and third among those in Texas.

The following table provides the population of the City, Bexar County, and the San Antonio-New Braunfels MSA[1] for the years shown:

Year	City of San Antonio	Bexar County	San Antonio-New Braunfels MSA
2016 (Estimated)	1,469,824	1,928,680	2,429,609
2010	1,327,407	1,714,773	2,142,508
2000	1,144,646	1,392,931	1,711,703
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

Data for 1920-1990 has been restated from the redefined eight-county MSA to the original four-county MSA.

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.

Sources: U.S. Census Bureau; Texas Association of Counties – County Information Project; City of San Antonio

EDUCATION

Within 50 miles of San Antonio, 15 colleges and universities offer degrees in all major fields of study and educate more than 159,000 students.

Institution	Certified Fall 2015	Certified Fall 2016	Change
Texas State University	37,979	38,808	829
The University of Texas at San Antonio	28,787	28,959	172
San Antonio College	20,638	19,028	(1,610)
Northwest Vista College	16,656	16,793	137
St. Philip's College	11,198	11,604	406
Palo Alto College	8,671	9,108	437
University of the Incarnate Word of San Antonio	8,598	8,597	(1)
Texas A&M University-San Antonio	4,564	5,474	910
St. Mary's University	3,592	3,531	(61)
Wayland Baptist University	3,592	3,510	(82)
Northeast Lakeview College	3,332	3,484	152
Our Lady of the Lake University	3,334	3,292	(42)
The University of Texas Health Science Center at San Antonio	3,130	3,250	120
Trinity University	2,439	2,462	23
Texas Lutheran University	1,373	1,295	(78)
Total	**157,883**	**159,195**	**1,312**

Source: Texas Higher Education Coordinating Board

ECONOMY

San Antonio boasts a favorable business environment that supports economic diversification and growth. This diversification can be seen by the large variety of industries that have major operations in the city, including the aerospace, bioscience/healthcare, environmental/green technology, financial services, information technology and cyber security, and manufacturing industries along with the military. All of these industries are supported by the city's commitment to strengthen infrastructure improvements and to invest in a growing and dedicated workforce.

The San Antonio Economic Foundation, a private, nonprofit organization that assists business and industry relocating or expanding into the San Antonio area, the Greater San Antonio Chamber of Commerce, and the U.S Bureau of Labor Statistics are the sources of the following information on local industry.

AEROSPACE/AVIATION

The local aerospace industry includes a range of businesses that manufacture aircraft equipment and parts, service and repair aircraft, produce and distribute air transportation equipment and supplies, provide both scheduled and unscheduled air transportation, and operate flight schools. The local combined aerospace-related maintenance, repair and operations (MRO), manufacturing, military and air transportation services industry provides over 13,000 jobs. Most of these jobs are concentrated at the San Antonio International Airport and Port San Antonio which occupies the facilities formerly operated by the U.S. Air Force as Kelly Air Force Base.

BIOSCIENCE/HEALTHCARE

As one of San Antonio's leading industries, the healthcare and bioscience industry has shown steady growth and innovation over the past two decades. The industry is composed of health services and related industries such as research, pharmaceuticals, and medical device manufacturing. In the Hospitals and Ambulatory Health Care Services employment subsectors alone, in 2016 there are over 92,000 jobs in the local area. Employment in these two subsectors has increased by almost a third since 2007.

FINANCIAL SERVICES

The Financial Services industry in San Antonio includes the following sectors: banking and credit; investment activities; insurance; funds, trusts and other financial vehicles; accounting and bookkeeping. San Antonio's financial sector employs more than 85,000 people. It is one of the city's most stable, promising and significant business sectors and has grown in number of jobs by over 28% since 2007.

INFORMATION TECHNOLOGY/CYBER SECURITY

The Information Technology (IT) industry plays a major role in San Antonio. The most recent economic impact estimate of the IT and Cyber Security industry in San Antonio measures at $10 billion. The industry itself is both large and diverse, with over 1,000 IT and Internet-related firms that produce and sell information technology products. San Antonio has one of the largest concentrations of IT and cybersecurity professionals in the nation to include personnel from all branches of the military, the National Security Agency and U.S. government law enforcement agencies.

The IT products sector includes manufacturers of computer and electronic equipment and components, wholesale trade (including business-to-business electronic market), retail trade, and Internet and software publishing. The Information sector is estimated to employ 21,000 persons in 2016.

MANUFACTURING

San Antonio has a large and diverse manufacturing industry, with a representation of every major sector of U.S. manufacturing present in the community, including materials and electricity, equipment and metal, transportation, and diversified products. This sector employs over 45,000 people in the San Antonio area as of December 2015.

MILITARY/DEFENSE

The U.S. military has had a significant and historic presence in San Antonio dating back well into the 19th century. The military mainly operates in San Antonio today under the framework known as Joint Base San Antonio (JBSA). JBSA has a substantial impact on the local economy in San Antonio and in Texas. The Texas Comptroller of Public Accounts and JBSA registered an impact estimated at $48.7 billion overall. In fact, JBSA contributes 65% of Texas' total military GDP and generates an annual disposable personal income of approximately $17 billion. Military employment accounts for 3.4% of the area's total employment and 64% of Texas' total military population.

EMPLOYMENT

The San Antonio economy has experienced robust, sustained growth since the mid-1990's. This economic growth coupled with the net in-migration trends experienced in many areas of Texas has resulted in population growth that has exceeded national averages. While job growth slowed significantly during the national downturn experienced from 2007-2011 (average annual growth of 1.1%), job growth has been steadily increasing since 2011 through 2016 (average annual growth of 2.9%). Annual growth in 2015 (2.5%) and in 2016 (2.2%) slowed compared to the five-year annual average likely due to lower oil prices in the last two years and the related loss of many energy-related jobs in Texas. Despite the challenges being faced within the Texas energy sector, the diversity of the San Antonio economy provides a measure of stability through economic cycles. Specifically, San Antonio's strategic positions in key employment sectors including government and military, biomedical sciences, medical services, tourism, and hospitality contribute to this stability. San Antonio's favorable economic position relative to the nation is reflected in the fact that, according to the U.S. Bureau of Labor Statistics, as of December 2016, the San Antonio MSA unemployment rate was 3.7% (preliminary estimate), while the nation's was 4.7%.

A summary of San Antonio's nonagricultural employment by industry since 2007 is as follows:

San Antonio MSA Non-Farm Employment by Industry (2007 - 2016)

as of December of each year 2007-2016

	2016 *	2015	2014	2013	2012	2011	2010	2009	2008	2007
Natural Resources, Mining and Construction	59,500	58,600	57,800	51,100	47,000	44,000	45,200	48,600	55,500	56,200
Manufacturing	46,200	47,200	47,000	46,300	46,900	46,400	45,300	43,500	45,600	49,000
Trade, Transportation and Utilities	178,100	176,300	172,800	165,600	159,000	153,700	149,400	148,500	154,600	157,600
Information	21,300	21,400	21,800	21,500	20,500	19,700	18,400	18,600	21,000	21,800
Financial Activities	85,100	84,500	82,400	78,600	76,300	71,900	69,800	67,100	67,400	66,700
Professional and Business Services	128,200	125,200	122,800	117,300	114,100	108,200	104,300	105,800	107,800	110,800
Educational and Health Services	157,800	153,100	147,400	142,200	138,700	137,100	131,900	127,100	122,900	117,400
Leisure and Hospitality	126,700	121,300	117,700	114,200	110,800	105,600	101,200	97,500	99,300	95,900
Other Services	39,600	37,200	34,800	34,100	33,200	31,600	31,800	30,900	30,700	30,200
Government	174,500	170,400	166,100	163,700	162,200	161,600	164,200	161,900	158,200	154,100
Total Non-Farm Employment	1,017,000	995,200	970,600	934,600	908,700	879,800	861,500	849,500	863,000	859,700

Source: U.S. Bureau of Labor Statistics

** Preliminary as of December 2016*

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.

SAN ANTONIO WATER SYSTEM PROFILE

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SAN ANTONIO WATER SYSTEM PROFILE

HISTORY

SAWS was created in 1992 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.

On January 28, 2012, SAWS assumed the operational control and management of the Bexar Metropolitan Water District (BexarMet). Legislation passed by the State Legislature in 2011 provided for the dissolution of BexarMet and required that full integration with SAWS be completed by January 1, 2017. SAWS operated the former BexarMet as a separate entity known as SAWS District Special Project (DSP) from January 2012 until January 2016. In January 2016, all the outstanding debt of DSP was refunded with SAWS issued debt and the assets and liabilities of DSP were transferred to SAWS.

By state law, full integration with SAWS is be considered to be complete when:

1. BexarMet Infrastructure meets TCEQ standards,
2. It is no longer operating as separate entity, and
3. Former BexarMet customers pay water rates equal to SAWS

All requirements have been met with the last requirement being met on January 1, 2017 when customers located in the former BexarMet service areas began paying for water service under SAWS rate structure.

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, 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. SAWS maintains more than 12,000 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

SAWS' water delivery service area currently extends over approximately 934 square miles, making it the largest water purveyor in Bexar County. The service area 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.

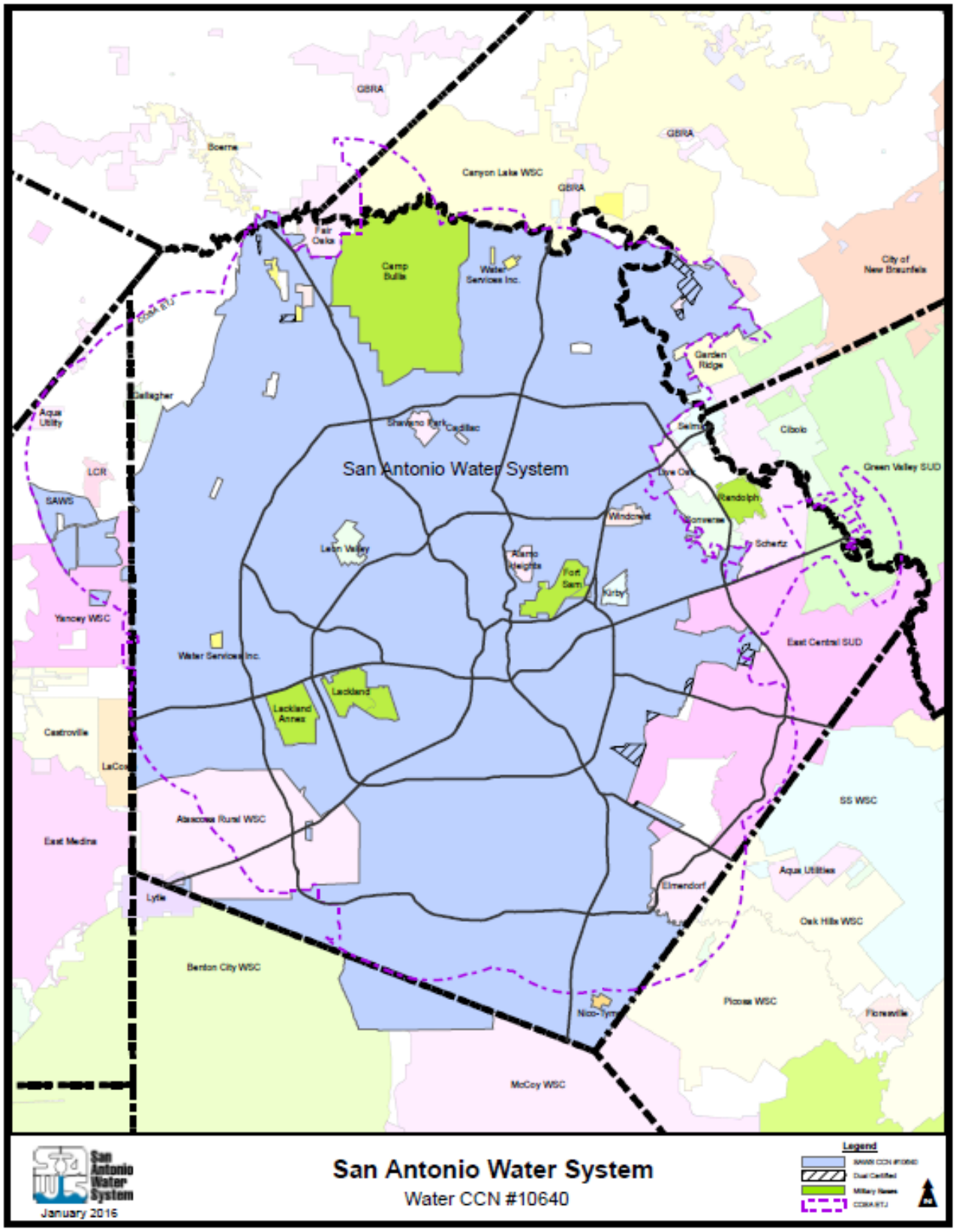
SAWS provides potable water service to residential, commercial, multifamily, industrial and wholesale accounts. As of December 31, 2016, the water delivery system provides potable water service to 488,705 customer connections.

The water delivery system currently utilizes 59 elevated storage tanks and 57 ground storage reservoirs with combined storage capacities of 269.2 million gallons. As of December 31, 2016, SAWS had installed 6,961 miles of distribution mains, ranging in size from 1 inch to 96 inches in diameter. As of December 31, 2016, SAWS was equipped with 39,998 fire hydrants in service.

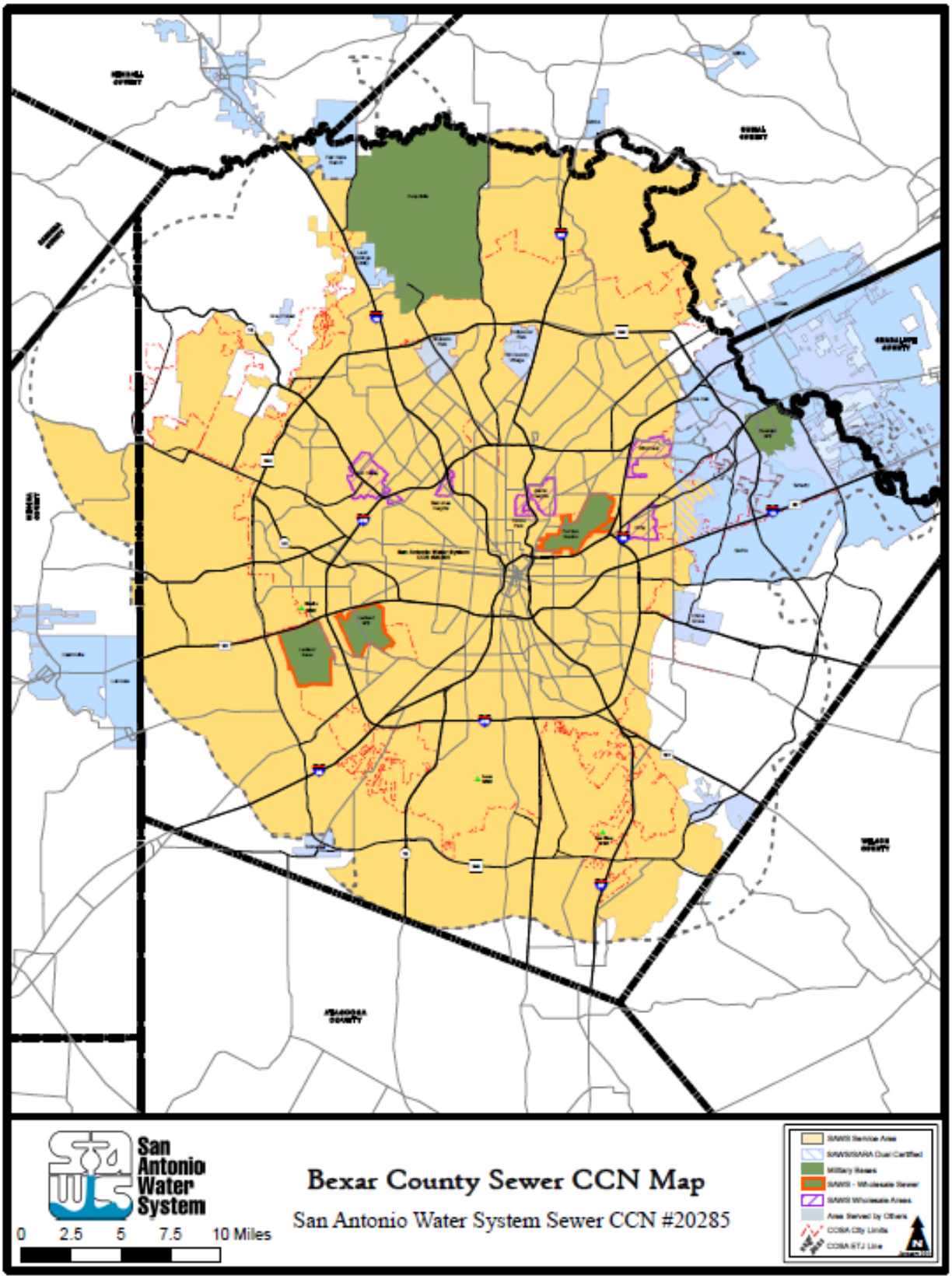
A larger and somewhat different area, following natural watersheds, is defined for wastewater collection and treatment. SAWS is the largest wastewater treatment agency in the San Antonio area. SAWS also provides collection and treatment services by contract to developments outside its defined service area to avoid unnecessary proliferation of state wastewater discharge permits. The wastewater system has certain prescribed boundaries that currently cover an area of approximately 852 square miles. SAWS also coordinates with the City of San Antonio for wastewater planning the City's total planning area, its extraterritorial jurisdiction (ETJ), of approximately 1,109 square miles. The population for this planning area is approximately 1.6 million people. As of December 31, 2016, SAWS provided wastewater services to 437,460 customer connections, including 12 wholesale sewer connections.

The wastewater system is composed of approximately 5,375 miles of mains and three major treatment plants: Dos Rios Water Recycling Center, Leon Creek Water Recycling Center and Medio Creek Water Recycling Center.

WATER SERVICE AREA



WASTEWATER SERVICE AREA

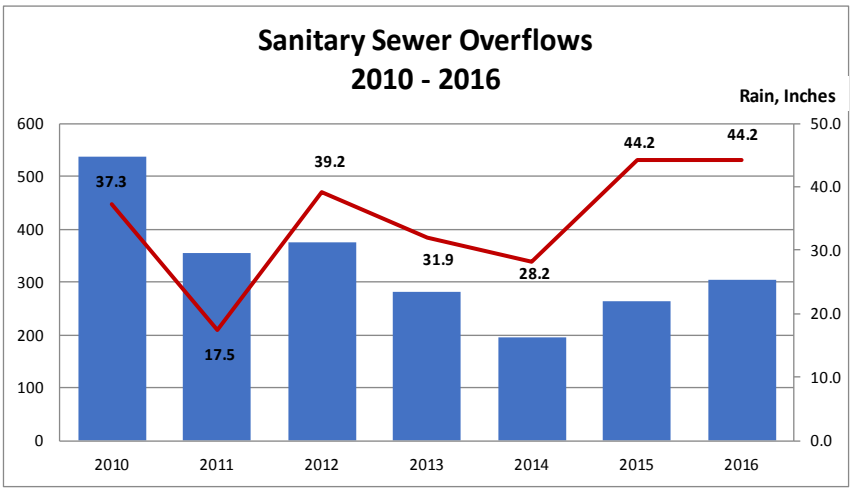


Chilled Water System

SAWS owns, operates, and maintains five thermal energy facilities providing chilled water services to governmental and private entities. Two of the facilities, located in the City's downtown area, provide chilled water to 21 customers. They include various City facilities such as the Henry B. Gonzalez Convention Center and the Alamodome, which constitute a large percentage of the downtown system's chilled water annual production requirements. In addition to City facilities, the two central plants also provide chilled water service to a number of major hotels in the downtown area, including the Grand Hyatt, Marriott Riverwalk and Hilton Palacio Del Rio. The other three thermal facilities, owned and operated by SAWS, are located at the Port San Antonio industrial area (formerly Kelly USA) 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.

Sewer Management

In June 2013, SAWS approved a settlement with the U.S. Environmental Protection Agency (EPA) that will require additional work over 10 to 12 years to reduce sanitary sewer overflows (SSOs). The work required to comply with the consent decree includes system-wide inspection, cleaning and evaluation of sanitary sewer pipelines. Additionally, increased investment in the replacement and rehabilitation of aging sewer infrastructure is necessary. The targeted replacement and rehabilitation program will be specifically tailored based on extensive condition assessments currently being performed. SAWS has significantly reduced the number of SSOs as result of efforts made since 2012 to clean and replace sewer pipelines. While the number of SSOs have increased during the last two years, the increase is attributable to high levels of rainfall. The following chart shows the number of SSOs and annual rainfall since 2010.



The 2017 O&M budget includes $26.3 million in operating costs related to program management, televising and cleaning sewer mains, capacity assessment activities, and repair of sewer infrastructure. Additionally, $141.5 million in capital project investments are planned in 2017 to rehabilitate aging sewer infrastructure and address system capacity issues.

Water Supply

Historically, San Antonio obtained nearly all of its water from 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 limit withdrawals from, the Edwards Aquifer through a permitting system. They are also responsible for ensuring that continuous minimum spring flows of the Comal Springs (in New Braunfels) and the San Marcos Springs are maintained to protect endangered and threatened species.

In 1996, the City Council appointed a 34-member Citizens Committee to develop strategic policies and goals for water resource management. The Citizens Committee on Water Policy report, entitled "A Framework for Progress: Recommended Water Policy Strategy for the San Antonio Area," was unanimously accepted by City Council, becoming the foundation for SAWS' *1998 Water Resource Plan*. In November 1998, the City Council accepted the *1998 Water Resource Plan* "Securing our Water Future Together" as the first comprehensive, widely supported water resource plan for San Antonio. The *1998 Water Resource Plan* established programs for immediate implementation, as well as a process for developing long-term water supplies. In October 2000, the City Council created a permanent funding mechanism, the Water Supply Fee, for water supply development and water quality protection.

The *1998 Water Resource Plan* has been updated numerous times. The current version is the *2012 Water Management Plan*. SAWS constantly revisits the plan's various assumptions and is in the process of updating the *2012 Water Management Plan*, which should be completed by mid-2017. The Water Management Plan charts the path that SAWS plans to pursue to meet the long-term needs of current and future San Antonio residents through 2070 – even during periods of extreme drought.

CURRENT SOURCES OF WATER SUPPLY

The table below provides a summary of the projected available sources of water supply during 2017 under non-drought conditions for SAWS. The availability of these supplies will vary under drought conditions.

Available Sources of Water Supply Projected for 2017 Under Non-Drought Conditions

Source	Acre -Feet
Edwards Aquifer	284,278
Recycled Water (CPS Energy Power Plants)	50,000
Recycled Water (Direct Customers)	25,000
Regional Carrizo	13,557
Canyon Regional Water Authority	6,300
Medina Surface Water	-
Canyon Lake	9,000
Local Carrizo	9,900
Trinity Aquifer	20,000
Brackish Groundwater Desalination	8,000
Total	**426,035**

EDWARDS AQUIFER

The largest amount of SAWS water holdings is Edwards Aquifer permitted groundwater withdrawal rights. In 2017, SAWS has budgeted for a total inventory of 286,416 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 spring flows. These cutbacks in any given year may range from 0% to 44%. In 2015, SAWS Edwards Aquifer permitted groundwater rights were reduced by 19.7%. There were no cutbacks in permitted rights in 2016.

Through SAWS' Aquifer Storage and Recovery facility (ASR), SAWS is able to store Edwards Aquifer water in a portion of the Carrizo Aquifer located in southern Bexar County during wet times or periods of low customer demand. This water can be recovered during periods of drought in order to augment SAWS' available water supplies to meet customers' water demands. At December 31, 2016, SAWS has 121,000 acre-feet of water stored in ASR.

In connection with the EAA's directive by the Texas Legislature to ensure that continuous minimum spring flows of the Comal Springs and the San Marcos Springs are maintained to protect endangered and threatened species, the Edwards Aquifer Recovery Implementation Program (EARIP) was established in 2007. The EARIP was 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. Together, these entities over a four-year period developed and approved a springflow protection and habitat restoration plan, the Edwards Aquifer Habitat Conservation Plan (EAHCP).

The primary parties to the EAHCP include the EAA, SAWS, the City of New Braunfels, the City of San Marcos and Texas State University. The EAHCP was 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. This ITP was issued by the USFWS on March 18, 2013.

A major component of the EAHCP includes the use of the SAWS ASR facility in conjunction with other measures to contribute to modeled spring flow protections during severe droughts. After the approval of the EAHCP, SAWS and the EAA entered into an Interlocal Contract in August 2013 that details the implementation of the ASR strategy contributing to springflow protection. The EAA itself, or by use of an agent, acquires Edwards Aquifer groundwater withdrawal rights which are conveyed to SAWS for storage at ASR. An amount commensurate to the water conveyed on behalf of the region will be forborne from SAWS Edwards Aquifer production when specified triggers during a drought similar to Texas' drought of record are met. The contract, and amount of water leased by the EAA and conveyed to SAWS to store, limits the forbearance SAWS is obligated to perform over the term of the ITP. SAWS is reimbursed by the EAA for the incremental cost of storing EAHCP water in ASR and withdrawing that water during drought of record conditions to cover its forbearance requirements under the agreement.

RECYCLED WATER

The San Antonio Water System has the largest recycled water system in the United States and is permitted to sell Type I (high quality) recycled water from its wastewater treatment plants. The water recycling program is designed to provide up to 25,000 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, running east and west. In 2008, these two major transmission lines were interconnected at the northern end, providing additional flexibility to this valuable water resource. Currently, approximately 130 miles of pipeline deliver highly treated effluent to 125 customer connections. Recycled water is being delivered for industrial processes, cooling towers, and irrigation of golf courses and parks, all of which would otherwise rely on potable-quality water. Aside from supporting the local economy, this water recycling system also releases water into the upper San Antonio River and Salado Creek to sustain flows. The result has been significant and lasting environmental improvements for the aquatic ecosystems in these streams.

SAWS also provides 50,000 acre-feet of recycled water to San Antonio's municipally owned electric and gas utility, CPS Energy. This water is discharged into the San Antonio River from the Dos Rios wastewater treatment facility. CPS Energy diverts the water downstream into Braunig and Calaveras Lakes to provide cooling water for its nearby power plants.

REGIONAL CARRIZO

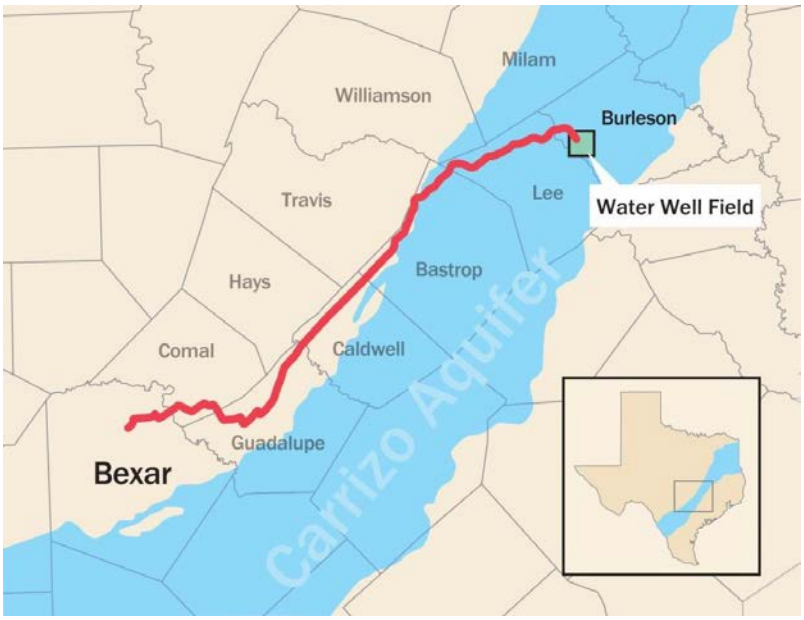
As part of diversifying SAWS' water portfolio, a regional partnership with Schertz-Seguin Local Government Corporation (SSLGC) was formed. This regional partnership has helped to secure SAWS' largest firm non-Edwards supply to-date. The Regional Carrizo project is located in Gonzales County, approximately 50 miles from San Antonio. This project allows SAWS to utilize available capacity in an existing pipeline and water treatment plant owned and operated by SSLGC. In 2016, this project provided 10,000 acre-feet of water to SAWS customers, from the Carrizo Aquifer in western Gonzales County. In 2017, SAWS has budgeted for 13,450 acre-feet of water from the Regional Carrizo project, including the purchase of an additional 2,500 acre-feet of water from SSLGC.

BRACKISH GROUNDWATER DESALINATION

In August 2011, the SAWS Board of Trustees approved proceeding on the Brackish Groundwater Desalination (BGD) program. The BGD program involves the production of brackish water from the Wilcox Aquifer in southern Bexar County and treatment to drinking water quality standards. Design was completed in early 2014 and construction of the treatment plant, pipelines, remaining wells, and other facilities began in mid-2014. After a period of testing, the plant became fully operational in late 2016. Phase I of the plant has the capacity to provide 13,440 acre-feet per year of drought-proof desalinated groundwater to San Antonio's taps. Future phases will eventually bring the total supply from this program to 33,600 acre-feet per year; making it the nation's largest inland desalination plant.

FUTURE SOURCES OF WATER SUPPLY

VISTA RIDGE – REGIONAL WATER SUPPLY



In October 2014, the San Antonio City Council adopted an ordinance approving the execution of an agreement with Abengoa Vista Ridge (AVR) to bring a new water supply of 50,000 acre-feet per year (or 16.3 billion gallons annually) to San Antonio. The agreement, which was executed in November 2014, calls for AVR to build and operate wells and a pipeline system to pump groundwater from Burleson County to San Antonio for a period of 30 years. In exchange, SAWS will pay a fixed unit price for water produced and made available, plus all operating and maintenance costs. At the end of the contract term, the wellfield and pipeline system ownership will transfer to SAWS.

The project is divided into three phases: Development, Construction, and Operations. The contract signing initiated the Development Phase involving permitting, easement acquisition, and other activities required to secure funds necessary to finance construction of the system. Upon securing financing of the project, which occurred on November 2, 2106, the contract allows for up to 4 ½ years for the Construction Phase to be completed. Thereafter, the Operations Phase will begin and continue for 30 years.

A second agreement with the owner of the groundwater leases gives SAWS the right to continue producing water for an additional 30-year term beginning upon the transfer of system ownership to SAWS. In combination, both agreements will provide over 60 years of contracted water supply. The financial attractiveness of this project will continue during the second term, when the price of water drops to a fraction of the first-term price.

The Vista Ridge project is expected to be complete in 2020, at which time it will account for approximately 20 percent of potable water delivered to customers.

In November 2015, AVR's parent company, Abengoa S.A., filed for creditor protection in its home country of Spain. Though AVR was established as a bankruptcy-remote entity, its reliance on Abengoa S.A. for financing during development phase of the project forced it to pause work. In the early months of 2016, Abengoa began to seek an equity investor to help move the project forward. In conjunction with SAWS management, Abengoa negotiated with several firms and ultimately selected Garney Construction of Kansas City, Missouri, to take a controlling share in the Project Company. In May 2016, SAWS Board voted unanimously to approve the proposed change in control. Garney officially took full control of the project on June 10, 2016, and now owns an 80 percent share of the 140-mile pipeline venture, while Abengoa retains a silent 20 percent equity share.

A familiar face to the water utility, Garney Construction has more than 30 years of experience with SAWS, performing more than $156 million in major projects. These include the H_2Oaks Aquifer Storage and Recovery facility, the Local Carrizo Aquifer project, and the water recycling pipeline. In addition, Garney is currently building the 28-mile integration pipeline that will transfer water from the desalination and ASR plants throughout the South and West sides of San Antonio. Having been involved in the original Vista Ridge project proposal, Garney has been intimately familiar with the project, and has transitioned smoothly into the lead role.

Also in May 2016, SAWS exercised its contractual right to lock in the interest rate and corresponding price for water after an initial 18-month period during which interest rates were subject to market fluctuations. This move will save SAWS ratepayers upward of a half-billion dollars on the Vista Ridge project, relative to the maximum price it could have been obligated to pay under the contract.

Conservation

The cost of developing and acquiring additional water supplies to meet the increased water demands of San Antonio's projected future population is high. SAWS recognizes that efforts to promote conservation are a cost-efficient approach to minimizing the increase in demand for water caused by population growth. Beginning in 1994, SAWS implemented progressive water conservation programs aimed at reducing the number of gallons of water used. These programs target both indoor and outdoor residential, commercial and industrial uses. SAWS' conservation efforts over time have had a dramatic impact on water usage per customer and helped to avoid the need to develop even more water supplies to support the city's population growth over the last 20 years. Continued reductions in customer demand as a result of these programs is an important component of SAWS water planning efforts and demonstrates that SAWS focus on reducing customer demand through conservation programs will not waver.

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FINANCIAL POLICIES

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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 operates as a proprietary fund and applies all applicable GASB pronouncements and presents its financial statements in accordance with the GASB Codification of Governmental Accounting and Financial Reporting Standards. Under this approach, all assets, deferred outflows of resources, liabilities and deferred inflows of resources of SAWS 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 recognized as goods or services are provided. Customers' 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. The principal operating revenues of SAWS 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

Approximately sixty days prior to the beginning of each fiscal year, SAWS presents an 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 the 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 operations as well as a capital improvement program. 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 impairments. Contributions to employee retirement plans, both pension and post-retirement medical, 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 CFO and the Executive Management Team.

All funds are appropriated in the 2017 annual operating budget. Capital Improvement Program financial projections are not appropriated. Any amendments to the annual operating budget which are expected to reduce the annual unrestricted transfer to the Renewal and Replacement Fund must be approved by the Board of Trustees.

FUND ACCOUNTING

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. Interfund receivable and payable accounts have been eliminated in the financial statements.

CORE BUSINESSES

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

- Water Delivery – the functions of distributing potable water to customers
- Water Supply – the functions related to the development and provision of additional water resources
- Wastewater – the functions of collecting and treating wastewater from the user customer
- Chilled Water – the functions related to providing chilled water service to specific customers of SAWS

RESTRICTED RESOURCES

SAWS' policy is generally 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 acceptances and commercial paper; collateralized direct repurchase agreements, reverse repurchase agreements; no-load money market mutual funds; investment pools; municipal bonds; 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. Money market investments, including US Treasury and agency obligations, with a remaining maturity at time of purchase of one year or less are reported at amortized cost, which approximates fair value. Investments other than money market investments are reported at fair value.

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. A provision to increase the allowance for uncollectible accounts is recorded as an offset to operating revenue.

INVENTORY

Inventories are valued at the lower of weighted average cost or market.

RESTRICTED ASSETS

Assets restricted by City Ordinance to pay current liabilities are reported as current assets in the Statement of Net Position, regardless of their relative liquidity. Assets restricted for the acquisition of capital assets or to pay noncurrent liabilities are reported as noncurrent assets in the Statement of Net Position.

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, direct internal costs, 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. 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 acquisition 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, infrastructure that facilitates expansion of SAWS' service capacity is contributed by developers. In these instances, SAWS records the donated infrastructure as plant contributions and grants credits to the developer equal to the estimated fair 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.

Compensated Absences

SAWS' policy is to accrue employee vacation pay as earned as well as the employer portion of Social Security taxes and required pension contributions related to the accrued vacation pay. Sick leave is not accrued as a terminating employee is not paid for accumulated sick leave.

Self-Insurance

SAWS is self-insured for a portion of workers' compensation, employee's health, employer's liability, public officials' liability, property damage, and certain elements of general liability. A liability has been recorded for the estimated amount of eventual loss which will be incurred on claims arising prior to the end of the period including incurred but not reported claims.

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

City Ordinance No. 75686 requires SAWS to make payments to the City each month after making all other payments required by the City Ordinance. The amount of the payment is determined by City Council from time to time and cannot exceed 5%. Currently SAWS pays 2.7% of Gross Revenues to the City. Payments to the City are reported as non-operating expense in the Statement of Revenues, Expenses and Changes in Net Position.

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
3. Pay amounts required to be deposited in any reserve or contingency fund created for the payment and security of bond obligations
4. Fund transfers to the City of San Antonio, and
5. Pay any other debt payable

Net Revenues are defined in 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.

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 Program 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, capital recovery/impact fees, 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

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 senior lien revenue bonds and 100% of average annual debt service in order to issue junior lien revenue bonds in a public offering.

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 to 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. Historically, SAWS target was to maintain Net Revenues equal to at least 2.00 times Annual Senior Lien Debt Service and at least 1.50 times Total Annual Debt Service to ensure the required debt coverage in times of revenue fluctuations. Over the next several years, SAWS plans to increase debt coverage to a minimum of 1.70 to 1.75 times Total Annual Debt Service.
- 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 shall move toward a goal of funding approximately 50% of capital expenditures with non-debt sources.
- 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

- As required by ordinance, 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.
- Including the amounts maintained in the operating reserve above, SAWS' target is to maintain Days Cash on Hand of approximately 300 days.
- 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 will be made with proceeds from bond issued or with unrestricted resources.

FINANCIAL PLANNING PROCESS

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FINANCIAL PLANNING PROCESS

LONG-RANGE FINANCIAL PLANNING

Long-range financial planning is critical for SAWS to accomplish its mission. The overriding goal of financial planning, analysis, and strategy development is to improve the SAWS financial position in order to meet the short-term and long-term operational and strategic objectives of SAWS. In developing the SAWS financial plan, concerns of all stakeholders are considered with various scenarios and potential risks evaluated by executive management in reaching the optimum balance of limited resources with organizational needs and stakeholder concerns.

The financial plan is organized into two distinct planning horizons in order to facilitate management of the system: Short-Term of five years in length; and Long-Term of five to twenty years in length. The planning horizons play a key role in prioritizing the strategic, operational, and financial needs and resources 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 Long-Term planning process sets the course of the overall direction of financial, operational, and capital resource allocation priorities of the system.

Major strategic policy guidelines emphasized are long-term water supply needs and infrastructure replacement goals. 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.

A crucial component of the SAWS financial management strategy is the comprehensive 20-year Multi-Year Financial Plan (MYFP). The MYFP serves as a foundation supporting SAWS' strategic, operational, investment, and financial planning functions. Through analyses on cash flow probabilities and risk; investment and financing opportunities and constraints; and strategic plan implementation goals and targets, financial forecasts are made in the MYFP to assist executive management in the allocation of the resources of the system.

The MYFP provides a critical planning platform to perform statistical risk and resource allocation analyses through scenario, simulation, and constraint modeling on revenues, operations and maintenance expense, capital expenditures, capital financing including cash and debt financing, and rate requirements. Resource utilization analyses and planning help identify factors affecting strategic outcomes of the system and provide opportunities for new strategies and program development to allocate resource costs for various growth and replacement scenarios of the system.

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, debt coverage ratios, and fund requirements. The MYFP incorporates forecasts and requirements by each core business of SAWS: Water Supply; Water Delivery; Wastewater; and Chilled Water.

Annual Budget Process

The annual budget process begins with updating the MYFP. As a part of this process, Business Planning staff review SAWS' financial activity, levels of service provided, customer growth and consumption patterns, weather trends and financial market trends. In addition, the following variables 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
- Other variables that might cause a change in the level of revenue

Business Planning staff and Executive Management review the resulting financial forecasts and plans to ensure that forecasted revenues are sufficient to meet projected financial needs. If it becomes evident that forecasted revenues are not sufficient to address forecasted operations, maintenance, infrastructure and water supply needs, then 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.

All potential pricing adjustments are evaluated in the context of customer affordability measures and key financial statistics. The affordability of customer bills are evaluated relative to the income of the system's customers and price competitiveness with other utilities. Key financial statistics include: debt coverage ratios on all debt; percentage of capital financed with cash; and overall level of cash balances.

2017 Budget Process

The annual financial planning process begins with identifying SAWS' priorities for the short-term. The focus of the 2017-2021 financial forecast included the following objectives:

- Provide dependable, high quality water and sewer service
- Operate and maintain the system in a prudent and cost-efficient manner
- Comply with all regulatory requirements
- Provide sufficient funding for necessary capital investments
- Ensure that rates for water service are fair and reasonable

Revenue Forecast

One of the most important strategies of the financial planning environment is the assessment of risk and impact of errors in forecasted revenues. Errors in the revenue forecast will cause inefficiencies to the system. The value of these inefficiencies will be evident once management has to take corrective action due to the forecast error. Overestimating revenues causes excess allocation of capital resources. Adjusting these resources or changing to alternative resources can be time intensive and costly. On the other hand, underestimating revenues results in underutilization of resources in the current period. However, these resources can be put to use in subsequent planning periods. The risk to the system from overestimating revenues are assumed to be of greater significance than the risk to the system from underestimating revenues. As a result, SAWS' revenue forecast is generally conservative in nature. The table below includes a sample of the issues driving the 2017 revenue forecast.

Revenue Source	Drivers
Operating Revenues	Mitigate impacts of sustained periods of above normal rainfall
	Effect of conservation, and new tiered water rates on customer usage
Non-operating Revenues	Slight improvement in short-term interest rates
Capital Recovery Fees	Utilized for capital funding - dependent upon development activity

OPERATIONS AND MAINTENANCE BUDGET

Current Services Level – The 2017 budget process involved a calculation of the Current Services Level budget, which was an estimate of the cost required to maintain the current level of services in 2017. The Current Services Level budget served as the baseline for all subsequent 2017 budget changes and was developed from the following components:

- Current employee wage and benefit costs
- Estimated 2017 utility costs including provision for any electric and gas utility rate increases
- Estimated 2017 fuel costs
- Elimination of one-time 2016 budgeted expenses

Improvements and/or Mandates - Departments requiring additional funding for improvements or newly identified mandates that exceeded the 2017 Current Services Level were required to submit decision packages to include detailed justification for each specific request.

Budget Development and Review

- Vice presidents/department directors reviewed current programs, activities and current levels of service provided to their customers. Additionally, they evaluated and prioritized new departmental needs.
- The Executive Management Team (EMT) conducted a comprehensive review of decision packages submitted. During this review, all requests for additional funding were prioritized and were approved or denied based on this prioritization. This review by the EMT further ensured that departmental budgets were aligned with corporate goals and objectives.
- Several review sessions were held with the City of San Antonio Public Utilities office to discuss the O&M budget inputs and assumptions.

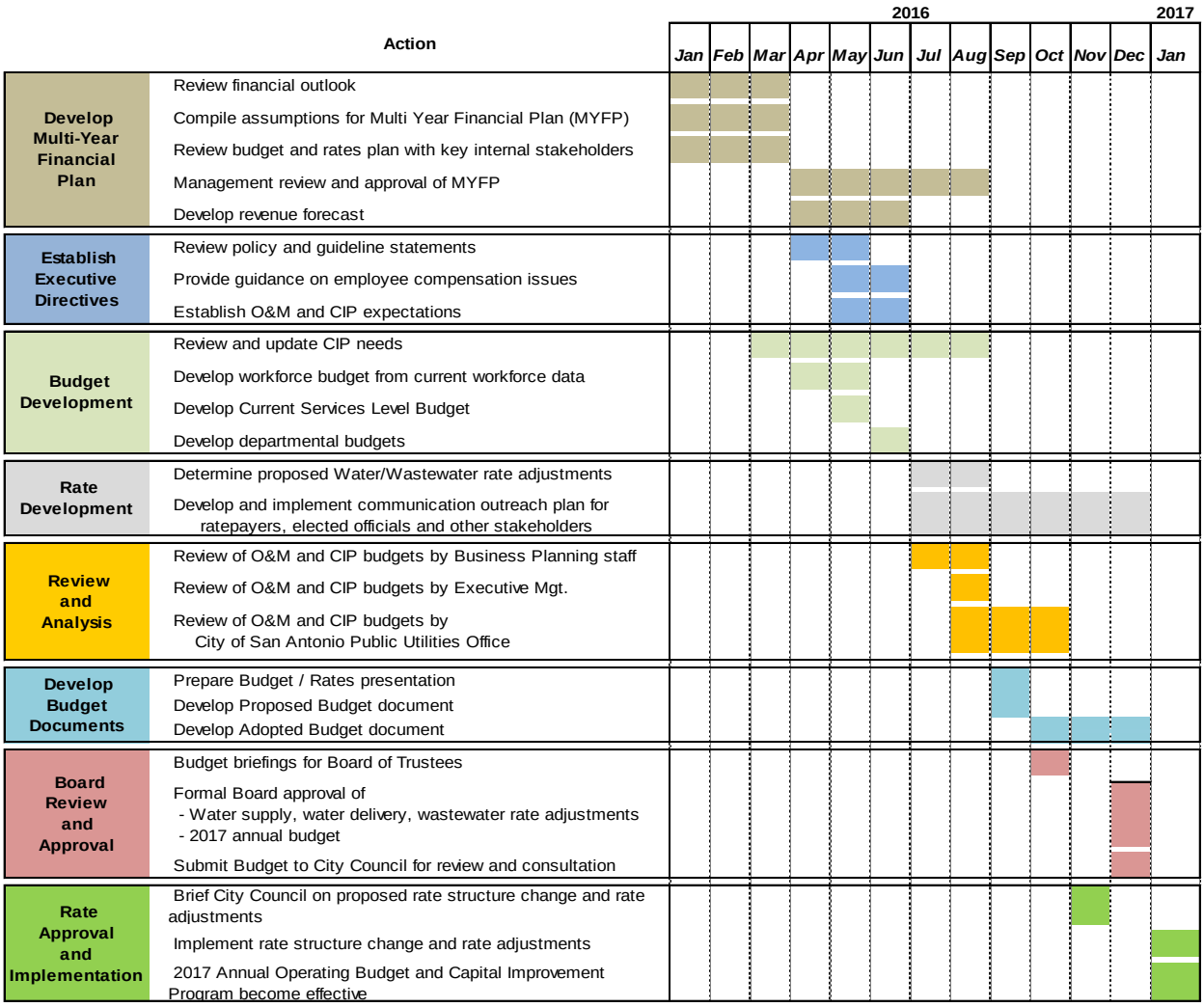
CAPITAL IMPROVEMENT PROGRAM

The annual budget process includes the development of a Capital Improvements Program that supports the corporate vision of providing plentiful, quality, affordable water services. Delivering a sustainable capital improvement plan ensures that the use of resources today does not damage prospects for future generations.

There are four distinct phases to this process:

1) Project identification – 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 plan impact on rates and review rate mitigation strategies.
4) Review and Approval - Upon executive management concurrence, the plan is presented to the Board of Trustees for review and approval.

2017 BUDGET TIMELINE



SHORT- TERM FIVE YEAR FORECAST

The sources and uses of funds for the period 2017 – 2021 is shown in the table below.

$ in Millions	2017 Budget	2018 Forecast	2019 Forecast	2020 Forecast	2021 Forecast
Sources of Funds					
Revenue, incl. prior adjustments	$ 613.0	$ 651.2	$ 683.9	$ 732.9	$ 865.7
Rate Adjustment, incremental	38.7	31.0	47.3	130.5	31.3
Nonoperating Revenues	8.0	9.4	10.4	10.0	9.9
Draw on Equity	4.9	1.4	1.4	-	-
Capital Recovery Fees	56.1	56.1	56.1	56.1	56.1
Total Sources of Funds	**$ 720.7**	**$ 749.1**	**$ 799.1**	**$ 929.5**	**$ 963.0**
Uses of Funds					
Operations and Maintenance	$ 324.9	$ 333.9	$ 341.2	$ 455.8	$ 464.0
Debt Service & Expenses	224.1	238.6	252.4	267.6	282.0
Transfer to City of San Antonio	16.8	17.7	19.1	22.6	23.5
Available for R&R Restricted	57.9	57.7	75.7	58.0	58.0
Available for R&R Unrestricted	97.0	101.2	110.7	125.5	135.5
Total Uses of Funds	**$ 720.7**	**$ 749.1**	**$ 799.1**	**$ 929.5**	**$ 963.0**

The sources of funds primarily 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.

Increases in operations and maintenance costs over the forecast period are driven by primarily operating costs tied to the acquisition of new water supplies. The largest new ongoing costs will be those associated with the operation of the Brackish Water Desalination project, starting in late 2016, and the cost of annually purchasing approximately 50,000 acre feet of Vista Ridge water beginning in 2020.

The growth in debt service reflects the allocation of capital resources toward major strategic priorities of water resources, infrastructure replacement, system growth, and sustainability. The five year 2017 – 2021 capital improvement program is projected at $1.6 billion as shown below. A significant priority includes wastewater capital replacement projects associated with the wastewater Sanitary Sewer Overflow Reduction Program.

CIP *($ in Millions)*	2017	2018	2019	2020	2021	Total
Water Supply	$ 113.6	$ 30.3	$ 50.7	$ 22.8	$ 0.9	$ 218.1
Water Delivery	75.1	126.7	73.2	112.2	101.2	488.5
Wastewater	178.8	167.7	191.7	174.4	212.2	924.8
Chilled Water	-	1.7	0.1	5.7	-	7.5
Total	***$ 367.5***	***$ 326.5***	***$ 315.6***	***$ 315.1***	***$ 314.3***	***$ 1,639.0***

Funding for the five year capital improvement program is projected to come from a mixture of renewal and replacement, impact fees, investment income, and bond funds. SAWS long term goal is for approximately 50% of capital improvements to be funded from non-debt sources. During the 2017-2021 five year forecast, the percentage of the capital improvements funded with non-debt sources is currently projected to average 42%.

Capital Improvement Program					
	2017	**2018**	**2019**	**2020**	**2021**
CIP Budget $M	$ 367.5	$ 326.5	$ 315.6	$ 315.1	$ 314.3
Capital Improvement Program Funding					
	2017	**2018**	**2019**	**2020**	**2021**
Revenue/Renewal & Replacement	23.0%	25.5%	28.8%	32.0%	36.9%
Capital Recovery Fees	18.9%	12.3%	16.5%	7.9%	8.0%
Bond Capacity	3.2%	0.0%	0.0%	0.0%	0.0%
Bonds/Commercial Paper	54.9%	62.2%	54.7%	60.1%	55.1%
Total	100.0%	100.0%	100.0%	100.0%	100.0%
Cash Funding $M	$ 154.0	$ 123.4	$ 143.0	$ 125.7	$ 141.0
Debt Funding $M	$ 213.5	$ 203.1	$ 172.6	$ 189.4	$ 173.3

ANNUAL OPERATING BUDGET

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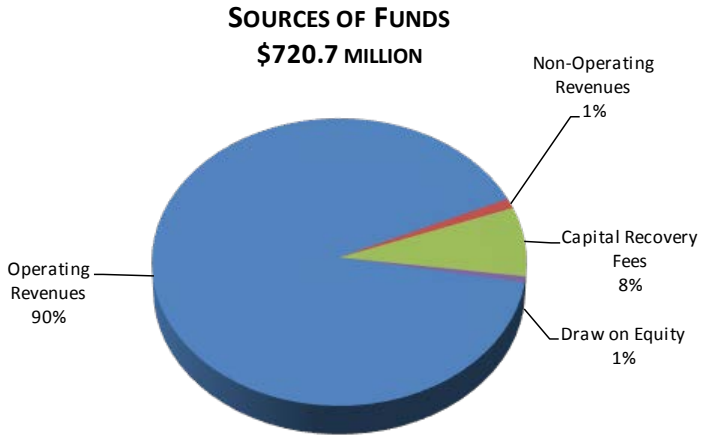
ANNUAL OPERATING BUDGET

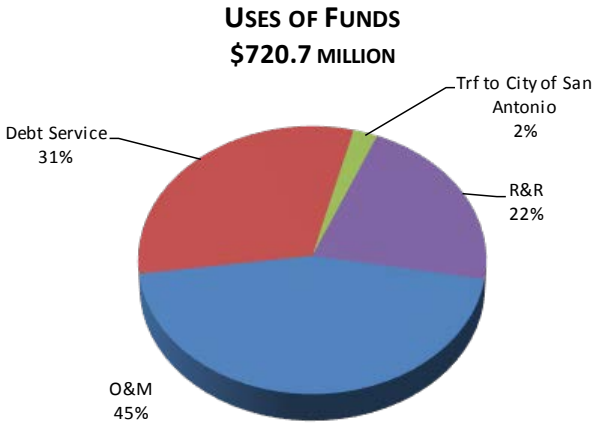
FINANCIAL PLAN SUMMARY

The following table summarizes the consolidated Sources and Uses of Funds that comprise the SAWS Annual Operating Budget.

(dollars in thousands)	2014 Actual (1)	2015 Actual (1)	2016 Budget	2017 Budget
SOURCES OF FUNDS				
Operating Revenues				
Sewer Service Charges	$ 205,828	$ 208,912	$ 222,587	$ 238,496
Metered Water Sales	132,735	128,909	195,122	202,690
Water Supply Fee	108,062	101,688	136,507	150,862
DSP Revenues	68,663	65,253		
EAA Fee	18,860	17,187	24,467	24,059
Chilled Water Sales	11,152	11,102	10,236	10,236
Conservation	8,375	9,152	9,648	10,525
Industrial Waste Surcharge	5,464	5,401	6,147	6,026
Stormwater	4,435	4,797	4,558	4,592
Recycled Water System	5,042	5,046	5,238	5,548
Recovery of TCEQ Fees	1,602	1,594	1,964	2,235
Reduction for Affordability Program	(1,911)	(2,007)	(2,737)	(3,548)
Total Operating Revenues	568,307	557,034	613,737	651,721
Nonoperating Revenues	2,148	2,486	1,974	4,450
Build America Bonds Subsidy	3,707	3,690	3,638	3,585
Total Revenues	574,162	563,210	619,349	659,756
Capital Recovery Fees	58,444	64,056	57,029	56,103
Draw on Equity	1,400	1,400	1,400	4,850
Total Sources of Funds	**$ 634,006**	**$ 628,666**	**$ 677,778**	**$ 720,709**
USES OF FUNDS				
Operations and Maintenance	$ 296,022	$ 296,518	$ 313,677	$ 324,860
Revenue Bond Debt Requirement	183,103	188,388	207,481	219,048
Other Debt Service Requirement	2,860	2,001	3,066	5,005
Transfer to the City of San Antonio	13,089	12,683	13,870	16,847
Balance Available for:				
Renewal and Replacement Fund (Restricted)	61,466	65,614	59,707	57,912
Renewal and Replacement Fund (Unrestricted)	77,466	63,462	79,977	97,037
Total Uses of Funds	**$ 634,006**	**$ 628,666**	**$ 677,778**	**$ 720,709**

(1) Includes DSP financial results for comparative purposes





FINANCIAL PLAN SUMMARY BY CORE BUSINESS

The San Antonio Water System consists of 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.

The following schedule reflects the 2017 Budget for Sources and Uses of Funds by core business:

(dollars in thousands)	Water Supply	Water Delivery	Wastewater	Chilled Water	Total
SOURCES OF FUNDS					
Operating Revenues					
Sewer Service Charges	$ -	$ -	$ 238,496	$ -	$ 238,496
Metered Water Sales		202,690			202,690
Water Supply Fee	150,862				150,862
EAA Fee	24,059				24,059
Chilled Water Sales				10,236	10,236
Conservation	10,525				10,525
Industrial Waste Surcharge			6,026		6,026
Stormwater	4,592				4,592
Recycled Water System	5,548				5,548
Recovery of TCEQ Fees		1,779	456		2,235
Reduction for Affordability Program	(789)	(854)	(1,905)		(3,548)
Intercompany Reallocations	5,630	(5,630)			-
Total Operating Revenues	200,427	197,985	243,073	10,236	651,721
Nonoperating Revenues	1,451	1,335	1,664	-	4,450
Build America Bonds Subsidy	940	1,098	1,547	-	3,585
Total Revenues	202,818	200,418	246,284	10,236	659,756
Capital Recovery Fees	18,669	16,374	21,060	-	56,103
Draw on Equity	2,000	1,350	1,500	-	4,850
Total Sources of Funds	**$ 223,487**	**$ 218,142**	**$ 268,844**	**$ 10,236**	**$ 720,709**
USES OF FUNDS					
Operations and Maintenance	$ 127,680	$ 84,683	$ 105,548	$ 6,949	$ 324,860
Revenue Bond Debt Requirement	53,852	73,369	89,217	2,610	219,048
Other Debt Service Requirement	1,000	1,874	1,999	132	5,005
Transfer to the City of San Antonio	4,587	5,379	6,605	276	16,847
Balance Available for:					
Renewal and Replacement Fund (Restricted)	19,261	16,750	21,878	23	57,912
Renewal and Replacement Fund (Unrestricted)	17,107	36,087	43,597	246	97,037
Total Uses of Funds	**$ 223,487**	**$ 218,142**	**$ 268,844**	**$ 10,236**	**$ 720,709**

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 in 2001, 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.

(dollars in thousands)	2014 Actual	2015 Actual	2016 Budget	2017 Budget
SOURCES OF FUNDS				
Operating Revenues				
Water Supply Fee	$ 108,062	$ 101,688	$ 136,507	$ 150,862
Conservation	8,375	9,152	9,648	10,525
EAA Fee	18,860	17,187	24,467	24,059
Recycled Water System	5,042	5,046	5,238	5,548
Stormwater	4,435	4,797	4,558	4,592
Reduction for Affordability Program	(324)	(550)	(749)	(789)
Intercompany Reallocations	5,630	5,630	5,630	5,630
Total Operating Revenues	150,080	142,950	185,299	200,427
Nonoperating Revenues	853	917	1,180	1,451
Build America Bonds Subsidy	973	968	954	940
Total Revenues	151,906	144,835	187,433	202,818
Capital Recovery Fees	13,598	14,685	16,246	18,669
Draw on Equity	1,400	1,400	1,400	2,000
Total Sources of Funds	**$ 166,904**	**$ 160,920**	**$ 205,079**	**$ 223,487**
USES OF FUNDS				
Operations and Maintenance	$ 74,658	$ 80,010	$ 118,149	$ 127,680
Revenue Bond Debt Requirement	46,526	49,868	51,815	53,852
Other Debt Service Requirement	384	958	676	1,000
Transfer to the City of San Antonio	3,413	3,225	3,609	4,587
Balance Available for:				
Renewal and Replacement Fund (Restricted)	14,074	16,112	18,369	19,261
Renewal and Replacement Fund (Unrestricted)	27,849	10,747	12,461	17,107
Total Uses of Funds	**$ 166,904**	**$ 160,920**	**$ 205,079**	**$ 223,487**

DSP financial results for 2014 and 2015 are reported solely in the Water Delivery Core Business. Budgeted revenues for 2016 and 2017 associated with customers in the former DSP service areas are allocated based on the projected water usage for those customers and the rates in effect for that usage. Budgeted O&M costs for 2016 and 2017 related to the operations of the former DSP service areas have been allocated between the Water Delivery and Water Supply Core Businesses in a rational manner. All DSP debt related costs are allocated to the Water Delivery Core Business for all years presented.

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.

(dollars in thousands)	2014 Actual	2015 Actual	2016 Budget	2017 Budget
SOURCES OF FUNDS				
Operating Revenues				
Metered Water Sales	$ 132,735	$ 128,909	$ 195,122	$ 202,690
DSP Revenues	68,663	65,253		
Recovery of TCEQ Fees	1,169	1,165	1,452	1,779
Reduction for Affordability Program	(566)	(548)	(748)	(854)
Intercompany Reallocations	(5,630)	(5,630)	(5,630)	(5,630)
Total Operating Revenues	196,371	189,149	190,196	197,985
Nonoperating Revenues	546	638	333	1,335
Build America Bonds Subsidy	1,135	1,130	1,114	1,098
Total Revenues	198,052	190,917	191,643	200,418
Capital Recovery Fees	24,585	24,852	23,546	16,374
Draw on Equity	$0	$0	-	1,350
Total Sources of Funds	**$ 222,637**	**$ 215,769**	**$ 215,189**	**$ 218,142**
USES OF FUNDS				
Operations and Maintenance	$ 110,262	$ 105,246	$ 82,081	$ 84,683
Revenue Bond Debt Requirement	62,451	63,507	69,169	73,369
Other Debt Service Requirement	838	644	1,126	1,874
Transfer to the City of San Antonio	3,636	3,363	3,817	5,379
Balance Available for:				
Renewal and Replacement Fund (Restricted)	24,886	24,770	23,797	16,750
Renewal and Replacement Fund (Unrestricted)	20,564	18,239	35,199	36,087
Total Uses of Funds	**$ 222,637**	**$ 215,769**	**$ 215,189**	**$ 218,142**

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.

(dollars in thousands)	2014 Actual	2015 Actual	2016 Budget	2017 Budget
SOURCES OF FUNDS				
Operating Revenues				
Sewer Service Charges	$ 205,828	$ 208,912	$ 222,587	$ 238,496
Industrial Waste Surcharge	5,464	5,401	6,147	6,026
Recovery of TCEQ Fees	433	429	512	456
Reduction for Affordability Program	(1,021)	(909)	(1,240)	(1,905)
Total Operating Revenues	210,704	213,833	228,006	243,073
Nonoperating Revenues	664	794	357	1,664
Build America Bonds Subsidy	1,599	1,592	1,570	1,547
Total Revenues	212,967	216,219	229,933	246,284
Capital Recovery Fees	20,261	24,519	17,237	21,060
Draw on Equity	-	-	-	1,500
Total Sources of Funds	**$ 233,228**	**$ 240,738**	**$ 247,170**	**$ 268,844**
USES OF FUNDS				
Operations and Maintenance	$ 101,254	$ 103,925	$ 106,867	$ 105,548
Revenue Bond Debt Requirement	71,490	72,501	83,405	89,217
Other Debt Service Requirement	1,629	212	1,201	1,999
Transfer to the City of San Antonio	5,737	5,792	6,165	6,605
Balance Available for:				
Renewal and Replacement Fund (Restricted)	22,278	25,358	17,519	21,878
Renewal and Replacement Fund (Unrestricted)	30,840	32,950	32,013	43,597
Total Uses of Funds	**$ 233,228**	**$ 240,738**	**$ 247,170**	**$ 268,844**

CHILLED WATER CORE BUSINESS

The Chilled Water core business provides cooling services to SAWS customers, including various downtown hotels, City of San Antonio Convention Center, Hemisfair Plaza, Alamodome, and Port San Antonio tenants.

(dollars in thousands)	2014 Actual	2015 Actual	2016 Budget	2017 Budget
SOURCES OF FUNDS				
Operating Revenues				
Chilled Water Sales	$ 11,152	$ 11,102	$ 10,236	$ 10,236
Total Operating Revenues	11,152	11,102	10,236	10,236
Nonoperating Revenues	85	137	104	-
Build America Bonds Subsidy	-	-	-	-
Total Revenues	11,237	11,239	10,340	10,236
Capital Recovery Fees	-	-	-	-
Draw on Equity	-	-	-	-
Total Sources of Funds	**$ 11,237**	**$ 11,239**	**$ 10,340**	**$ 10,236**
USES OF FUNDS				
Operations and Maintenance	$ 9,848	$ 7,337	$ 6,580	$ 6,949
Revenue Bond Debt Requirement	2,636	2,512	3,092	2,610
Other Debt Service Requirement	9	187	63	132
Transfer to the City of San Antonio	303	303	279	276
Balance Available for:				
Renewal and Replacement Fund (Restricted)	228	(626)	22	23
Renewal and Replacement Fund (Unrestricted)	(1,787)	1,526	304	246
Total Uses of Funds	**$ 11,237**	**$ 11,239**	**$ 10,340**	**$ 10,236**

NET POSITION

Net Position is the difference between the assets and liabilities of SAWS as reflected on the statement of net position and is a key indicator of financial condition. It is the measure of financial resources available for future use after payment of all obligations.

SAWS is an enterprise fund, with separate self-balancing sub-funds which are maintained to account for resources of various purpose, thereby distinguishing balances restricted by City Ordinance or other enabling legislation from unrestricted resources.

The following schedule reflects the projected change in net position for 2017. Net position is expected to increase by $177.5 million or 6.8% during 2017.

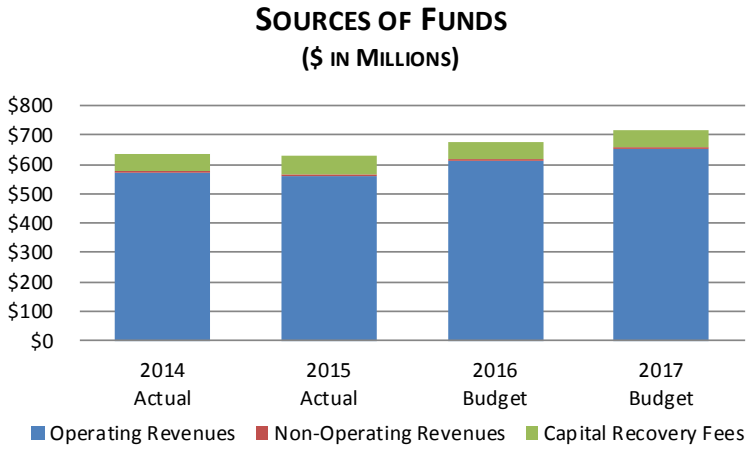
($ in thousands)	System Fund	Debt Service Fund	Debt Reserve Fund	Renewal and Replacement Fund	Project Fund	Combined Total
Net Position, December 31, 2016	**$1,940,548**	**$60,396**	**$56,016**	**$343,104**	**$214,953**	**$2,615,017**
2017 Change in Net Position	240,272	(121,908)	532	58,314	309	177,519
Transfers in (out)	(326,210)	235,845	-	90,365	-	-
Proceeds from Bond Issue	(290,550)	-	-	-	290,550	-
Bond Issue Costs	4,358	-	-	-	(4,358)	-
Retirement of Bonds	83,040	(83,040)	-	-	-	-
Commercial paper retired	75,405	(3,550)	-	-	(71,855)	-
Expenditures for plant additions	367,466	-	-	(153,815)	(213,651)	-
Net Position, December 31, 2017	**$2,094,329**	**$87,743**	**$56,548**	**$337,968**	**$215,948**	**$2,792,536**

SOURCES OF FUNDS

The following table summarizes the 2016 budgeted Sources of Funds for all core businesses.

(dollars in thousands)	2014 Actual (1)	2015 Actual (1)	2016 Budget	2017 Budget
SOURCES OF FUNDS				
Operating Revenues				
Sewer Service Charges	$ 205,828	$ 208,912	$ 222,587	$ 238,496
Metered Water Sales	132,735	128,909	195,122	202,690
Water Supply Fee	108,062	101,688	136,507	150,862
DSP Revenues	68,663	65,253	-	-
EAA Fee	18,860	17,187	24,467	24,059
Chilled Water Sales	11,152	11,102	10,236	10,236
Conservation	8,375	9,152	9,648	10,525
Industrial Waste Surcharge	5,464	5,401	6,147	6,026
Stormwater	4,435	4,797	4,558	4,592
Recycled Water System	5,042	5,046	5,238	5,548
Recovery of TCEQ Fees	1,602	1,594	1,964	2,235
Reduction for Affordability Program	(1,911)	(2,007)	(2,737)	(3,548)
Total Operating Revenues	**568,307**	**557,034**	**613,737**	**651,721**
Nonoperating Revenues	2,148	2,486	1,974	4,450
Build America Bonds Subsidy	3,707	3,690	3,638	3,585
Total Revenues	**574,162**	**563,210**	**619,349**	**659,756**
Capital Recovery Fees	58,444	64,056	57,029	56,103
Draw on Equity	1,400	1,400	1,400	4,850
Total Sources of Funds	**$ 634,006**	**$ 628,666**	**$ 677,778**	**$ 720,709**

(1) Includes DSP financial results for comparative purposes



REVENUES

Sources of funds include operating revenues, non-operating revenues, Build America Bonds subsidy, and capital recovery fees. Operating revenues consist primarily of revenues generated through metered billings for potable water, recycled water, wastewater and chilled water services. Additional operating 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

Over 90% of SAWS operating revenues come from the Water Supply Fee, Metered Water Sales, EAA Fee and Sewer Service Charges, which all vary based on customer's metered water usage. Fluctuations in system wide metered water usage are primarily tied to changes in:

- the number of customer connections
- the average use per customer

In the budget process, customer connections 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

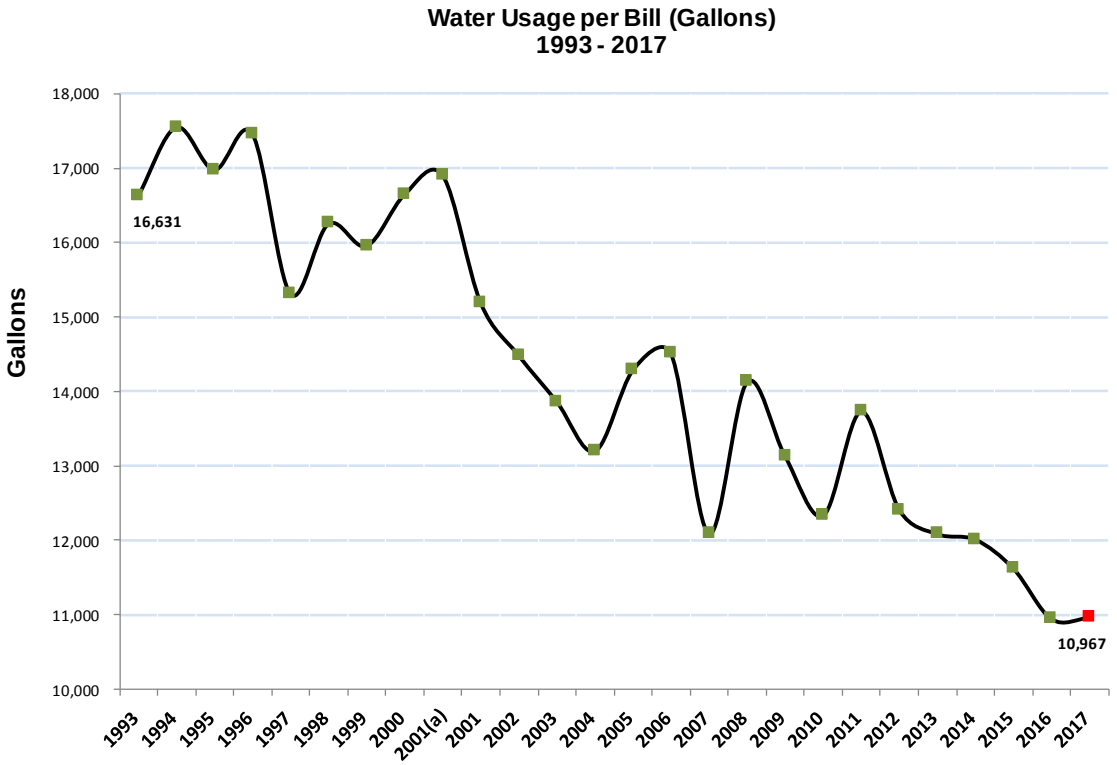
Due to this systematic and comprehensive approach to forecasting metered revenues, SAWS has been able to identify developing shifts in usage patterns and underlying trends in customers' water usage. These customer connections and usage forecasts are aggregated to develop a comprehensive forecast for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

In recent years, the growth in wastewater customers has exhibited slightly higher growth than customers in the SAWS water service area. With this trend expected to continue, 2017 total water and wastewater combined customer growth is forecasted at 1.5% with water customer growth projected at 1.4% and wastewater customer growth projected at 1.6%.

Average usage per customer is typically affected by weather (temperature and precipitation), seasonal, cyclical, price elasticity, conservation, and drought restriction variables. Therefore the modeling of the average usage per customer incorporates statistical forecasting to incorporate these variables.

The following chart shows the average monthly water usage for all customers by year since 1993. Beginning in 2016, the average usage includes water usage for customers in the former SAWS DSP service area. The average usage for these customers is substantially less than the historical average usage for SAWS customers. As a result average usage drops significantly in 2016. Other noticeable effects on average usage include:

- A significant, persistent downward trend through the whole data series
- Volatility in the trend after 2004 due to the weather variations
- Impacts of ongoing drought restrictions from 2013 through 2015



Note: Gallons Prior to 2016 Do Not Include Sale to the District Special Project

Weather fluctuations, from very rainy periods to drought conditions and related drought restrictions, factor into future water usage forecasts. Extreme weather profiles of very dry conditions in 2011 and wet conditions in 2015 and 2016 provide a starting proxy for the expected range of usage conditions in the future.

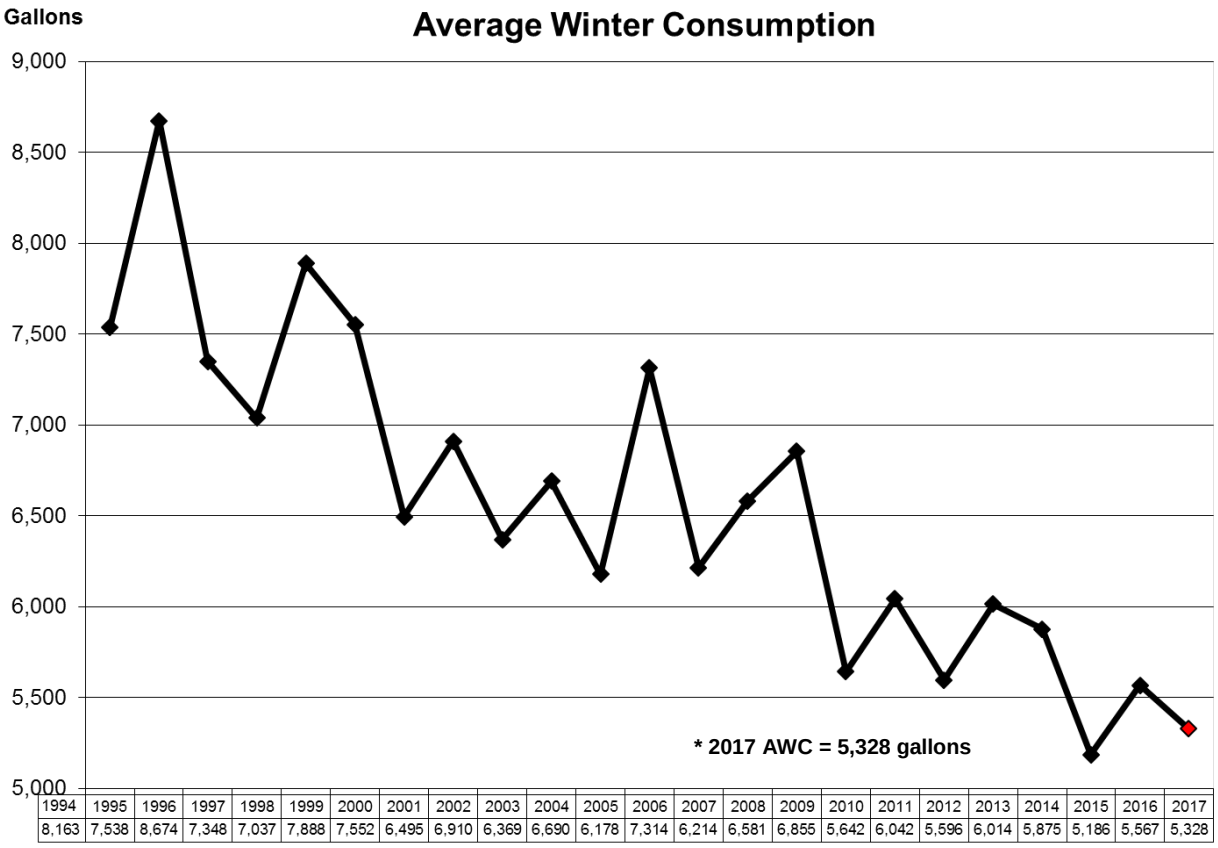
The drought that began in 2011 lasted into 2015. The resulting drought restrictions during that period, brought customer usage levels in 2013 and 2014 to what was up until then historically low usage levels. Extremely wet weather conditions during 2015 served to end the drought but also dampened average customer demand to a new historic low level of 11,645 gallons. 2016 was another very wet year. This, combined with the consolidation of the SAWS DSP service areas, resulted in average customer usage of 10,948 gallons for 2016.

In order to minimize the financial risk to the system of overestimating revenues, 2017 budgeted revenues assumes average customer use per bill of 10,967 gallons. This forecast allows for the possibility of either continued wet conditions or drought restrictions as well as accounts for impacts of continuing conservation efforts. Total budgeted water usage of 64.8 billion gallons for 2017 is 2% more than the 63.5 billion gallons budgeted in 2016. The increase in assumed usage between 2016 and 2017 is the result of stronger than expected customer growth during 2016 and projected customer growth for 2017. Average customer usage for 2017 is projected to be slightly lower than what was projected for 2016 but slightly higher than the actual average usage in 2016.

Metered wastewater volumetric revenues are based on contributed flow estimated through water usage. For the commercial class, all water usage with the exception of water used for irrigation is 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 during three consecutive billing periods beginning after November 15 and ending on or about March 15 of each year.

The 2017 AWC budget of 5,328 gallons assumes a systematic decline in use per customer under normal weather conditions due to water conservation and increased awareness of rate adjustments that affect the customer's bill

The AWC, as shown in the following chart, has declined persistently since 1994 as a result of indoor conservation efforts and increasing public awareness about the winter averaging method and measurement period. There have also been two significant downward shifts in the AWC beginning in 2010 to 5,642 gallons, then in 2015 to 5,186 gallons. The 2017 budgeted AWC of 5,328 gallons takes into account these shifts.



1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
8,163	7,538	8,674	7,348	7,037	7,888	7,552	6,495	6,910	6,369	6,690	6,178	7,314	6,214	6,581	6,855	5,642	6,042	5,596	6,014	5,875	5,186	5,567	5,328

Operating Revenues

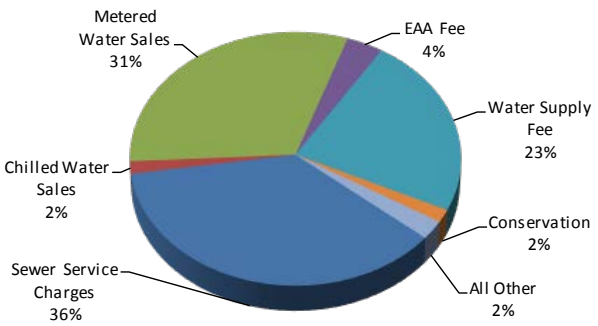
The 2017 revenue budget includes a rate adjustment of 6.8% on an average residential bill (*7,092 gallons water; 5,668 wastewater assumed*). Details of the rate adjustment are as follows:

- 6.8% Water Supply Fee, 8.6% water delivery, and 5.6% wastewater rate adjustments
- Rate increases are effective for usage beginning January 1, 2017
- Rate adjustments result in projected additional operating revenue of $39 million in 2017

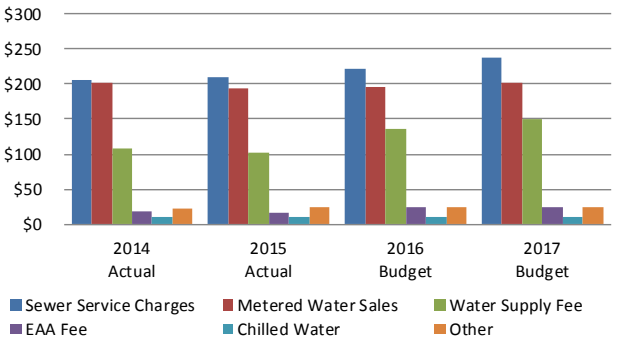
Customers in former BexarMet/DSP service areas will see water rate adjustments for the first time since 2010. Now that the former utility has been fully integrated into SAWS, customers in those areas will begin paying SAWS rates for water service beginning in January 2017.

The average residential customer in former BexarMet areas will see an increase of 7.7 percent in their monthly water and sewer bill. However, customers who use 2,992 gallons a month or less will likely see a decrease of more than 3 percent.

2017 Operating Revenues
$651.7 Million



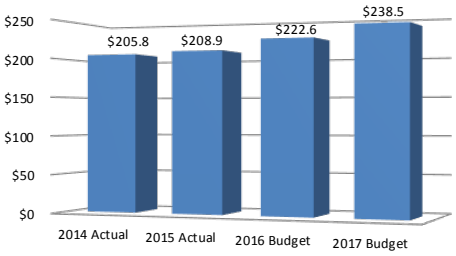
Operating Revenues
($ in Millions)



Wastewater Operating Revenues

Wastewater operating revenues recover the costs associated with the collection and treatment of wastewater. Sewer service charges consist of a fixed monthly service availability fee and volumetric charges based on each customer's contributed wastewater flow. Residential contributed wastewater flow is estimated based upon a customer's water usage during three consecutive billing periods between November 15th and March 15th. For all other customers, actual monthly water usage, excluding any amount used for irrigation (metered or assumed), is used to calculate contributed wastewater flow.

Sewer Service Charges
($ in Millions)

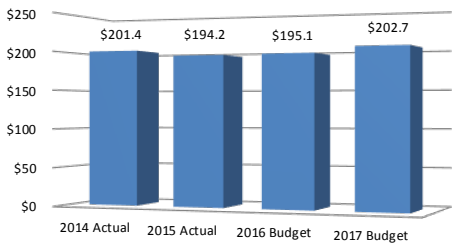


Wastewater operating revenues for 2017 consist primarily of $238.5 million in metered sewer service charges and $6.0 million in sewer surcharge revenues. Net metered wastewater revenues include a 5.6% rate adjustment forecast to generate $12.4 million in additional wastewater revenue in 2017.

WATER DELIVERY OPERATING REVENUES

Water delivery operating revenues recover the costs associated with the production, transmission, and distribution of potable water to the customer primarily through monthly fixed and volumetric charges on each customer's metered water usage. 2017 metered water sales are forecast at $202.7 million, including an 8.6% rate adjustment forecast to generate $17.2 million in additional water revenue in 2017. The additional revenue generated by the rate increase is partially offset by a decrease in water delivery revenues as a result of former DSP customers moving to SAWS rates.

METERED WATER SALES
($ IN MILLIONS)



The 2017 revenue forecast assumes that water sales will total 64.8 billion gallons which is a 2% increase from the 63.5 billion gallons forecasted for the 2016 combined SAWS and DSP annual budget. The increase in assumed usage reflects increased customer growth offset slightly by declining per-customer usage in recent years.

WATER SUPPLY OPERATING REVENUES

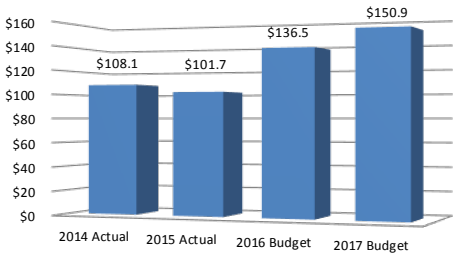
2017 budgeted water supply operating revenues consist primarily of revenues from: the Water Supply Fee; Edwards Aquifer Authority pass-through fees, and recycled water charges. Additionally, SAWS allocates a portion of water delivery charges to the water supply core business to fund conservation programs and receives fees from the City of San Antonio to provide services related to the City's storm water program.

The Water Supply Fee was implemented in 2001 to support one of SAWS fundamental responsibilities: developing and procuring additional water supplies. The Water Supply Fees consists of volumetric charges assessed on customers' meter water usage. 2017 Water Supply Fee revenues are projected to be $150.9 million which includes a 6.8% rate adjustment forecasted to generate $10.0 million in additional revenue in 2017. Additional Water Supply Fees will also be generated as a result of former DSP customers moving to SAWS rates.

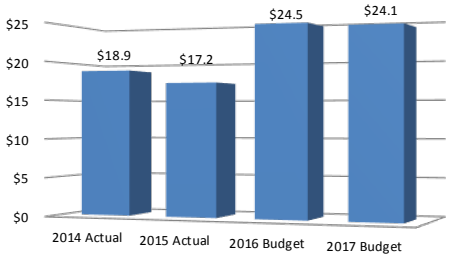
The Edwards Aquifer Authority (EAA) is statutorily empowered to impose an annual permit fee on all parties permitted to pump water from the Edwards Aquifer. The annual permit fee charged to SAWS is based on the number of acre-feet per year that SAWS is permitted to pump from the Edwards Aquifer and is recovered by SAWS through the assessment of a pass-through volumetric charge to its customers; the EAA Fee. The 2017 EAA Fee budgeted revenue is $24.1 million.

Recycled water revenues are budgeted to be $5.5 million in 2017, including a 7.9% rate adjustment on all metered recycle water sales not including the CPS Energy contract. The forecasted receipt of $3.2 million from the CPS Energy contract is projected to contribute 58% of recycled water revenues.

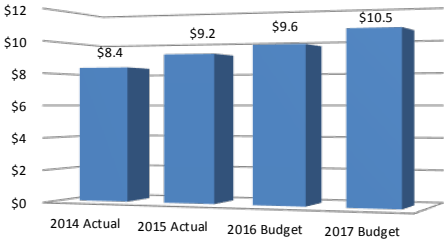
WATER SUPPLY FEE REVENUES
($ IN MILLIONS)



EDWARDS AQUIFER AUTHORITY FEE
($ IN MILLIONS)



CONSERVATION
($ IN MILLIONS)



Conservation revenues are used to fund residential and commercial conservation programs. Conservation revenues for 2017 will be recovered from a portion of the residential water charges for monthly usage in excess of 7,481 gallons, a portion of non-residential monthly meter charges, and a portion of the irrigation revenues from all usage

blocks. For 2017, conservation revenues are budgeted at $10.5 million or 5.3% of total Water Supply operating revenues.

SAWS bills storm water charges to customers and provides certain other services related to the City of San Antonio's Storm Water Program. The City of San Antonio will provide a reimbursement to SAWS of $4.6 million in 2017 to offset the cost of providing those services.

CHILLED WATER OPERATING REVENUES

SAWS provides chilled water for cooling purposes primarily to commercial customers located in downtown San Antonio and Port San Antonio. 2017 revenues are projected at $10.2 million, remaining at the same level as budgeted in 2016. Chilled water services compromise approximately 1.6% of total operating revenues.

NON-OPERATING REVENUES

2017 non-operating revenues, budgeted at $8.0 million, are comprised of $4.4 million of interest earnings on investments and a $3.6 million federal subsidy to be received on previously issued Build America Bonds. Non-operating revenues account for 1.1% of the total sources of funds for 2017.

The average investment base is assumed to be $550 million and the yield on those investments is estimated to be 0.75% in 2017.

DRAW ON EQUITY

The 2016 Draw on Equity of $4.9 million includes $1.4 million from an annual payment from the Lower Colorado River Authority (LCRA) that SAWS receives through 2019 as a result of a lawsuit settlement. Also included is $3.5 million drawn from the Renewal and Replacement Fund to offset the impact on rates from one-time capital equipment purchases included in the 2017 budget.

CAPITAL RECOVERY FEES

Capital recovery fees, also referred to as impact fees, are codified in Chapter 395 of the Texas Local Government Code and provide for the 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.

The collection of capital recovery fees varies from year to year based on the number of new customer connections and the fees charged. SAWS typically performs an impact fee study every five years. The last impact fee study was completed in 2014 and the impact fees charged to customers connecting to SAWS water or wastewater systems were adjusted. Impact Fee rates are not expected to change until the next impact fee study, which will likely be conducted in 2019. Capital recovery fees are budgeted at $56.1 million in 2017, reflecting continuing strong customer growth. In total, these fees are projected to account for 7.8% of the total sources of funds for 2017.

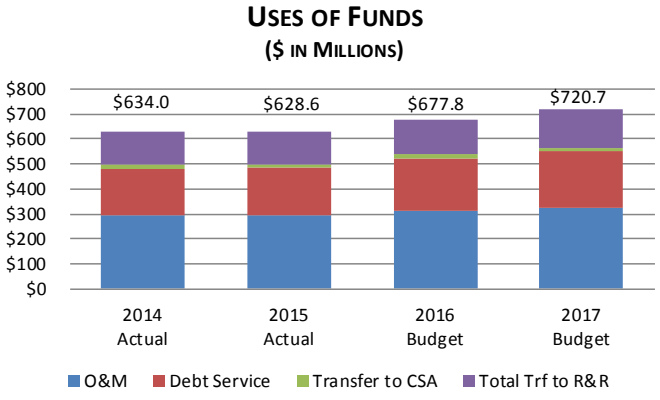
USES OF FUNDS

City of San Antonio, Texas Ordinance No. 75686 requires that Gross Revenues be pledged and appropriated to the extent required for the following uses and in the order of priority shown to pay:

1. Operations & Maintenance
2. Debt Service & Reserve Fund Requirements
3. Transfer to the City
4. Any Surplus Transferred to R&R (provides cash for funding future capital program)

Uses of funds are summarized in the following table and chart:

(dollars in thousands)	2014 Actual	2015 Actual	2016 Budget	2017 Budget
USES OF FUNDS				
Operations and Maintenance	$ 296,022	$ 296,518	$ 313,677	$ 324,860
Revenue Bond Debt Requirement	183,103	188,388	207,481	219,048
Other Debt Service Requirement	2,860	2,001	3,066	5,005
Transfer to the City of San Antonio	13,089	12,683	13,870	16,847
Balance Available for:				
Renewal and Replacement Fund (Restricted)	61,466	65,614	59,707	57,912
Renewal and Replacement Fund (Unrestricted)	77,466	63,462	79,977	97,037
Total Uses of Funds	**$ 634,006**	**$ 628,666**	**$ 677,778**	**$ 720,709**



Operation and Maintenance Expense

The cost to operate and maintain the system on a daily basis comprises the largest single use of SAWS' revenues. Approximately 50 cents of every dollar collected from customers in 2017 will go toward supporting ongoing operations and maintenance. The 2017 budget for Operations and Maintenance (O&M) is $324.9 million, which is an increase of 3.6% from the 2016 O&M budget.

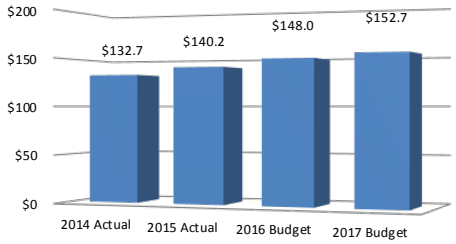
SAWS operation and maintenance expenses are categorized into four major expenditure types: Salaries and Fringe Benefits, Contractual Services, Materials and Supplies and Other Charges. Additionally, a portion of these costs are capitalized in direct support of SAWS Capital Improvement Program.

($ in thousands)	2014 Actual	2015 Actual	2016 Budget	2017 Budget
Operations and Maintenance				
Salaries and Fringe Benefits	$ 132,731	$ 140,174	$ 147,992	$ 152,694
Contractual Services	163,201	163,864	175,319	175,568
Materials and Supplies	23,632	23,490	22,305	24,416
Other Charges	12,792	7,502	10,311	10,647
O&M Before Capitalized Cost Total	**332,355**	**335,030**	**355,927**	**363,324**
Capitalized Cost	(36,333)	(38,512)	(42,251)	(38,464)
Total O&M	**$ 296,022**	**$ 296,518**	**$ 313,677**	**$ 324,860**

Salaries and Fringe Benefits

Salaries and fringe benefits include wages and benefits for all full time and part time employees including: overtime, on-call pay, employees' insurance and retirement benefits, and contributions to a trust established to provide other post-employment benefits (OPEB). Total salary and fringe benefit costs for 2017 are estimated at $152.7 million, or 42.0% of gross operation and maintenance expenditures (before capitalization) and reflect a 3.2% increase from the prior year budget. The increased salary and fringe benefits are the result of annual wage adjustments given to employees as well as 39 additional full-time equivalents (FTE) positions. Annual wage adjustments include bringing the minimum wage up to $14 per hour. The new positions provide additional resources that primarily support improved customer service metrics related to call center response and meter reading.

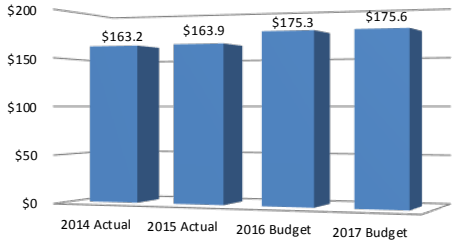
Salaries and Fringe Benefits
($ in Millions)



Contractual Services

Contractual services costs represent expenditures for services that are obtained by express or implied contract. Total Contractual Services for 2017 are budgeted at $175.6 million, which is 48.3% of the gross operation and maintenance expenditures (before capitalization) and reflect a 0.1% increase from the 2016 budget, driven primarily by increases in 1) utilities related to the new desalination plant and 2) purchased water costs associated with the Regional Carrizo project. Partially offsetting these increases are decreased expenditures as a result of shifting from the sanitary sewer overflow (SSO) reduction program assessment phase, which focused on cleaning and televising the system, to the planning and alternative analysis phase which focuses on designing future strategic CIP projects to address condition and capacity constraints in the sewer system identified during the assessment phase.

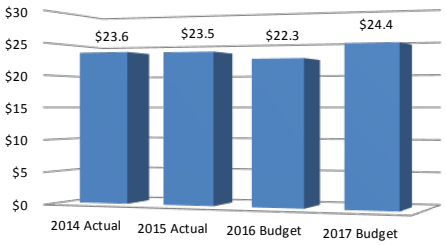
Contractual Services
($ in Millions)



Materials and Supplies

The Materials and Supplies budget of $24.4 million is 6.7% of gross operation and maintenance expenditures and reflects an increase of 9.5% as compared to the prior year budget, resulting primarily from an increase in chemical costs associated with the initial operation of the desalination plant. Partially offsetting this increase is a reduction in motor fuels and lubricants resulting from projected price reductions in petroleum product costs.

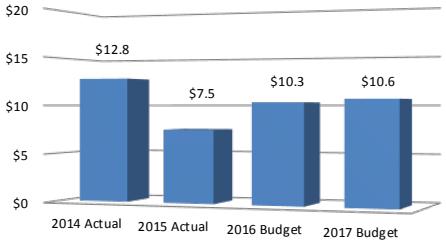
Materials and Supplies
($ in Millions)



Other Charges

Other Charges for 2017 are estimated at $10.6 million, or 2.9% of gross operation and maintenance expenditures, and reflect a 3.3% increase from the prior year budget. Included in this category is property, casualty and workers' compensation costs, retirees' healthcare costs and bank charges. The projected increase is primarily attributable to increasing retiree health insurance costs.

Other Charges
($ in Millions)



Capitalized Costs

Operating and maintenance costs that support functions directly related to capital improvements are reflected as reductions to the gross Operations and Maintenance costs and are funded as part of SAWS Capital Improvement Program (CIP). In 2017, Capitalized Costs are estimated at $38.5 million, or 10.6% of gross operation and maintenance expenditures.

OPERATIONS AND MAINTENANCE SUMMARY BY EXPENSE CLASSIFICATION

($ in thousands)	2014 Actual	2015 Actual	2016 Budget	2017 Budget
Salaries and Fringe Benefits				
511100 Salaries	$ 85,095	$ 89,252	$ 96,450	$ 101,062
511140 Overtime Pay	4,332	5,566	3,701	4,290
511150 On-Call Pay	573	636	511	528
511160 Employee Insurance	13,678	15,617	17,510	16,336
511162 Retirement	21,104	19,577	20,022	20,684
511164 Unused Sick Leave Buyback	68	67	70	70
511166 Personal Leave Buyback	879	893	950	950
511168 Accrued Vacation leave	901	974	1,200	1,200
511170 Incentive Pay	100	92	77	74
511175 Other Post Employment Benefits	6,000	7,500	7,500	7,500
Salaries and Fringe Benefits Total	**132,731**	**140,174**	**147,992**	**152,694**
Contractual Services				
511210 Operating Expense	1,956	1,941	1,977	2,229
511211 Rental of Facilities	289	299	322	297
511212 Alarm and Security	1,312	1,381	1,134	1,939
511214 Uniforms and Shoe Allowance	277	285	329	397
511216 Catering Svcs & Luncheons	117	87	92	99
511219 Conservation Programs	1,525	1,854	3,677	3,675
511220 Maintenance Expense	11,727	12,980	13,435	15,216
511221 Street Cut Permit Admin Fee	710	1,080	751	751
511222 St Pave/Repair Fee	2,144	2,433	1,704	1,620
511223 Preventive Maintenance	102	102	77	102
511224 Corrective Maintenance	1,712	2,007	1,477	1,717
511225 Damage Repair	150	153	179	179
511230 Equipment Rental Charges	652	917	677	281
511240 Travel	99	83	201	245
511245 Training	230	514	618	716
511247 Conferences	38	24	85	126
511250 Memberships and Subscriptions	365	363	386	447
511260 Utilities	29,991	28,327	31,481	32,633
511261 Water Options	43,540	43,519	43,231	45,165
511265 Ground Water District Pay	19,871	24,700	24,999	24,705
511270 Mail and Parcel Post	2,255	2,223	2,298	2,294
511310 Educational Assistance	159	136	225	167
511312 Contractual Prof Svcs	30,601	28,669	33,695	28,786
511313 Inspect & Assessment Fees	1,850	1,774	1,822	2,250
511314 Water Treatment Operations	737	227	300	-
511315 Temporary Employees	1,999	1,194	1,012	598
511320 Legal Services	3,345	1,222	3,155	1,925
511370 Communications	1,278	1,301	1,437	1,657
511381 Software and Hardware Maintenance	4,172	4,070	4,541	5,351
Contractual Services Total	**163,201**	**163,864**	**175,319**	**175,568**

OPERATIONS AND MAINTENANCE SUMMARY BY EXPENSE CLASSIFICATION *(CONTINUED)*

($ in thousands)	2014 Actual	2015 Actual	2016 Budget	2017 Budget
Materials and Supplies				
511410 Small Tools	751	681	731	812
511417 Copy and Printing Expense	18	12	42	37
511420 Operating Materials	2,212	2,382	2,301	2,512
511421 Heating Fuel	80	27	51	29
511422 Chemicals	5,536	5,457	6,407	8,344
511425 Education of School Children	27	25	30	30
511426 Public Awareness-WQEE	15	-	1	1
511427 Enforcement	-	-	20	20
511428 Program Materials	628	-	-	-
511430 Maintenance Materials	9,006	9,960	8,296	8,283
511440 Safety Materials & Supplies	881	932	835	866
511441 Inventory Variances	91	937	35	35
511450 Tires and Tubes	753	634	633	703
511451 Motor Fuel & Lubricants	3,634	2,443	2,925	2,746
Materials and Supplies Total	**23,632**	**23,490**	**22,305**	**24,416**
Other Charges				
511510 Judgements and Claims	388	(1,177)	1,030	725
511511 AL & GL Claims - Cont. Liab.	224	(490)	75	330
511520 Bank Charges	1,540	1,043	20	20
511525 Cash Short/(Over)	(1)	(5)	-	-
511530 Employee Relations	122	125	171	233
511540 Retiree Insurance	8,162	6,245	6,498	6,899
511570 Casualty Insurance	1,500	906	1,367	1,230
511580 Unemployment Compensation	68	49	80	80
511590 Workers Comp Medical	789	807	1,070	1,130
Other Charges Total	**12,792**	**7,502**	**10,311**	**10,647**
O&M Before Capitalized Cost Total	**332,355**	**335,030**	**355,927**	**363,324**
Capitalized Cost	**(36,333)**	**(38,512)**	**(42,251)**	**(38,464)**
Grand Total	**$ 296,022**	**$ 296,518**	**$ 313,677**	**$ 324,860**

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 of existing debt and 30-year level debt service on new debt necessary to support the capital program. The 2017 debt service schedules assume the issuance of an additional $294.9 million of bonds in 2017 to provide funds for the 2017 CIP as well as refund approximately $80 million of outstanding tax-exempt commercial paper. The amount necessary to fulfill total bonded debt service requirements in 2017 on existing and new bonded debt is projected to be $219.0 million, which is 5.6% more than the 2016 budgeted level. Additional discussion of SAWS debt program is included in the Debt Service section of this report.

Other Debt Expense

SAWS expects to pay approximately $5.0 million in debt related expenses in 2017. These expenses include the following fees: remarketing agent, credit liquidity facility, rating agency, and paying agent. 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

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 up to 5% of the gross revenues as defined by ordinance. Certain revenues are exempt from gross revenues for purposes of calculating the transfer. The actual percentage contributed is determined by City Council. Since the inception of SAWS in 1992, the transfer to the City has been set at 2.7% of non-exempt gross revenues. SAWS has budgeted $16.8 million for this transfer in 2017.

Balance Available for Transfer to Renewal and Replacement Fund

After meeting all other requirements of system revenues including operations and maintenance expenses, debt service, and transfer to the City's General Fund, $154.9 million is estimated to be available for transfer to the Renewal and Replacement Fund (R&R) of which $57.9 million is restricted for use associated with SAWS Capital Improvement Program. The R&R Fund can be used for the purpose of funding improvements, extensions, additions, replacements, or other capital expenditures (including capital outlay) 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 that is transferred to the City's General Fund each year.

Capital Outlay consists of 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, and miscellaneous equipment. The Capital Outlay program is based on priorities established by executive management. The capital outlay program for 2017 consists of $14.0 million in planned capital expenditures meeting the above criteria. The $4.8 million increase over the 2016 expenditure level is due primarily to the implementation of certain computer software systems and equipment purchases that are considered to nonrecurring in nature

The following table summarizes the planned expenditures in 2017 for the capital outlay program.

($ in thousands)	2014 Actual	2015 Actual	2016 Budget	2017 Budget
Automobiles and Trucks	$ 3,867	$ 433	$ 5,198	$ 5,582
Computer Equipment	2,010	1,690	2,673	2,662
Lab Equipment	135	60	-	200
Machinery and Equipment	1,101	2,640	220	1,315
Miscellaneous Equipment	1,663	1,345	1,015	2,259
Pumping Equipment	978	934	-	863
Software Systems	14	457	135	1,111
Total	**$ 9,768**	**$ 7,559**	**$ 9,241**	**$ 13,992**

After funding of $14.0 million for 2017 capital outlay expenditures, $83.0 million in unrestricted funds is expected to be added to the R&R Fund in 2017. These unrestricted funds are expected to be utilized to provide pay-as-you-go funding to support the SAWS Capital Improvement Program in 2018 and beyond.

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 of fixed-rate and variable rate obligations. Commercial paper provides SAWS with flexibility and efficiency in the timing and amount of debt issued. The commercial paper program and variable rate debt provides a hedge to partially offset the variable rate nature of the investment portfolio.

REVENUE BONDS

As of December 31, 2016 SAWS currently has Senior and Junior Lien Water System Revenue Bonds outstanding.

- **Senior Lien Water System Revenue Bonds -** comprised of Series 2007, Series 2009, Series 2009B, Series 2010B, Series 2011, Series 2011A, Series 2012, and Series 2012A outstanding in the amount of $846,940,000 as of December 31, 2016 and 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 2007, Series 2007A, Series 2008, Series 2008A, Series 2009, Series 2009A, Series 2010, Series 2010A, Series 2011, Series 2011A, Series 2012 (NO RESERVE FUND), Series 2012, Series 2013A, Series 2013B (NO RESERVE FUND), Series 2013C, Series 2013D, Series 2013E (NO RESERVE FUND), Series 2014A (NO RESERVE FUND), Series 2014C, Series 2014D, Series 2015A, Series 2015B (NO RESERVE FUND), Series 2106A (NO RESERVE FUND), Taxable Series 2016B (NO RESERVE FUND), Series 2016C (NO RESERVE FUND), Series 2016D and Series 2016E outstanding in the amount of $1,584,615,000 as of December 31, 2016 and 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 paying the debt service on senior lien debt.

- **Junior Lien Water System Variable Rate Revenue Bonds** – comprised of the $100,000,000 Series 2013F (NO RESERVE FUND) Bonds (the "Series 2013F Bonds), and the $100,000,000 Series 2014B (NO RESERVE FUND) Bonds (the "Series 2014B Bonds), (together the "Bonds"), were issued as multi-modal variable rate bonds, initially issued in a Securities Industry and Financial Markets Association (SIFMA) Index Mode. During the initial three-year term of the bonds, the interest rate for the Series 2013F Bonds will reset

weekly based on the SIFMA Swap Index, plus a spread of 0.68% and the Series 2014B will reset weekly based on the SIFMA Swap Index, plus a spread of 0.40%. The initial term of the Series 2013F Bonds expires October 31, 2016 and the Series 2014B Bonds expires October 31, 2017. Upon expiration of the initial term, the bonds will be remarketed into a successive SIFMA Index Mode, or another mode as allowed under the authorizing ordinance. On November 1, 2016, the Series 2013F Bonds were remarketed into a Term Mode for a five year interest rate period that expires October 31, 2021. The remarketing of the Series 2013F Bonds produced a premium of approximately $1.7 million which resulted in a principal paydown for the remarketing of the Series 2013F Bonds of approximately $1.2 million. The coupon rate for the Series 2013F Bonds is 2.0%, with a current yield of 1.63%. Total Junior Lien Variable Rate Revenue Bonds outstanding as of December 31, 2016 was $198,795,000. The debt service for the variable rate bonds is 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 paying the debt service on senior lien debt.

- **Subordinate Lien Revenue and Refunding Bonds - Interest Rate Hedge Agreement (Swap) -** In 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 SIFMA. 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 paying debt service on senior lien and junior lien debt.

  In 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. At December 31, 2016, $88,255,000 of the commercial paper notes outstanding 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 2017 budgeted debt service requirements of SAWS at the original principal amortization of the Subordinate Lien Obligations.

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 requiring a reserve fund. 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 bonds anticipated to be issued in 2017 assumes any required increase in the reserve fund will be funded with proceeds from bonds issued.

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. (the "Series A Agreement"), and the other with Wells Fargo Bank, N.A (the "Series B

Agreement" and, together with the Series A Agreement, the "Agreements"). Bank of Tokyo-Mitsubishi UFJ, Ltd. currently supports a $350 million program of Series A TECP notes, and Wells Fargo Bank, N.A. currently supports a $100 million program of Series B TECP notes. The Series A Agreement extends to October 4, 2018. The Series B Agreement extends to January 15, 2018. Pursuant to the Agreements, the revolving line of credit currently totals $450 million.

After refunding approximately $80 million in currently outstanding commercial paper, the 2017 Budget assumes approximately $307 million of commercial paper remains outstanding to fund capital improvement projects through 2017. As stated in the "Interest Rate Hedge Agreement (Swap)" section herein, an additional $88.3 million of the commercial paper program is attributable to the redemption of the Subordinate Lien Obligations. The 2016 Budget assumes that the interest to be paid on the 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. 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.

BOND AND COMMERCIAL PAPER RATINGS

In September 2016, SAWS' credit ratings were reaffirmed by the three major rating agencies. These ratings are as follows:

	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+

The high quality ratings reflects 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.

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 2017 Annual Operating Budget projects an estimated 2017 Senior Lien Debt Coverage ratio of 3.42 times and 2017 Total Debt Coverage ratio of 1.51 times.

DEBT COVERAGE CALCULATION *($ in thousands)*		
Total Sources of Funds	**$**	**720,709**
Less Revenues from:		
City Public Service contract		3,223
Interest on CPS contract		
Capital Recovery Fees		56,103
Transfer from Renewal & Replacement Fund		4,850
Interest on Project Funds		309
Gross Revenues as defined by Ordinance No. 75686	**$**	**656,223**
Less: Operations & Maintenance		324,860
Pledged Revenues as defined by Ordinance No. 75686	**$**	**331,364**
2017 Senior Lien Debt Service Requirement	$	97,008
2017 Senior Lien Debt Coverage Ratio		**3.42** x
Maximum Senior Lien Debt Service Requirement (Year 2027)	$	119,811
Maximum Senior Lien Debt Coverage Ratio		**2.77** x
2017 Total Bonded Debt Service Requirement	$	219,049
2017 Total Bonded Debt Coverage Ratio		**1.51** x
Maximum Total Bonded Debt Service Requirement (Year 2021)	$	219,997
Maximum Total Bonded Debt Coverage Ratio		**1.51** x

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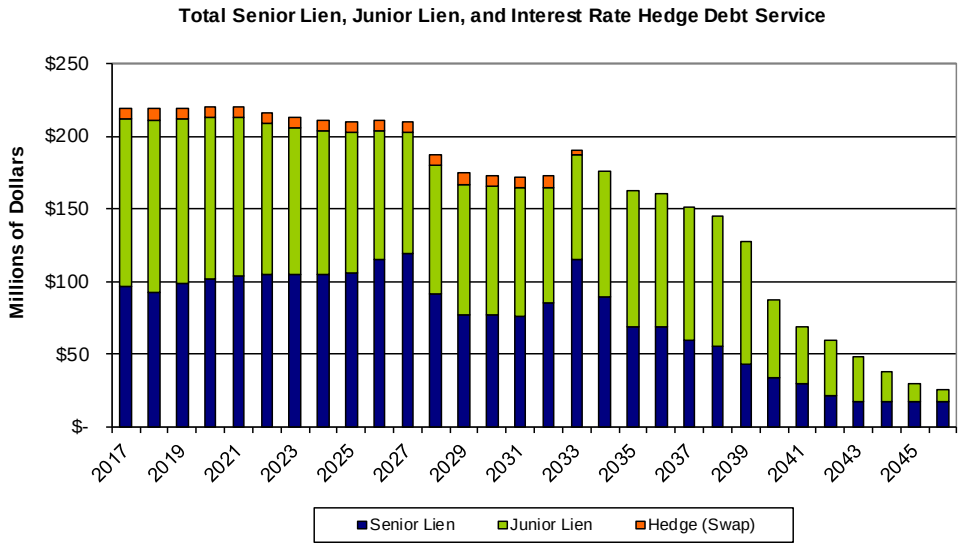
BUDGETED REVENUE AND REFUNDING BONDS DEBT SERVICE SCHEDULES

Fiscal Year	Senior Lien			Junior Lien		
December 31,	Principal	Interest	Total	Principal	Interest	Total
2017	$ 32,808,333	$ 64,199,616	$ 97,007,950	$ 58,960,833	$ 55,832,978	$ 114,793,811
2018	30,175,000	62,685,304	92,860,304	63,496,667	55,008,518	118,505,185
2019	36,998,333	61,339,129	98,337,463	60,095,000	53,125,507	113,220,507
2020	42,580,000	59,653,730	102,233,730	59,265,833	51,101,220	110,367,053
2021	46,041,667	57,619,306	103,660,972	60,117,500	48,912,989	109,030,490
2022	49,381,667	55,373,657	104,755,324	57,390,833	46,628,058	104,018,891
2023	52,191,667	52,946,275	105,137,942	56,233,333	44,439,544	100,672,877
2024	54,801,667	50,370,810	105,172,477	56,485,000	42,295,929	98,780,929
2025	58,293,333	47,646,170	105,939,503	56,611,667	40,156,536	96,768,202
2026	70,491,667	44,726,943	115,218,610	50,452,500	37,985,874	88,438,374
2027	78,576,667	41,234,177	119,810,843	46,948,333	36,061,953	83,010,286
2028	53,611,667	37,563,021	91,174,688	54,513,333	34,340,027	88,853,360
2029	41,761,667	34,952,382	76,714,049	57,877,500	32,296,310	90,173,810
2030	43,751,667	32,863,026	76,614,693	58,915,000	30,181,016	89,096,017
2031	45,813,333	30,666,379	76,479,713	59,963,333	28,098,033	88,061,367
2032	57,111,667	28,405,806	85,517,472	53,520,833	25,921,530	79,442,363
2033	89,653,333	25,702,738	115,356,071	48,289,167	24,029,462	72,318,629
2034	67,828,333	21,262,428	89,090,761	64,680,833	22,356,787	87,037,621
2035	51,673,333	17,695,798	69,369,131	72,703,333	20,030,415	92,733,748
2036	54,103,333	15,113,047	69,216,381	74,057,500	17,311,347	91,368,847
2037	47,568,333	12,409,068	59,977,401	76,653,333	14,649,018	91,302,351
2038	45,276,667	9,961,315	55,237,982	77,619,167	11,679,866	89,299,033
2039	36,061,667	7,627,992	43,689,659	75,421,667	8,492,588	83,914,254
2040	28,256,667	5,766,073	34,022,739	48,103,333	5,665,812	53,769,145
2041	25,028,333	4,467,078	29,495,411	34,950,833	4,037,753	38,988,586
2042	17,938,333	3,411,216	21,349,549	34,972,500	2,999,816	37,972,316
2043	15,305,000	2,607,413	17,912,413	28,076,667	1,958,063	30,034,730
2044	16,010,000	1,902,825	17,912,825	18,935,833	1,079,327	20,015,161
2045	16,745,000	1,165,838	17,910,838	11,397,596	419,094	11,816,691
2046	17,535,000	394,538	17,929,538	7,696,316	13,459	7,709,775
	$ 1,323,373,333	$ 891,733,098	$ 2,215,106,431	$ 1,584,405,579	$ 797,108,829	$ 2,381,514,408

Amounts represent transfers to the Debt Service Fund for existing and proposed debt, including obligations under the 2003 swap agreement.

BUDGETED REVENUE AND REFUNDING BONDS DEBT SERVICE SCHEDULES

Fiscal Year	Interest Rate Hedge (Swap)			Total Bonded Service		
December 31,	Principal	Interest	Total	Principal	Interest	Total
2017	$ 3,656,667	$ 3,590,132	$ 7,246,799	$ 95,425,833	$ 123,622,727	$ 219,048,560
2018	3,823,333	3,437,284	7,260,617	97,495,000	121,131,105	218,626,105
2019	3,996,667	3,277,468	7,274,135	101,090,000	117,742,105	218,832,105
2020	4,178,333	3,110,408	7,288,741	106,024,167	113,865,357	219,889,524
2021	4,370,000	2,935,753	7,305,753	110,529,167	109,468,049	219,997,216
2022	4,571,667	2,753,087	7,324,754	111,344,166	104,754,803	216,098,969
2023	4,780,000	2,561,992	7,341,992	113,205,000	99,947,811	213,152,811
2024	4,996,667	2,362,188	7,358,854	116,283,333	95,028,927	211,312,260
2025	5,226,667	2,153,327	7,379,994	120,131,667	89,956,032	210,087,699
2026	5,461,667	1,934,852	7,396,519	126,405,834	84,647,670	211,053,504
2027	5,710,000	1,706,555	7,416,555	131,235,000	79,002,684	210,237,684
2028	5,971,667	1,467,877	7,439,543	114,096,667	73,370,925	187,467,592
2029	6,243,333	1,218,261	7,461,594	105,882,500	68,466,953	174,349,453
2030	6,528,333	957,290	7,485,623	109,195,000	64,001,332	173,196,332
2031	6,825,000	684,405	7,509,405	112,601,667	59,448,818	172,050,485
2032	7,135,000	399,120	7,534,120	117,767,500	54,726,455	172,493,955
2033	2,413,333	100,877	2,514,211	140,355,833	49,833,077	190,188,911
2034	-	-	-	132,509,167	43,619,215	176,128,382
2035	-	-	-	124,376,667	37,726,213	162,102,880
2036	-	-	-	128,160,833	32,424,394	160,585,228
2037	-	-	-	124,221,667	27,058,085	151,279,752
2038	-	-	-	122,895,833	21,641,182	144,537,015
2039	-	-	-	111,483,333	16,120,580	127,603,914
2040	-	-	-	76,360,000	11,431,885	87,791,885
2041	-	-	-	59,979,167	8,504,831	68,483,998
2042	-	-	-	52,910,833	6,411,032	59,321,865
2043	-	-	-	43,381,667	4,565,476	47,947,142
2044	-	-	-	34,945,833	2,982,152	37,927,986
2045	-	-	-	28,142,596	1,584,932	29,727,528
2046	-	-	-	25,231,316	407,996	25,639,312
	$ 85,888,333	$ 34,650,876	$ 120,539,210	$ 2,993,667,246	$ 1,723,492,803	$ 4,717,160,049



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ORGANIZATION AND STAFFING

Organization and Staffing

Operations and Maintenance Summary by Department

($ in thousands)	2014 Actual	2015 Actual	2016 Budget	2017 Budget
Board of Trustees and Pres/CEO Group				
Board of Trustees	$ 53	$ 51	$ 57	$ 58
Office of the President-CEO	1,167	975	908	1,120
Board of Trustees Support	494	180	304	305
Internal Audit Dept	551	547	562	577
Board of Trustees and Pres/CEO Group Total	**2,264**	**1,754**	**1,831**	**2,060**
Engineering and Construction Group				
Office of the VP - Engineering and Construction	405	327	589	488
Construction	5,272	5,397	5,774	5,138
Development	3,949	3,897	4,177	4,674
Governmental Engineering	399	194	234	-
Pipelines	3,257	3,408	3,324	3,377
Plants and Major Projects	2,293	2,359	2,434	2,509
Vista Ridge Water Supply Project	-	142	1,237	2,016
Water Supply Implementation	-	132	289	-
Engineering and Construction Group Total	**15,576**	**15,856**	**18,058**	**18,201**
Water Resources and Governmental Relations				
Office of VP - Water Resources	272	341	272	8
Conservation Department	5,064	4,156	5,412	5,510
Governmental Relations	741	792	1,163	1,215
Water Resources Department	66,537	71,585	71,522	72,556
Water Resources and Governmental Relations Total	**72,614**	**76,875**	**78,369**	**79,289**
Operations Group				
Office of Chief Operating Officer	614	624	595	676
Environmental Laboratory Services	2,303	2,229	2,320	2,244
Office of Energy Management	262	270	263	270
Resource Protection & Compliance Div	7,629	7,324	7,760	8,520
Operations Group Total	**10,807**	**10,447**	**10,939**	**11,710**
Distribution and Collection Operations Group				
Office of the VP - Distribution and Collection	478	512	572	612
Construction and Maintenance	15,026	16,333	15,554	17,524
Distribution and Collection Support Services	835	783	744	443
Eastern Service Centers	12,453	12,343	13,449	12,827
Facilities	6,500	7,321	6,324	7,078
Fleet Management	9,751	8,788	8,629	8,700
Western Service Centers	11,977	12,847	11,585	11,149
Distribution and Collection Operations Group Total	**57,019**	**58,927**	**56,857**	**58,333**
Production and Treatment Operations and Maintenance				
Office of the VP - Production and Treatment	91	102	40	398
Chilled Water	6,781	6,113	5,447	5,725
Maintenance Management	28,044	31,101	16,292	17,183
Office of Dir. - Production and Treatment Operations	399	491	539	265
Production Department	17,450	11,990	32,808	34,929
Security	2,437	2,575	2,603	3,399
Treatment Operations Management	20,311	20,743	20,946	21,690
Production and Treatment Operations and Maintenan	**75,513**	**73,116**	**78,677**	**83,589**
Sewer System Improvements				
Capacity Assessment	2,218	2,375	2,261	2,100
Capacity Mgt O&M (CMOM)	6,877	6,580	6,877	2,473
Program Administration	6,686	7,458	9,468	9,411
Structural Sewer Assessment	7,232	7,467	6,619	6,138
Sewer System Improvements Total	**23,012**	**23,880**	**25,225**	**20,122**

OPERATIONS AND MAINTENANCE SUMMARY BY DEPARTMENT *(CONTINUED)*

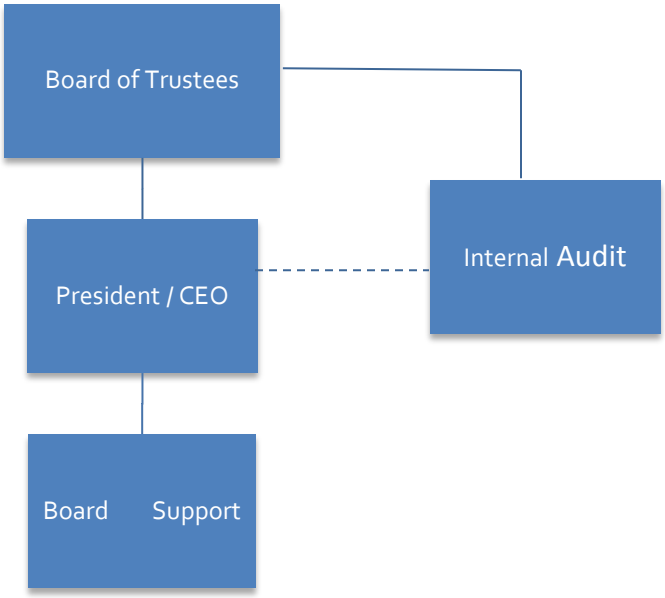
($ in thousands)	2014 Actual	2015 Actual	2016 Budget	2017 Budget
Financial Services Group				
Office of the CFO	370	382	370	385
Accounting	1,853	1,937	1,935	2,065
Business Planning	553	723	685	705
Continuous Improvement and Innovation	436	331	564	692
Purchasing	683	666	681	705
Supply	1,118	2,022	1,122	1,142
Treasury	2,709	1,969	1,012	964
Financial Services Group Total	**7,724**	**8,029**	**6,368**	**6,657**
Information Systems				
Administration	623	701	688	890
Application Services	4,863	5,110	5,957	7,148
Information Technology	7,212	6,880	7,246	7,363
Program Management	515	568	692	690
Network Security Services	2,848	2,835	3,424	3,802
Information Systems Total	**16,061**	**16,093**	**18,006**	**19,893**
Customer Service				
Billing	1,748	1,776	1,680	2,467
Customer Care	3,279	3,369	3,506	4,459
Customer Service Administration	1,317	808	1,120	567
Field Operations	5,904	5,895	6,226	7,329
Performance Analysis and Training	347	369	376	850
Customer Service Total	**12,595**	**12,217**	**12,908**	**15,671**
Legal Group				
Contracting Department	1,655	1,404	1,693	1,547
Corporate Real Estate Department	925	1,104	729	752
Legal Department	4,956	2,988	4,016	3,881
Legal Group Total	**7,537**	**5,497**	**6,437**	**6,180**
Human Resources Group				
Office of the VP - Human Resources	442	-	-	-
Claims	551	-	-	-
Corporate Training	529	-	-	-
Human Resources Div	2,199	3,362	3,712	3,810
Risk Management	1,690	2,569	3,349	3,245
Safety and Environmental Health	628	-	-	-
Human Resources Group Total	**6,038**	**5,932**	**7,061**	**7,056**
Communications and External Affairs				
Communications Administration	372	398	476	478
Communications	1,293	1,294	1,537	1,657
External Relations	1,340	1,253	1,259	1,340
Communications and External Affairs Total	**3,004**	**2,945**	**3,272**	**3,475**
Other Requirements	**22,592**	**23,464**	**31,920**	**31,089**
Total O&M before Capitalized Costs	**$ 332,355**	**$ 335,030**	**$ 355,927**	**$ 363,324**
Capitalized Cost	(36,333)	(38,512)	(42,251)	(38,464)
Grand Total	**$ 296,022**	**$ 296,518**	**$ 313,677**	**$ 324,860**

Operations and Maintenance Summaries by Group

Board of Trustees and President/CEO

The Board of Trustees and President /CEO Group provides the leadership and guidance for all of SAWS. It consists of the Board of Trustees, Office of the President/CEO, Board support functions, and the Internal Audit function.

- **Board of Trustees** – 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.
- **President/CEO** – 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.
- **Internal Audit -** Provides independent and objective assurance and consulting services designed to add value and improve SAWS operations. Internal Audit co-reports to the Board of Trustees.



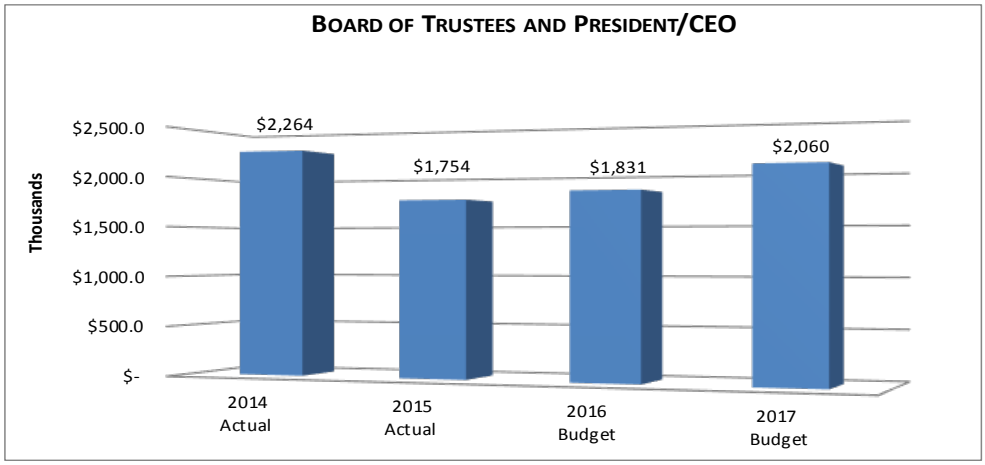
BOARD OF TRUSTEES AND PRESIDENT/CEO

($ in thousands)

Expenditures by Type	2014 Actual	2015 Actual	2016 Budget	2017 Budget
O&M Before Capitalized Cost				
Salaries and Fringe Benefits	$ 1,704	$ 1,498	$ 1,459	$ 1,679
Contractual Services	550	253	358	368
Materials and Supplies	11	3	14	12
Other Charges	-	-	-	-
O&M Before Capitalized Cost Total	**2,264**	**1,754**	**1,831**	**2,060**
Capitalized Cost	-	-	-	-
Intercenter Transfers	-	-	-	-
Total O&M	**$ 2,264**	**$ 1,754**	**$ 1,831**	**$ 2,060**
Capital Outlay	**$ -**	**$ 2**	**$ -**	**$ -**

Expenditures by Department	2014 Actual	2015 Actual	2016 Budget	2017 Budget
Board of Trustees	$ 53	$ 51	$ 57	$ 58
Office of the President-CEO	1,167	975	908	1,120
Board of Trustees Support	494	180	304	305
Internal Audit Dept	551	547	562	577
O&M Before Capitalized Cost Total	**2,264**	**1,754**	**1,831**	**2,060**
Capitalized Cost	-	-	-	-
Intercenter Transfers	-	-	-	-
Grand Total	**$ 2,264**	**$ 1,754**	**$ 1,831**	**$ 2,060**

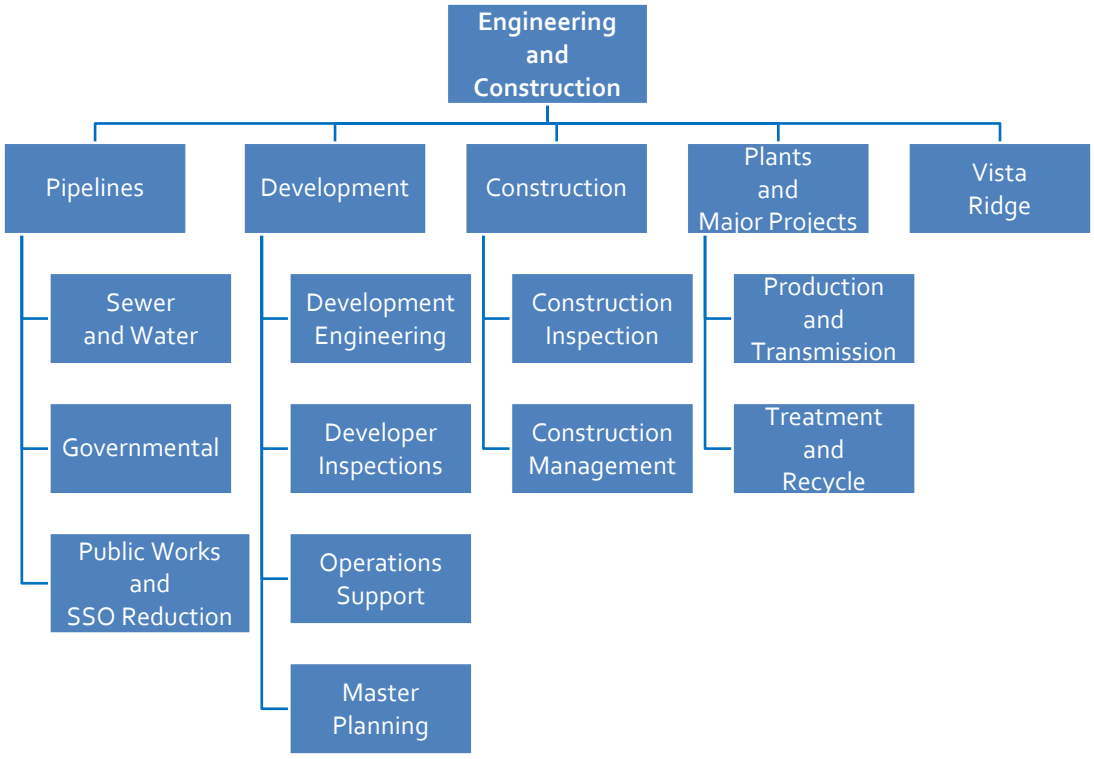
Full-time Equivalent Positions	2014 Budget	2015 Budget	2016 Budget	2017 Budget
Office of the President-CEO	6.0	5.0	4.0	5.0
Board of Trustees Support	1.0	1.0	1.0	1.0
Internal Audit Dept	4.5	4.0	4.0	4.0
Total Full-Time Equivalent Positions	**11.5**	**10.0**	**9.0**	**10.0**



Engineering and Construction

Engineering and Construction coordinates the development and execution of SAWS Capital Improvements Program (CIP). 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:

- **Pipelines** – Plans and coordinates design activities and manages construction for new and rehabilitated water distribution system and wastewater collection system projects.
- **Construction** – Inspects pipeline construction projects for water and sewer and water supply projects.
- **Development** – Manages impact fee program, develops water and wastewater master plans, coordinates infrastructure necessary for new development, and provides engineering support to Distribution and Collection Operations and Production and Treatment.
- **Plants and Major Projects** – Plans, coordinates design activities and manages construction for water supply integration projects, new water supply development, potable and recycled water production facilities, and wastewater treatment plants.
- **Vista Ridge** – Manages SAWS' obligations and interests in a Public Private Partnership (P_3) contract with the Vista Ridge Project Company for the annual supply of 50,000 acre-feet of a new, non-Edwards source of water for San Antonio. SAWS staff will monitor the Project Company's activities during the Development, Construction, and Operation phases of the contract.



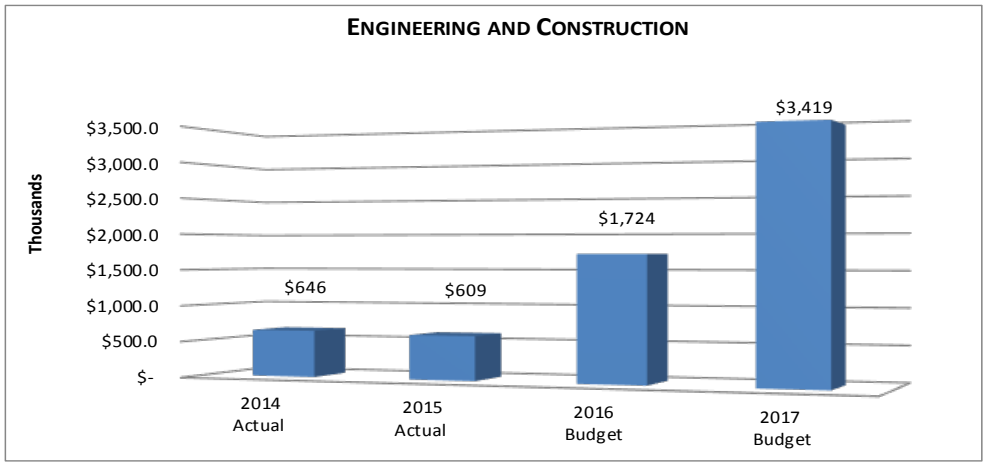
ENGINEERING AND CONSTRUCTION

($ in thousands)

Expenditures by Type	2014 Actual	2015 Actual	2016 Budget	2017 Budget
O&M Before Capitalized Cost				
Salaries and Fringe Benefits	$ 14,530	$ 14,647	$ 15,481	$ 15,791
Contractual Services	962	1,143	2,490	2,308
Materials and Supplies	83	65	88	102
Other Charges	-	-	-	-
O&M Before Capitalized Cost Total	**15,576**	**15,856**	**18,058**	**18,201**
Capitalized Cost	(14,891)	(15,246)	(16,335)	(14,782)
Intercenter Transfers	(38)	(1)	-	-
Total O&M	**$ 646**	**$ 609**	**$ 1,724**	**$ 3,419**
Capital Outlay	**$ 37**	**$ 37**	**$ -**	**$ 152**

Expenditures by Department	2014 Actual	2015 Actual	2016 Budget	2017 Budget
Office of the VP - Engineering and Construction	$ 405	$ 327	$ 589	$ 488
Construction	5,272	5,397	5,774	5,138
Development	3,949	3,897	4,177	4,674
Governmental Engineering	399	194	234	-
Pipelines	3,257	3,408	3,324	3,377
Plants and Major Projects	2,293	2,359	2,434	2,509
Vista Ridge Water Supply Project	-	142	1,237	2,016
Water Supply Implementation	-	132	289	-
O&M Before Capitalized Cost Total	**15,576**	**15,856**	**18,058**	**18,201**
Capitalized Cost	(14,891)	(15,246)	(16,335)	(14,782)
Intercenter Transfers	(38)	(1)	-	-
Grand Total	**$ 646**	**$ 609**	**$ 1,724**	**$ 3,419**

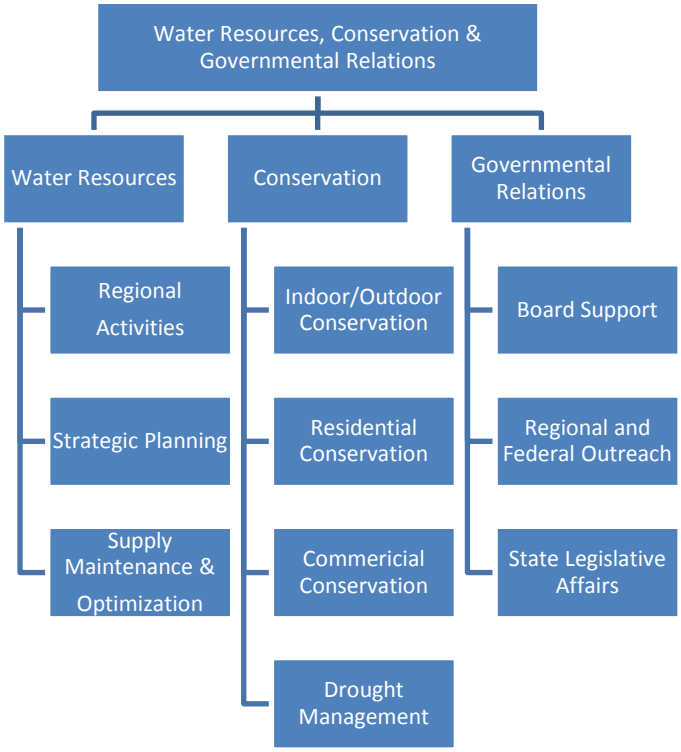
Full-time Equivalent Positions	2014 Budget	2015 Budget	2016 Budget	2017 Budget
Office of the VP - Engineering and Construction	3.0	3.0	3.0	3.0
Construction	72.0	66.0	57.0	60.0
Development	42.0	41.5	43.0	54.0
Governmental Engineering	21.0	20.0	19.0	-
Pipelines	18.0	25.5	22.0	38.0
Plants and Major Projects	34.5	35.5	34.0	23.5
Water Supply Implementaion	-	-	5.0	-
Vista Ridge Water Supply Project	-	-	1.0	4.0
Total Full-Time Equivalent Positions	**190.5**	**191.5**	**184.0**	**182.5**



WATER RESOURCES AND GOVERNMENTAL RELATIONS

The Water Resources, Conservation and Governmental Relations 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 three departments:

- **Water Resources** – Implements the SAWS' long-range Water Management Plan, through proactively managing existing supplies to ensure customer needs are met and leading efforts in the planning and development of new water supply opportunities to meet the city's growth. In addition to managing and developing supplies, Water Resources is also responsible for the marketing of the direct recycled water program as well as directing efforts to minimize non-revenue water, ensuring efficient use of water supplies.
- **Conservation** – Delivers nationally 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 efficient commercial and residential water use through education, outreach, incentives and drought ordinance rules.
- **Governmental Relations** – Identifies and manages critical issues that have public impact and require the attention of Executive Management. Manages key strategic relationships with elected officials and agencies at the county, regional, state and federal levels.



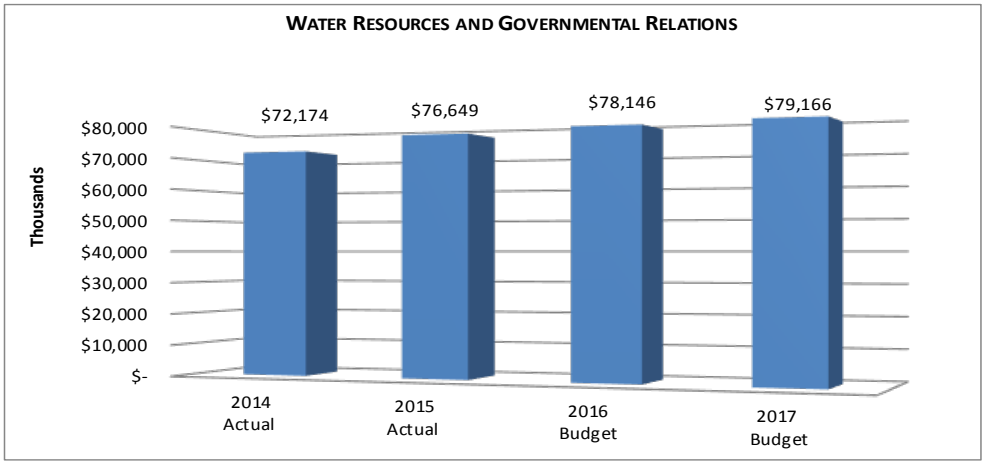
WATER RESOURCES AND GOVERNMENTAL RELATIONS

($ in thousands)

Expenditures by Type	2014 Actual	2015 Actual	2016 Budget	2017 Budget
O&M Before Capitalized Cost				
Salaries and Fringe Benefits	$ 3,618	$ 3,573	$ 3,712	$ 3,387
Contractual Services	68,416	73,273	74,645	75,890
Materials and Supplies	580	29	11	11
Other Charges	-	-	-	-
O&M Before Capitalized Cost Total	**72,614**	**76,875**	**78,369**	**79,289**
Capitalized Cost	(440)	(226)	(223)	(123)
Intercenter Transfers				
Total O&M	**$ 72,174**	**$ 76,649**	**$ 78,146**	**$ 79,166**
Capital Outlay	**$ 3**	**$ 500**	**$ 2**	**$ -**

Expenditures by Department	2014 Actual	2015 Actual	2016 Budget	2017 Budget
Office of VP - Water Resources	$ 272	$ 341	$ 272	$ 8
Conservation Department	5,064	4,156	5,412	5,510
Governmental Relations	741	792	1,163	1,215
Water Resources Department	66,537	71,585	71,522	72,556
O&M Before Capitalized Cost Total	**72,614**	**76,875**	**78,369**	**79,289**
Capitalized Cost	(440)	(226)	(223)	(123)
Intercenter Transfers	-	-	-	-
Grand Total	**$ 72,174**	**$ 76,649**	**$ 78,146**	**$ 79,166**

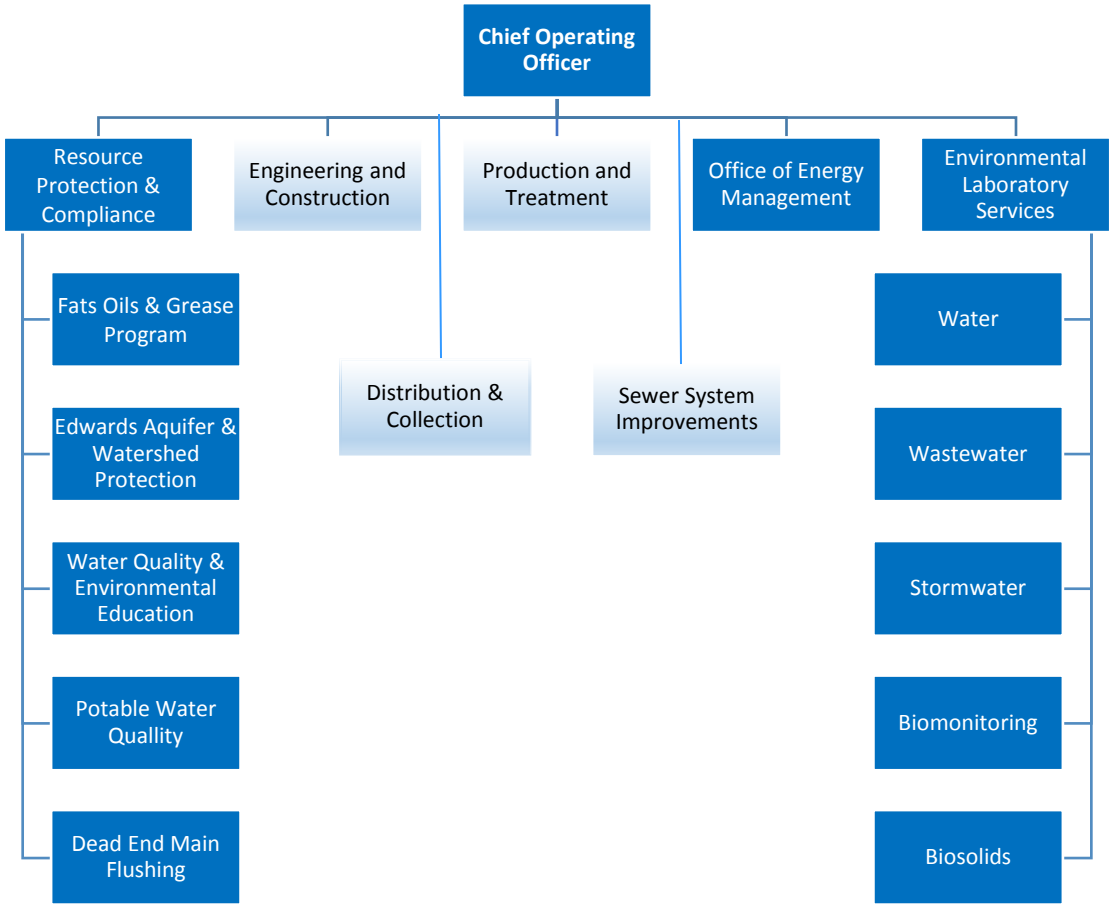
Full-time Equivalent Positions	2014 Budget	2015 Budget	2016 Budget	2017 Budget
Office of VP - Water Resources	2.0	2.0	2.0	-
Conservation Department	24.4	24.4	24.4	24.4
Governmental Relations	-	-	7.0	6.0
Water Resources Department	19.0	12.0	11.0	9.0
Total Full-Time Equivalent Positions	**45.4**	**38.4**	**44.4**	**39.4**



OPERATIONS

The Operations Group is managed by the Chief Operating Officer (COO). The COO oversees the Production & Treatment, Distribution & Collection, Sewer System Improvement and Engineering & Construction Groups. The area is responsible for managing the operation and maintenance of the water distribution and wastewater collection systems, and the water and wastewater plants. The following departments also report to the Chief Operating Officer:

- **Office of Energy Management** – Manages the CPS Energy metering and bill review and payment process. Develops the energy budget and tracks expenses and analysis trends. Monitors the energy Demand Side Management program with CPS Energy.
- **Resource Protection & Compliance** – Ensures water quality of all sources are protected; enforces the regulatory requirements established to protect regional water quality; monitors best management practices at construction sites; utilizes an extensive sampling and monitoring network for compliance purposes and oversees the Dead End Main Flushing Program
- **Environmental Laboratory Services (ELS)** – ELS is responsible for providing analytical services that ensure data integrity, reliability, responsiveness and accuracy for all of SAWS needs both in monitoring and compliance. The lab maintains a broad scope of analytical expertise covering microbiology, inorganic and organic testing activities. This broad base of technical expertise enables the laboratory to perform a wide variety of routine environmental tests to support the SAWS' water and wastewater activities. ELS is accredited by the Texas Commission on Environmental Quality (TCEQ) under the National Environmental Laboratory Accreditation Program.



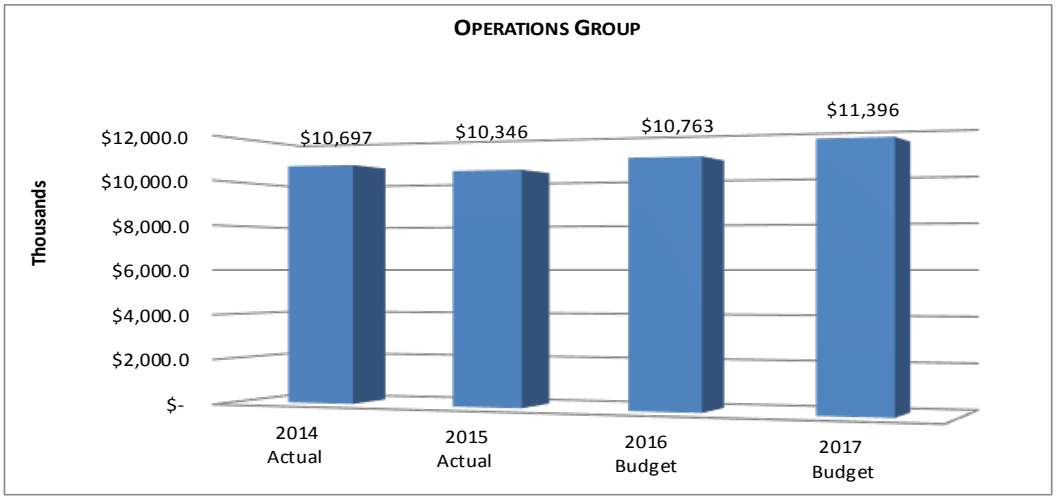
OPERATIONS

($ in thousands)

Expenditures by Type	2014 Actual	2015 Actual	2016 Budget	2017 Budget
O&M Before Capitalized Cost				
Salaries and Fringe Benefits	$ 8,879	$ 8,578	$ 8,780	$ 9,488
Contractual Services	1,430	1,384	1,662	1,621
Materials and Supplies	496	485	497	601
Other Charges	2	-	-	-
O&M Before Capitalized Cost Total	**10,807**	**10,447**	**10,939**	**11,710**
Capitalized Cost	(109)	(101)	(176)	(314)
Intercenter Transfers				
Total O&M	**$ 10,697**	**$ 10,346**	**$ 10,763**	**$ 11,396**
Capital Outlay	**$ 138**	**$ 61**	**$ -**	**$ 422**

Expenditures by Department	2014 Actual	2015 Actual	2016 Budget	2017 Budget
Office of Chief Operating Officer	$ 614	$ 624	$ 595	$ 676
Environmental Laboratory Services	2,303	2,229	2,320	2,244
Office of Energy Management	262	270	263	270
Resource Protection & Compliance Div	7,629	7,324	7,760	8,520
O&M Before Capitalized Cost Total	**10,807**	**10,447**	**10,939**	**11,710**
Capitalized Cost	(109)	(101)	(176)	(314)
Intercenter Transfers	-	-	-	-
Grand Total	**$ 10,697**	**$ 10,346**	**$ 10,763**	**$ 11,396**

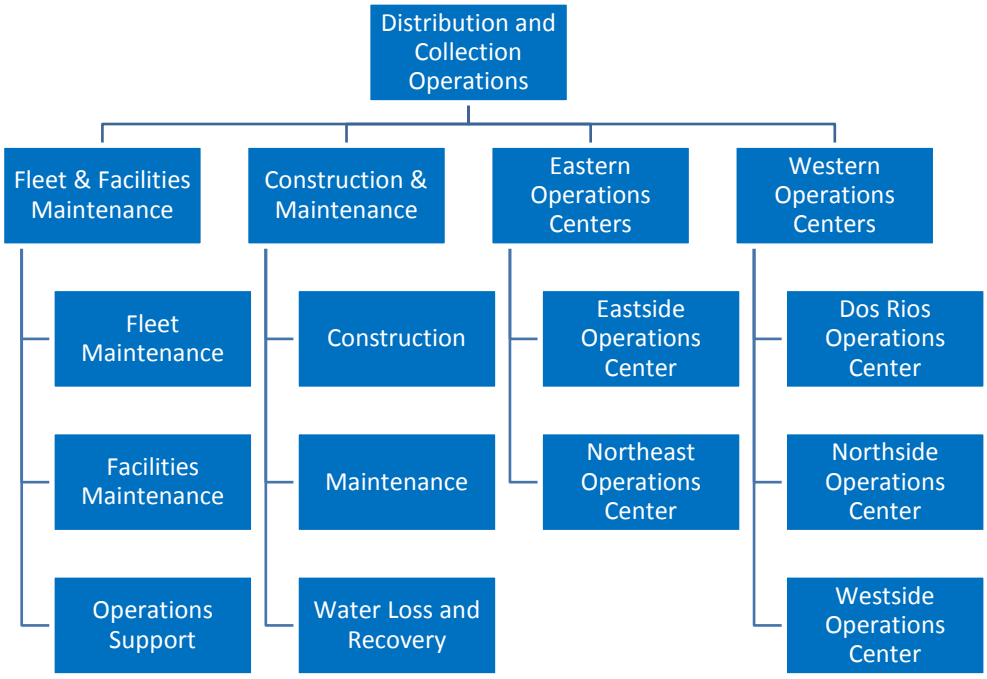
Full-time Equivalent Positions	2014 Budget	2015 Budget	2016 Budget	2017 Budget
Office of Chief Operating Officer	5.0	4.0	4.0	5.0
Environmental Laboratory Services	23.0	21.0	21.0	20.0
Office of Energy Management	3.0	3.0	3.0	3.0
Resource Protection & Compliance Div	80.0	76.0	84.0	93.0
Total Full-Time Equivalent Positions	**111.0**	**104.0**	**112.0**	**121.0**



Distribution and Collection

The Distribution and Collection Operations Group operates, maintains and repairs more than 5,300 miles of sewer mains and nearly 7,000 miles of water mains, and approximately 120 miles of recycled water distribution lines ensuring our customers receive uninterrupted, quality water and associated wastewater services. This is accomplished by the following departments:

- **Fleet & Facilities Maintenance** – Provides comprehensive maintenance services for all SAWS vehicles and equipment. The Fleet Department also manages vehicle replacement and disposal. Facilities Maintenance provides building maintenance and management services at SAWS facilities. Operations Support provides administrative support to departments within the group, including vendor invoice processing, data management, service contract management, materials acquisition and notification services for maintenance crews.
- **Construction & Maintenance** - Conducts in-house construction services, including asphalt and concrete services; preventative maintenance programs including sewer televising and cleaning to ensure the integrity of water and wastewater mains. Oversees a leak detection program to ensure water leaks are proactively identified and repaired; provides fire hydrant maintenance and meter repair services.
- **Eastern & Western Operations Centers** – SAWS Distribution and Collection crews are mobilized from four strategically located service centers throughout the city: Eastside, Northeast, Northside and Westside. SAWS operations centers are staffed with the necessary resources to properly repair and maintain underground water, wastewater, recycled water, and chilled water infrastructure throughout the SAWS service area.



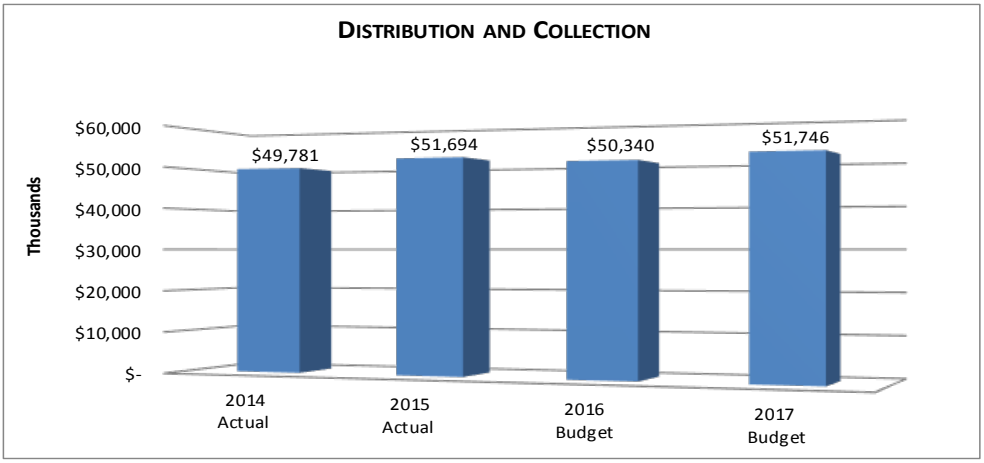
DISTRIBUTION AND COLLECTION

($ in thousands)

Expenditures by Type	2014 Actual	2015 Actual	2016 Budget	2017 Budget
O&M Before Capitalized Cost				
Salaries and Fringe Benefits	$ 33,537	$ 35,154	$ 34,681	$ 35,302
Contractual Services	11,993	13,527	11,305	12,462
Materials and Supplies	11,479	10,235	10,871	10,570
Other Charges	11	12	-	-
O&M Before Capitalized Cost Total	**57,019**	**58,927**	**56,857**	**58,333**
Capitalized Cost	(7,182)	(7,364)	(6,517)	(6,587)
Intercenter Transfers	(57)	131	-	-
Total O&M	**$ 49,781**	**$ 51,694**	**$ 50,340**	**$ 51,746**
Capital Outlay	**$ 5,254**	**$ 3,274**	**$ 5,318**	**$ 6,353**

Expenditures by Department	2014 Actual	2015 Actual	2016 Budget	2017 Budget
Office of the VP - Distribution and Collection	$ 478	$ 512	$ 572	$ 612
Construction and Maintenance	15,026	16,333	15,554	17,524
Distribution and Collection Support Services	835	783	744	443
Eastern Service Centers	12,453	12,343	13,449	12,827
Western Service Centers	11,977	12,847	11,585	11,149
Facilities	6,500	7,321	6,324	7,078
Fleet Management	9,751	8,788	8,629	8,700
O&M Before Capitalized Cost Total	**57,019**	**58,927**	**56,857**	**58,333**
Capitalized Cost	(7,182)	(7,364)	(6,517)	(6,587)
Intercenter Transfers	(57)	131	-	-
Grand Total	**$ 49,781**	**$ 51,694**	**$ 50,340**	**$ 51,746**

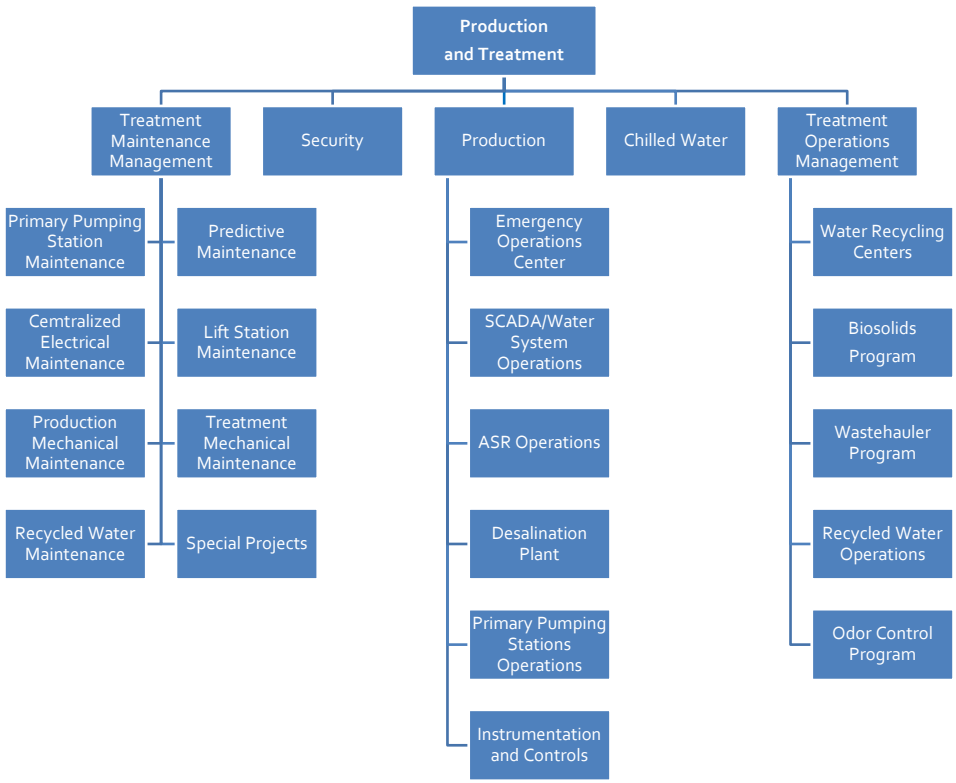
Full-time Equivalent Positions	2014 Budget	2015 Budget	2016 Budget	2017 Budget
Office of the VP - Distribution and Collection	2.0	4.0	4.0	5.0
Construction and Maintenance	191.0	203.0	204.0	206.0
Distribution and Collection Support Services	12.5	12.0	12.0	6.0
Eastern Service Centers	207.0	157.0	154.0	153.0
Western Service Centers	118.0	122.0	141.0	143.0
Facilities	48.0	42.0	41.0	41.0
Fleet Management	51.0	44.0	44.0	43.0
Total Full-Time Equivalent Positions	**629.5**	**584.0**	**600.0**	**597.0**



PRODUCTION AND TREATMENT OPERATIONS AND MAINTENANCE

The Production and Treatment Operations group provides the essential function of managing the 24-hour-a-day operation of the water and wastewater system. The group is responsible for the production and distribution of potable water; the treatment of wastewater for distribution in the recycle system or discharge; the processing of wastewater biosolids for ultimate disposal; the distribution of recycled water for reuse purposes and management of city wide odor control program. This group consists of the following departments:

- **Treatment Maintenance Management** – Manages centralized mechanical and electrical maintenance across all SAWS production, treatment and lift station facilities, and the Aquifer Storage & Recovery (ASR) and desalination plant. The department is also responsible for maintenance of the Recycle Water system outfalls and Special projects construction & repairs across the system.
- **Security** – Manages a proactive security program and associated support contracts for all SAWS facilities.
- **Production** – Manages the production and distribution of potable water across SAWS service area. Oversees contract water deliveries. Operates the Twin Oaks Aquifer Storage & Recovery facility and the desalination plant. Manages centralized instrumentation and maintenance functions for all SAWS services. The Emergency Operations Center manages the 24-hour emergency call center and reports/dispatches crews for water leaks, main breaks and overall tactical response to problems with the system.
- **Chilled Water** - Is responsible for the production of chilled water to provide centralized cooling services to federal, city and private facilities in downtown San Antonio and at Port San Antonio.
- **Treatment Operations Management –** Oversees all operations of the three water recycling centers as well as manages related biosolids to ensure proper recycling or disposal in compliance with state and federal regulations. Manages the Wastehauler program and the odor control program. Operates the recycle water system outfalls and manages environmental flows to the river.



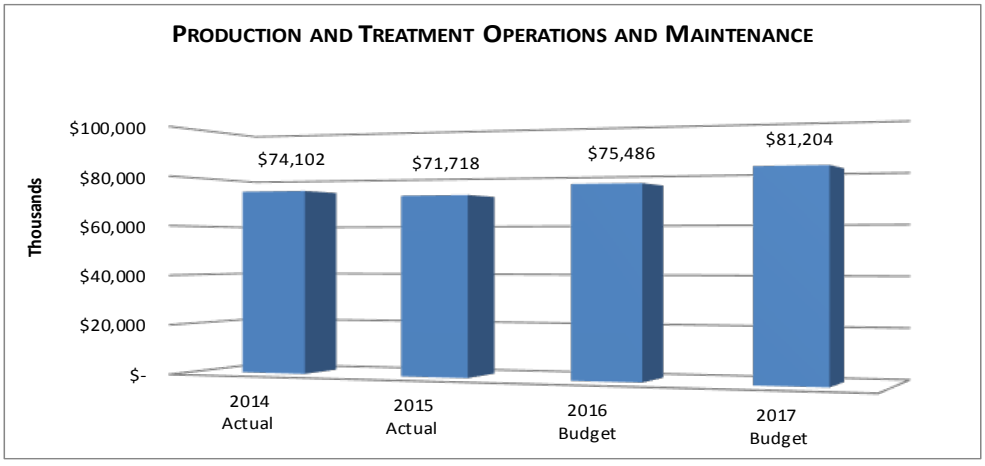
PRODUCTION AND TREATMENT OPERATIONS AND MAINTENANCE

($ in thousands)

Expenditures by Type	2014 Actual	2015 Actual	2016 Budget	2017 Budget
O&M Before Capitalized Cost				
Salaries and Fringe Benefits	$ 22,324	$ 22,280	$ 22,838	$ 23,181
Contractual Services	43,623	40,258	46,098	48,510
Materials and Supplies	9,566	10,578	9,741	11,897
Other Charges	-	-	-	-
O&M Before Capitalized Cost Total	**75,513**	**73,116**	**78,677**	**83,589**
Capitalized Cost	(1,601)	(1,261)	(3,190)	(2,385)
Intercenter Transfers	191	(137)	-	-
Total O&M	**$ 74,102**	**$ 71,718**	**$ 75,486**	**$ 81,204**
Capital Outlay	**$ 2,913**	**$ 1,127**	**$ 968**	**$ 3,109**

Expenditures by Department	2014 Actual	2015 Actual	2016 Budget	2017 Budget
Office of the VP - Production and Treatment	$ 91	$ 102	$ 40	$ 398
Office of Dir. - Production and Treatment Operatic	399	491	539	265
Chilled Water	6,781	6,113	5,447	5,725
Maintenance Management	28,044	31,101	16,292	17,183
Production Department	17,450	11,990	32,808	34,929
Security	2,437	2,575	2,603	3,399
Treatment Operations Management	20,311	20,743	20,946	21,690
O&M Before Capitalized Cost Total	**75,513**	**73,116**	**78,677**	**83,589**
Capitalized Cost	(1,601)	(1,261)	(3,190)	(2,385)
Intercenter Transfers	191	(137)	-	-
Grand Total	**$ 74,102**	**$ 71,718**	**$ 75,486**	**$ 81,204**

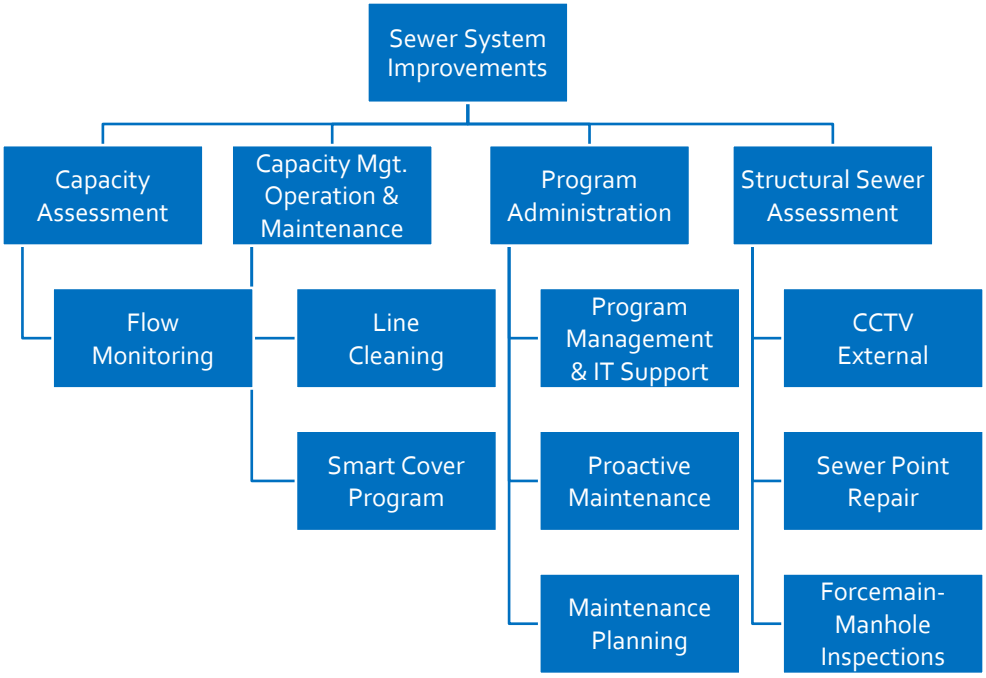
Full-time Equivalent Positions	2014 Budget	2015 Budget	2016 Budget	2017 Budget
Office of the VP - Production and Treatment	-	-	-	2.0
Office of Dir. - Production and Treatment Operatic	4.0	4.0	5.0	2.0
Chilled Water	21.0	12.0	11.0	10.0
Maintenance Management	171.0	159.0	154.0	153.0
Production Department	67.0	65.0	71.0	71.0
Security	9.0	10.1	10.1	10.5
Treatment Operations Management	79.0	78.0	77.0	79.0
Total Full-Time Equivalent Positions	**351.0**	**328.1**	**328.1**	**327.5**



Sewer System Improvements

The Sewer System Improvements Department is responsible for developing, implementing and administering various programs designed to reduce sanitary sewer overflows in the wastewater collection and transmission system (WCTS). This is accomplished through the following functions:

- **Capacity Assessment** – Evaluates the capacity of the WCTS through flow monitoring and a series of hydraulic modeling and investigative steps focused on identifying and prioritizing capacity constraints.
- **Capacity Management Operation & Maintenance (CMOM) –** Executes a comprehensive program encompassing activities to optimize the performance of the WCTS related to SSO reduction, including a system-wide cleaning program and Fats, Oils, and Grease Control Program.
- **Program Administration** – Directs the comprehensive Sewer System Improvement program activities related to SSO reduction. Provides overall data management and reporting pertaining to the operations and maintenance of the WCTS.
- **Structural Sewer Assessment** – Coordinates and executes activities associated with inspecting, assessing and developing remedial measures associated with condition and capacity constraints in the WCTS.



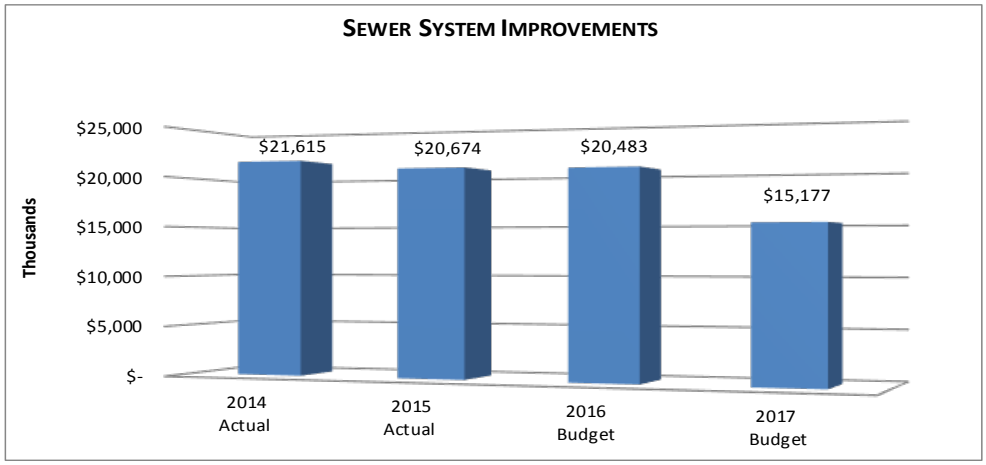
SEWER SYSTEM IMPROVEMENTS

($ in thousands)

Expenditures by Type	2014 Actual	2015 Actual	2016 Budget	2017 Budget
O&M Before Capitalized Cost				
Salaries and Fringe Benefits	$ 2,473	$ 3,029	$ 3,187	$ 3,676
Contractual Services	20,052	20,552	21,884	16,267
Materials and Supplies	487	299	153	179
Other Charges	-	-	-	-
O&M Before Capitalized Cost Total	**23,012**	**23,880**	**25,225**	**20,122**
Capitalized Cost	(1,423)	(3,180)	(4,742)	(4,945)
Intercenter Transfers	26	(26)	-	-
Total O&M	**$ 21,615**	**$ 20,674**	**$ 20,483**	**$ 15,177**
Capital Outlay	**$ 4**	**$ 510**	**$ -**	**$ 54**

Expenditures by Department	2014 Actual	2015 Actual	2016 Budget	2017 Budget
Capacity Assessment	$ 2,218	$ 2,375	$ 2,261	$ 2,100
Capacity Mgt O&M (CMOM)	6,877	6,580	6,877	2,473
Program Administration	6,686	7,458	9,468	9,411
Structural Sewer Assessment	7,232	7,467	6,619	6,138
O&M Before Capitalized Cost Total	**23,012**	**23,880**	**25,225**	**20,122**
Capitalized Cost	(1,423)	(3,180)	(4,742)	(4,945)
Intercenter Transfers	26	(26)	-	-
Grand Total	**$ 21,615**	**$ 20,674**	**$ 20,483**	**$ 15,177**

Full-time Equivalent Positions	2014 Budget	2015 Budget	2016 Budget	2017 Budget
Program Administration	29.0	29.0	35.0	45.0
Structural Sewer Assessment	-	-	4.0	-
Total Full-Time Equivalent Positions	**29.0**	**29.0**	**39.0**	**45.0**

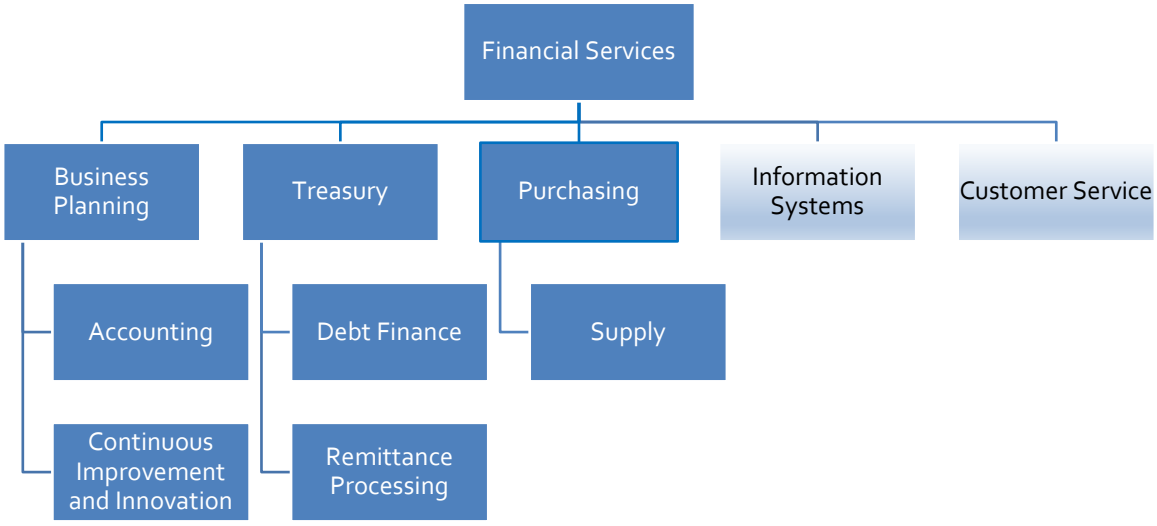


Financial Services

The Financial Services Group is headed by the Sr. Vice President and Chief Financial Officer (CFO) and 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:

- **Business Planning:**
  - Ensures that SAWS' strategic objectives are financially supported through short and long range financial planning, developing and implementing the annual budget and developing rates sufficient to fund SAWS' capital and operating activities.
  - Accounting is responsible for accurate and timely accounting and financial reporting through the general accounting, property accounting, payroll, and accounts payable departments.
  - Continuous Improvement and Innovation conducts business performance reviews and process analysis across the organization to streamline operations, maximize budgetary resources, promote efficiencies, enhance customer service and implement innovative management practices
- **Treasury** – Responsible for banking relationships, investment and debt management, and remittance (customer payment) processing.
- **Purchasing** – Manages the processing and contracting of all procurement requests for materials, supplies and services. Also manages the inventory control function.

The CFO also oversees the Information Systems and Customer Service groups.



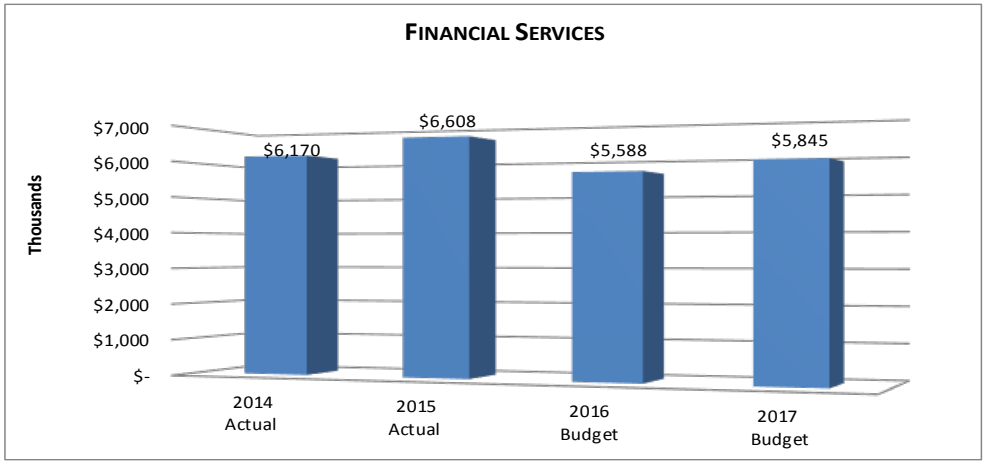
FINANCIAL SERVICES

($ in thousands)

Expenditures by Type	2014 Actual	2015 Actual	2016 Budget	2017 Budget
O&M Before Capitalized Cost				
Salaries and Fringe Benefits	$ 5,263	$ 5,491	$ 5,508	$ 5,825
Contractual Services	796	484	757	727
Materials and Supplies	125	1,012	83	85
Other Charges	1,540	1,043	20	20
O&M Before Capitalized Cost Total	**7,724**	**8,029**	**6,368**	**6,657**
Capitalized Cost	(1,554)	(1,421)	(780)	(812)
Intercenter Transfers				
Total O&M	**$ 6,170**	**$ 6,608**	**$ 5,588**	**$ 5,845**
Capital Outlay	**$ 5**	**$ 2**	**$ -**	**$ -**

Expenditures by Department	2014 Actual	2015 Actual	2016 Budget	2017 Budget
Office of the CFO	$ 370	$ 382	$ 370	$ 385
Accounting	1,853	1,937	1,935	2,065
Business Planning	553	723	685	705
Continuous Improvement and Innovation	436	331	564	692
Purchasing	683	666	681	705
Supply	1,118	2,022	1,122	1,142
Treasury	2,709	1,969	1,012	964
O&M Before Capitalized Cost Total	**7,724**	**8,029**	**6,368**	**6,657**
Capitalized Cost	(1,554)	(1,421)	(780)	(812)
Intercenter Transfers	-	-	-	-
Grand Total	**$ 6,170**	**$ 6,608**	**$ 5,588**	**$ 5,845**

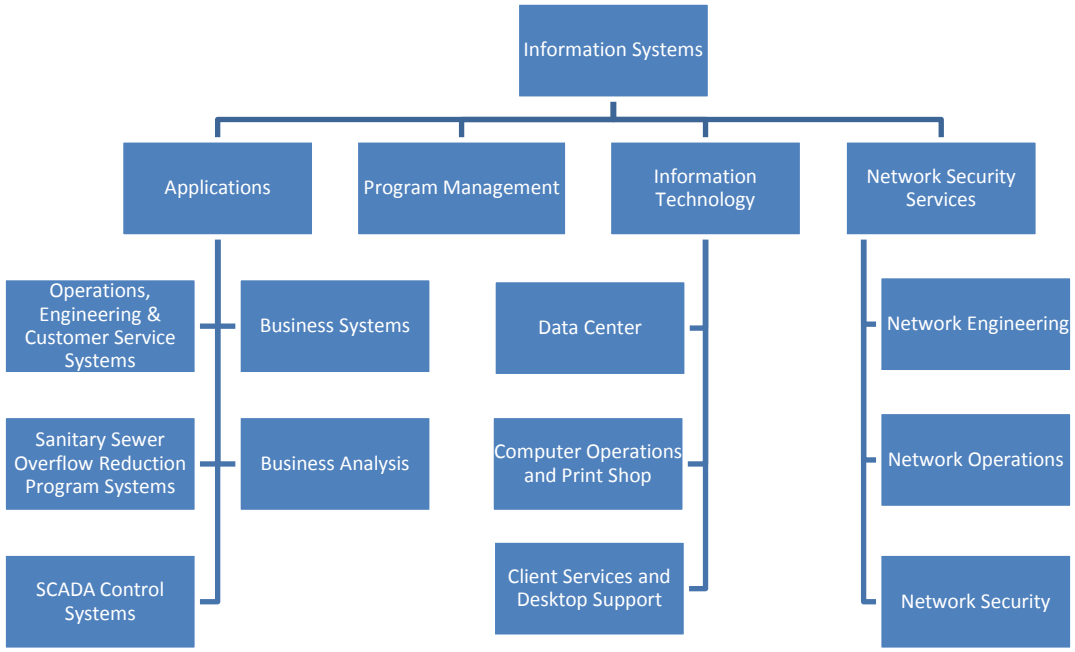
Full-time Equivalent Positions	2014 Budget	2015 Budget	2016 Budget	2017 Budget
Office of the CFO	2.0	2.0	2.0	2.0
Accounting	20.0	21.5	21.5	21.5
Business Planning	6.0	6.0	7.0	7.0
Continuous Improvement and Innovation	3.0	3.0	3.0	4.0
Purchasing	7.0	7.0	7.0	7.0
Supply	17.0	17.0	17.0	17.0
Treasury	14.0	13.0	13.0	11.0
Total Full-Time Equivalent Positions	**69.0**	**69.5**	**70.5**	**69.5**



INFORMATION SYSTEMS

SAWS Information Systems teams deliver quality, cost-effective information technology applications and services, promoting innovation to sustain growth and enable SAWS to better serve the community. Information Systems teams include:

- **Applications** - Supports all functional areas of SAWS and responsible for SAWS software from requirements, analysis and design through programming, configuration, implementation, operations, and related upgrades and sustainability.
- **Program Management –** Supports SAWS' technology initiatives through program administration, project management, business process re-engineering, quality assurance, and organizational change management.
- **Information Technology:**
    - *Data Center* – Responsible for all aspects of systems administration, database administration, systems software and hardware, the storage area network, backup and disaster recovery.
    - *Client Services and Desktop Support* – Supports workstation and related peripheral devices across SAWS, including desktop support services as well as technology and software orders and requisitions.
    - *Computer Operations and Print Shop* – Provides computer operations and bill printing services as well as copy services.
- **Network Security Services:**
    - *Network Engineering* – Provides network and internet services, including all aspects of network architecture and engineering, wired and wireless network infrastructure for SAWS facilities.
    - *Network Operations* – Manages telecommunication services including IP telephony, teleconferencing, call center systems, interactive voice response systems, recording systems, digital radio systems and 911 systems.
    - *Network Security* – Responsible for developing, monitoring, and maintaining cyber security controls to protect the confidentiality, integrity and availability of information systems assets.



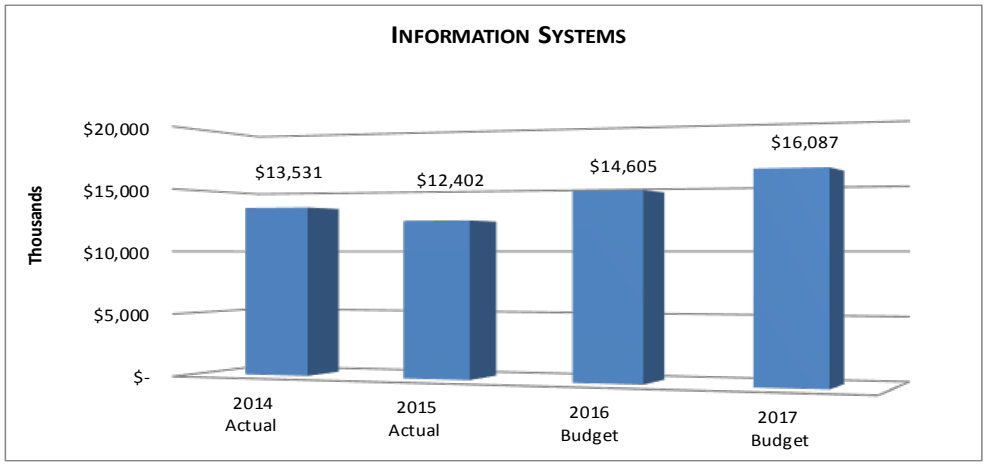
Information Systems

($ in thousands)

Expenditures by Type	2014 Actual	2015 Actual	2016 Budget	2017 Budget
O&M Before Capitalized Cost				
Salaries and Fringe Benefits	$ 7,470	$ 8,082	$ 9,063	$ 9,456
Contractual Services	8,123	7,605	8,480	9,870
Materials and Supplies	468	405	463	568
Other Charges	-	-	-	-
O&M Before Capitalized Cost Total	**16,061**	**16,093**	**18,006**	**19,893**
Capitalized Cost	(2,530)	(3,690)	(3,401)	(3,807)
Intercenter Transfers				
Total O&M	**$ 13,531**	**$ 12,402**	**$ 14,605**	**$ 16,087**
Capital Outlay	**$ 1,379**	**$ 1,999**	**$ 2,953**	**$ 3,903**

Expenditures by Department	2014 Actual	2015 Actual	2016 Budget	2017 Budget
Administration	$ 623	$ 701	$ 688	$ 890
Application Services	4,863	5,110	5,957	7,148
Information Technology	7,212	6,880	7,246	7,363
Program Management	515	568	692	690
Network Security Services	2,848	2,835	3,424	3,802
O&M Before Capitalized Cost Total	**16,061**	**16,093**	**18,006**	**19,893**
Capitalized Cost	(2,530)	(3,690)	(3,401)	(3,807)
Intercenter Transfers	-	-	-	-
Grand Total	**$ 13,531**	**$ 12,402**	**$ 14,605**	**$ 16,087**

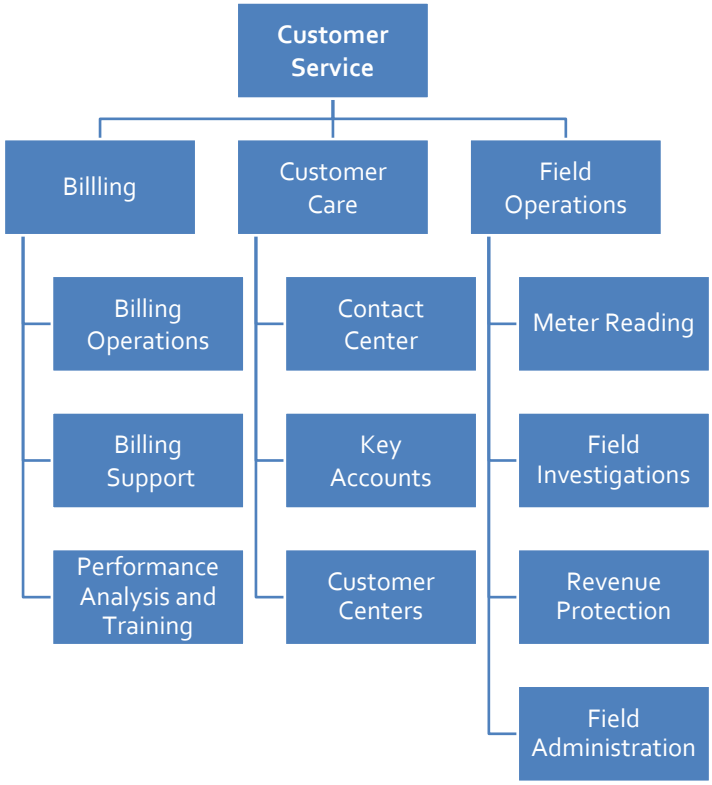
Full-time Equivalent Positions	2014 Budget	2015 Budget	2016 Budget	2017 Budget
Administration	10.0	4.0	3.0	3.0
Application Services	37.0	38.0	41.0	42.0
Information Technology	5.0	5.0	5.0	5.0
Program Management	6.0	7.0	8.0	8.0
Network Security Services	36.0	42.5	45.5	45.5
Total Full-Time Equivalent Positions	**94.0**	**96.5**	**102.5**	**103.5**



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.

- **Billing** – Reviews the billing process for accuracy of all SAWS bills printed daily and resolves customer service billing issues.
- **Customer Care** – Handles all inbound telephone customer inquiries regarding billing, account information, service problems and payments.
    - *Collections* – As a sub-section of the Call Center, this group is responsible for protection and collection of revenue on delinquent accounts
    - *Customer Centers* – Three full service walk-in locations provide friendly, personal interaction with our residential and commercial customers
- **Field Operations** – Responsible for meter reading; service turn-on/turn-off requests; investigations, revenue protection, and collection of delinquent accounts.
- **Performance Analysis and Training –** Responsible for training and process improvements throughout Customer Service



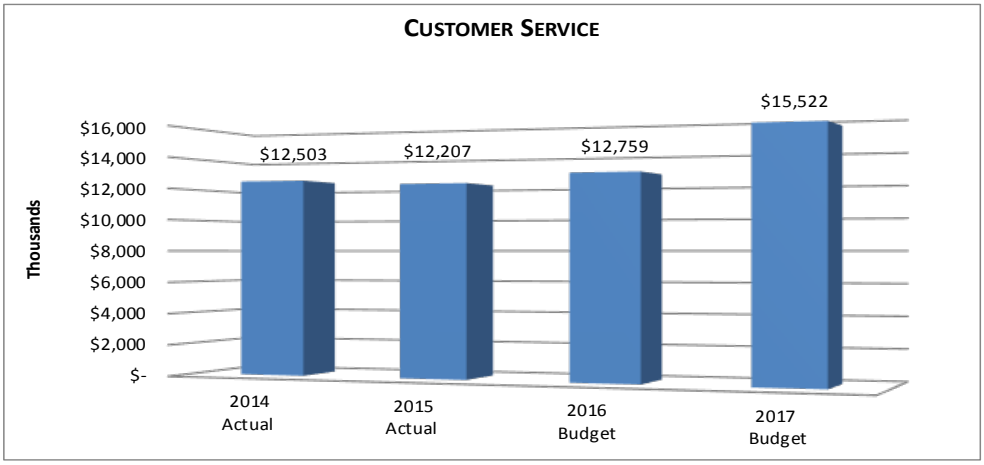
CUSTOMER SERVICE

($ in thousands)

Expenditures by Type	2014 Actual	2015 Actual	2016 Budget	2017 Budget
O&M Before Capitalized Cost				
Salaries and Fringe Benefits	$ 11,069	$ 11,211	$ 11,460	$ 13,244
Contractual Services	1,310	832	1,236	2,247
Materials and Supplies	216	178	205	170
Other Charges	-	(3)	7	11
O&M Before Capitalized Cost Total	**12,595**	**12,217**	**12,908**	**15,671**
Capitalized Cost	(1)	(1)	(149)	(149)
Intercenter Transfers	(91)	(9)	-	-
Total O&M	**$ 12,503**	**$ 12,207**	**$ 12,759**	**$ 15,522**
Capital Outlay	**$ 22**	**$ 6**	**$ -**	**$ -**

Expenditures by Department	2014 Actual	2015 Actual	2016 Budget	2017 Budget
Customer Service Administration	$ 1,317	$ 808	$ 1,120	$ 567
Billing	1,748	1,776	1,680	2,467
Customer Care	3,279	3,369	3,506	4,459
Field Operations	5,904	5,895	6,226	7,329
Performance Analysis and Training	347	369	376	850
O&M Before Capitalized Cost Total	**12,595**	**12,217**	**12,908**	**15,671**
Capitalized Cost	(1)	(1)	(149)	(149)
Intercenter Transfers	(91)	(9)	-	-
Grand Total	**$ 12,503**	**$ 12,207**	**$ 12,759**	**$ 15,522**

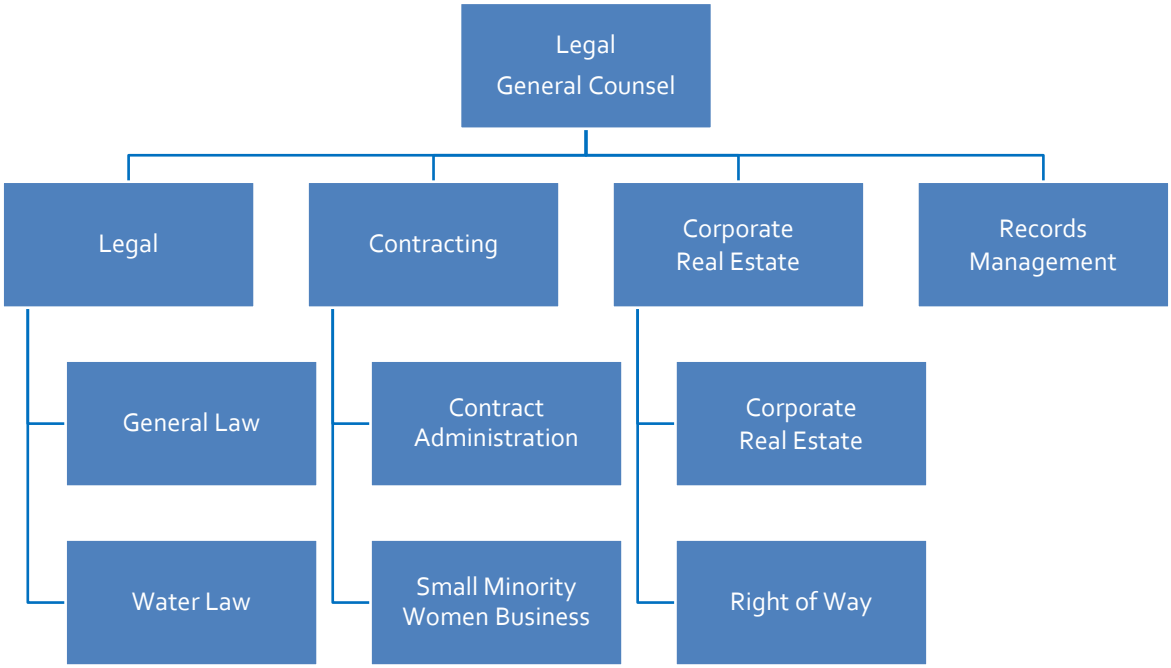
Full-time Equivalent Positions	2014 Budget	2015 Budget	2016 Budget	2017 Budget
Customer Service Administration	6.0	10.0	9.0	2.0
Billing	34.0	31.5	32.0	44.0
Customer Care	66.0	58.0	68.0	83.5
Field Operations	124.0	107.0	113.0	120.0
Performance Analysis and Training	6.0	4.0	5.0	11.0
Total Full-Time Equivalent Positions	**236.0**	**210.5**	**227.0**	**260.5**



LEGAL

The Legal Group is headed by the Vice President and General Counsel. The Group consists of the Legal Services Department, the Contracting Department, the Corporate Real Estate Department, and Records Management Department, whose functions are described below:

- **Legal Services**– Provides full service, in-house legal support to the SAWS' Board of Trustees, Executive Management and staff and manages the activities of outside legal counsel. The range of in-house legal expertise includes water resources, labor and employment, litigation management, real estate, general transactional, environmental, and public law.
- **Contracting** – Manages the administration of all construction and professional services contracts and oversees administration of the SAWS Small, Minority and Women Owned Business Program.
- **Corporate Real Estate** – Responsible for property acquisitions, dispositions and lease management activities, and supports all construction and maintenance activities by obtaining all rights of entry and easements.
- **Records Management --** Manages all utility records in compliance with the Texas Local Government Records Act, Texas Public Information Act and best records management practices.



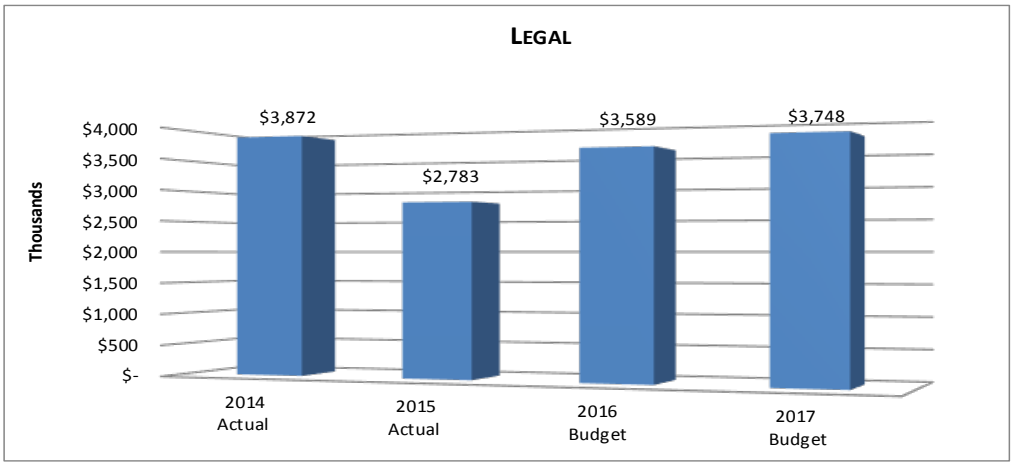
LEGAL

($ in thousands)

Expenditures by Type	2014 Actual	2015 Actual	2016 Budget	2017 Budget
O&M Before Capitalized Cost				
Salaries and Fringe Benefits	$ 4,058	$ 3,937	$ 4,193	$ 4,142
Contractual Services	3,463	1,538	2,222	2,013
Materials and Supplies	16	21	22	25
Other Charges	-	-	-	-
O&M Before Capitalized Cost Total	**7,537**	**5,497**	**6,437**	**6,180**
Capitalized Cost	(3,665)	(2,714)	(2,848)	(2,432)
Intercenter Transfers	-	-	-	-
Total O&M	**$ 3,872**	**$ 2,783**	**$ 3,589**	**$ 3,748**
Capital Outlay	**$ 1**	**$ 2**	**$ -**	**$ -**

Expenditures by Department	2014 Actual	2015 Actual	2016 Budget	2017 Budget
Contracting Department	$ 1,655	$ 1,404	$ 1,693	$ 1,547
Corporate Real Estate Department	925	1,104	729	752
Legal Department	4,956	2,988	4,016	3,881
O&M Before Capitalized Cost Total	**7,537**	**5,497**	**6,437**	**6,180**
Capitalized Cost	(3,665)	(2,714)	(2,848)	(2,432)
Intercenter Transfers	-	-	-	-
Grand Total	**$ 3,872**	**$ 2,783**	**$ 3,589**	**$ 3,748**

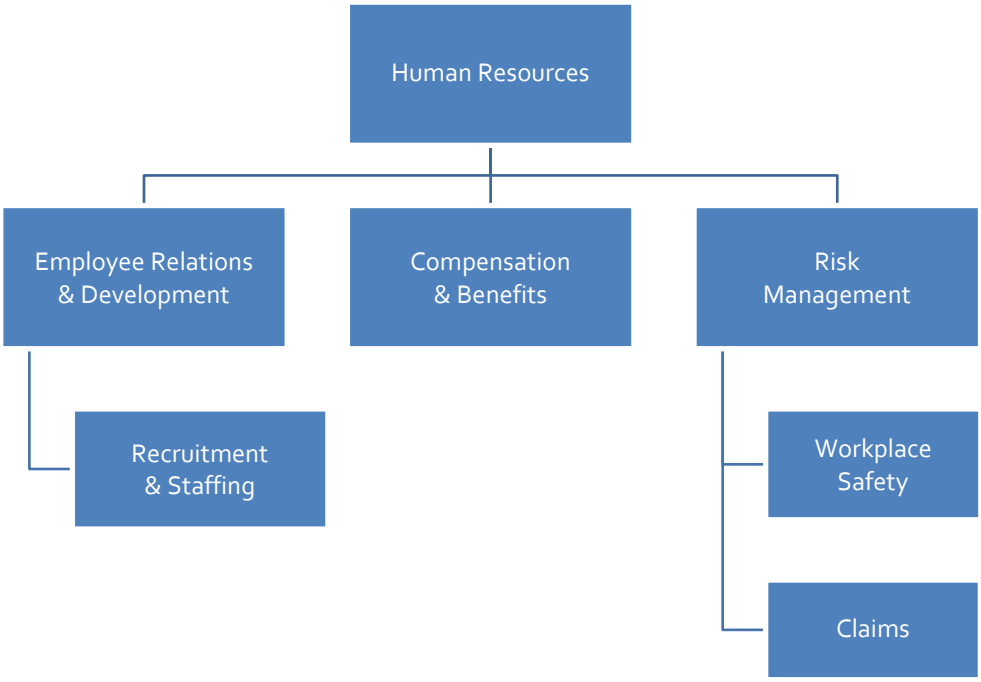
Full-time Equivalent Positions	2014 Budget	2015 Budget	2016 Budget	2017 Budget
Contracting Department	22.0	22.5	19.5	17.0
Corporate Real Estate Department	8.0	8.0	8.0	8.0
Legal Department	13.5	11.5	14.5	14.5
Total Full-Time Equivalent Positions	**43.5**	**42.0**	**42.0**	**39.5**



HUMAN RESOURCES

The Human Resource Group is committed to attracting and retaining a workforce of qualified employees to achieve the goals and mission of SAWS. SAWS' core values of Excellence, Integrity, and Respect are supported by developing and implementing comprehensive, innovative and proactive programs in employee relations and development, total compensation, benefits and wellness, and risk management and workplace safety. The group promotes continuous personal and professional growth for employees, by focusing on the following areas:

- **Employment Relations & Development** – Develops and administers a variety of employee programs including career development, leadership training, orientations, internships and mentoring programs. Provides proactive assistance to employees and supervisors regarding the interpretation and implementation of policies, procedures and directives. Provides direction and oversight for a variety of employment matters, including performance and disciplinary issues, investigations into formal complaints and other workplace concerns. Recruits employee resources required by all administrative and operational areas.
- **Compensation & Benefits** – Develops and manages the employees' compensation, benefit and wellness programs, balancing competitiveness and cost efficiency for these plans and programs. Responsible for the plan development and fiscal accountability of all medical and prescription plans, pension programs, wellness initiatives, and oversees the administration of these plans and programs.
- **Risk Management** – Manages all facets of the comprehensive commercial insurance program including administration of premises risk assessments. Coordinates all workplace safety activities to ensure a safe environment for employees. Administers all workers compensation, casualty and subrogation claims.



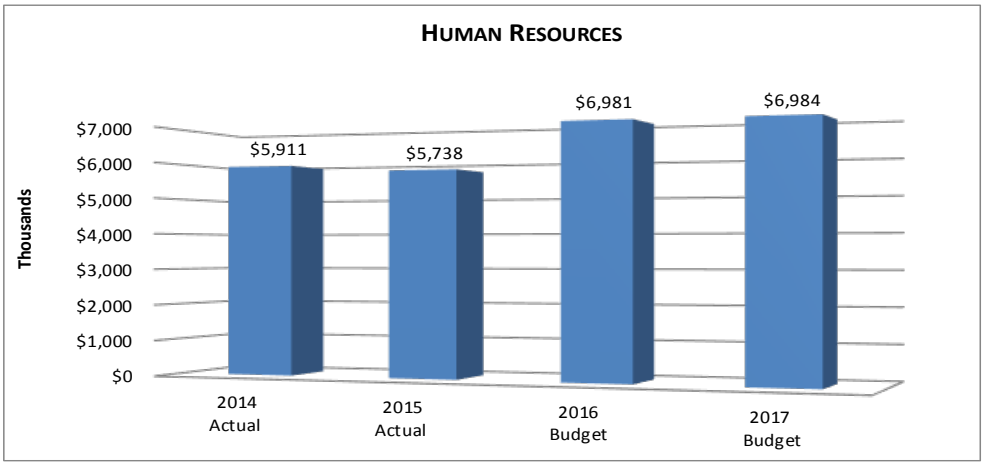
HUMAN RESOURCES

($ in thousands)

Expenditures by Type	2014 Actual	2015 Actual	2016 Budget	2017 Budget
O&M Before Capitalized Cost				
Salaries and Fringe Benefits	$ 3,448	$ 3,571	$ 3,902	$ 3,938
Contractual Services	955	1,283	1,581	1,618
Materials and Supplies	27	62	52	52
Other Charges	1,608	1,017	1,527	1,448
O&M Before Capitalized Cost Total	**6,038**	**5,932**	**7,061**	**7,056**
Capitalized Cost	(127)	(193)	(80)	(71)
Intercenter Transfers	-	(1)	-	-
Total O&M	**$ 5,911**	**$ 5,738**	**$ 6,981**	**$ 6,984**
Capital Outlay	**$ 6**	**$ 21**	**$ -**	**$ -**

Expenditures by Department	2014 Actual	2015 Actual	2016 Budget	2017 Budget
Human Resources Div	$ 2,199	$ 3,362	$ 3,712	$ 3,810
Risk Management	1,690	2,569	3,349	3,245
Claims	551	-	-	-
Corporate Training	529	-	-	-
Office of the VP - Human Resources	442	-	-	-
Safety and Environmental Health	628	-	-	-
O&M Before Capitalized Cost Total	**6,038**	**5,932**	**7,061**	**7,056**
Capitalized Cost	(127)	(193)	(80)	(71)
Intercenter Transfers	-	(1)	-	-
Grand Total	**$ 5,911**	**$ 5,738**	**$ 6,981**	**$ 6,984**

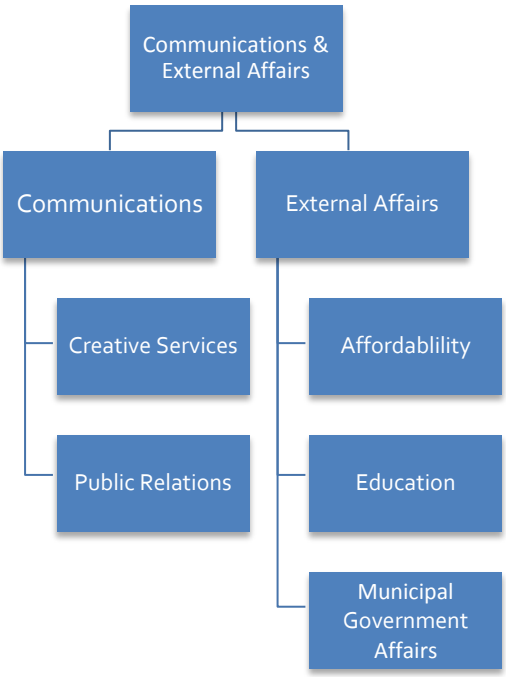
Full-time Equivalent Positions	2014 Budget	2015 Budget	2016 Budget	2017 Budget
Human Resources Div	16.0	27.0	26.0	26.0
Risk Management	1.0	18.0	19.0	18.0
Claims	8.5	-	-	-
Corporate Training	7.0	-	-	-
Office of the VP - Human Resources	4.0	-	-	-
Safety and Environmental Health	13.0	-	-	-
Total Full-Time Equivalent Positions	**49.5**	**45.0**	**45.0**	**44.0**



COMMUNICATIONS AND EXTERNAL AFFAIRS

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

- **Communications –** Manages and directs mass communications efforts through the following departments:
  - *Creative Services* – Develops the creative content for all internal and external communication efforts including newsletters, brochures, website and advertisements.
  - *Public Relations* – Manages news media relations for accuracy and appropriate messaging in news coverage concerning SAWS. Coordinates community events, manages social media content and directs advertising to promote awareness of SAWS programs, projects and image.
- **External Affairs** – Manages outreach efforts with customers, neighborhood and civic leaders, and San Antonio City Council members. Develops and conducts adult and youth educational programs to inform and promote water awareness in our community.



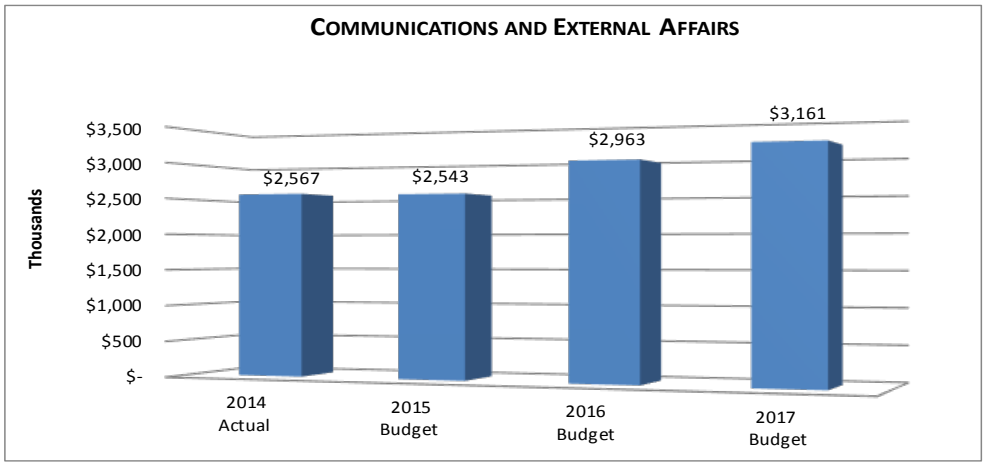
COMMUNICATIONS AND EXTERNAL AFFAIRS

($ in thousands)

Expenditures by Type	2014 Actual	2015 Budget	2016 Budget	2017 Budget
O&M Before Capitalized Cost				
Salaries and Fringe Benefits	$ 1,863	$ 1,844	$ 2,090	$ 1,995
Contractual Services	1,063	983	1,073	1,331
Materials and Supplies	79	118	106	145
Other Charges	-	-	4	4
O&M Before Capitalized Cost Total	**3,004**	**2,945**	**3,272**	**3,475**
Capitalized Cost	(437)	(402)	(310)	(314)
Intercenter Transfers	-	-	-	-
Total O&M	**$ 2,567**	**$ 2,543**	**$ 2,963**	**$ 3,161**
Capital Outlay	**$ 5**	**$ 19**	**$ -**	**$ -**

Expenditures by Department	2014 Actual	2015 Budget	2016 Budget	2017 Budget
Communications Administration	$ 372	$ 398	$ 476	$ 478
Communications	1,293	1,294	1,537	1,657
External Relations	1,340	1,253	1,259	1,340
O&M Before Capitalized Cost Total	**3,004**	**2,945**	**3,272**	**3,475**
Capitalized Cost	(437)	(402)	(310)	(314)
Intercenter Transfers	-	-	-	-
Grand Total	**$ 2,567**	**$ 2,543**	**$ 2,963**	**$ 3,161**

Full-time Equivalent Positions	2014 Budget	2015 Budget	2016 Budget	2017 Budget
Communications Administration	2.5	2.5	4.0	4.0
Communications	12.5	12.5	12.5	10.0
External Relations	13.5	14.0	7.0	8.5
Total Full-Time Equivalent Positions	**28.5**	**29.0**	**23.5**	**22.5**



OTHER REQUIREMENTS

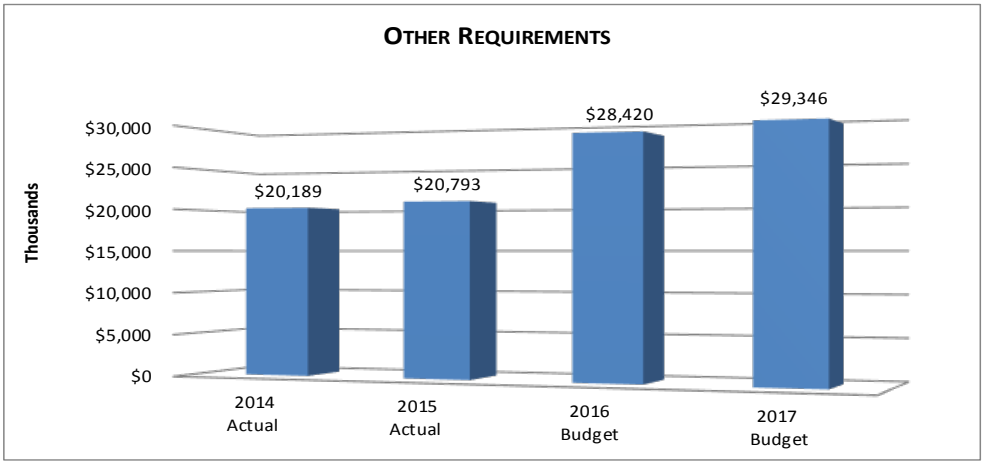
Other Requirements has been established to account for operations and maintenance expenses that relate to the overall organization and are difficult to associate with specific departments. These expenses affect all departments across the organization and are accumulated within this department to facilitate the budgeting and accounting process.

($ in thousands)

Expenditures by Type	2014 Actual	2015 Actual	2016 Budget	2017 Budget
O&M Before Capitalized Cost				
Salaries and Fringe Benefits	$ 12,496	$ 17,279	$ 21,637	$ 21,588
Contractual Services	464	751	1,530	336
Materials and Supplies	-	-	-	-
Other Charges	9,632	5,434	8,753	9,164
O&M Before Capitalized Cost Total	**22,592**	**23,464**	**31,920**	**31,089**
Capitalized Cost	(2,403)	(2,671)	(3,500)	(1,743)
Intercenter Transfers	-	-	-	-
Total O&M	**$ 20,189**	**$ 20,793**	**$ 28,420**	**$ 29,346**
Capital Outlay	**$ -**	**$ -**	**$ -**	**$ -**

Expenditures by Department	2014 Actual	2015 Actual	2016 Budget	2017 Budget
Other Requirements	$ 22,592	$ 23,464	$ 31,920	$ 31,089
O&M Before Capitalized Cost Total	**22,592**	**23,464**	**31,920**	**31,089**
Capitalized Cost	(2,403)	(2,671)	(3,500)	(1,743)
Intercenter Transfers	-	-	-	-
Grand Total	**$ 20,189**	**$ 20,793**	**$ 28,420**	**$ 29,346**

Full-time Equivalent Positions	2014 Budget	2015 Budget	2016 Budget	2017 Budget
Other Requirements	-	6.0	3.0	7.0
Total Full-Time Equivalent Positions	**-**	**6.0**	**3.0**	**7.0**



FULL-TIME EQUIVALENT POSITIONS

The 2017 Budget includes funding for 1,868.9 full-time equivalent (FTE) positions. This represents an increase of 38.9 authorized FTE positions from the 1,830.0 FTE positions budgeted in 2016. The majority of the positions were added to Customer Service to support improved customer service metrics related to call center response and meter reading.

The following table shows the distribution of funded FTE positions within each SAWS organizational unit authorized in each budget year from 2014 through 2016. Periodically, FTE positions and resources are reallocated among different areas of the organization in order to better meet changing needs. In such instances, where possible, prior year authorized FTE position levels have been restated as reflected in the below table in order to be consistent with the current year organizational structure.

FULL-TIME EQUIVALENTS SUMMARY BY GROUP

	2014 Budget	2015 Budget	2016 Budget	2017 Budget
Board of Trustees and Pres/CEO	11.5	10.0	9.0	10.0
Engineering and Construction	190.5	191.5	184.0	182.5
Water Resources and Conservation	45.4	38.4	44.4	39.4
Operations	111.0	104.0	112.0	121.0
Distribution and Collection Operations	629.5	584.0	600.0	597.0
Production and Treatment Operations	351.0	328.1	328.1	327.5
Sewer System Improvements	29.0	29.0	39.0	45.0
Financial Services	69.0	69.5	70.5	69.5
Information Systems	94.0	96.5	102.5	103.5
Customer Service	236.0	210.5	227.0	260.5
Legal	43.5	42.0	42.0	39.5
Human Resources	49.5	45.0	45.0	44.0
Communications and External Affairs	28.5	29.0	23.5	22.5
Other Requirements	-	6.0	3.0	7.0
Total	**1,888.4**	**1,783.5**	**1,830.0**	**1,868.9**

FULL-TIME EQUIVALENTS SUMMARY BY DEPARTMENT

	2014 Budget	2015 Budget	2016 Budget	2017 Budget
Board of Trustees and Pres/CEO Group				
Office of the President-CEO	6.0	5.0	4.0	5.0
Board of Trustees Support	1.0	1.0	1.0	1.0
Internal Audit Dept	4.5	4.0	4.0	4.0
Board of Trustees and Pres/CEO Group Total	**11.5**	**10.0**	**9.0**	**10.0**
Engineering and Construction Group				
Office of the VP - Engineering and Constructio	3.0	3.0	3.0	3.0
Construction	72.0	66.0	57.0	60.0
Development	42.0	41.5	43.0	54.0
Governmental Engineering	21.0	20.0	19.0	
Pipelines	18.0	25.5	22.0	38.0
Plants and Major Projects	34.5	35.5	34.0	23.5
Water Supply Implementaion			5.0	
Vista Ridge Water Supply Project			1.0	4.0
Engineering and Construction Group Total	**190.5**	**191.5**	**184.0**	**182.5**
Water Resources and Governmental Relations				
Office of VP - Water Resources	2.0	2.0	2.0	
Conservation Department	24.4	24.4	24.4	24.4
Governmental Relations			7.0	6.0
Water Resources Department	19.0	12.0	11.0	9.0
Water Resources and Governmental Relatio	**45.4**	**38.4**	**44.4**	**39.4**
Operations Group				
Office of Chief Operating Officer	5.0	4.0	4.0	5.0
Environmental Laboratory Services	23.0	21.0	21.0	20.0
Office of Energy Management	3.0	3.0	3.0	3.0
Resource Protection & Compliance Div	80.0	76.0	84.0	93.0
Operations Group Total	**111.0**	**104.0**	**112.0**	**121.0**
Distribution and Collection Operations Group				
Office of the VP - Distribution and Collection	2.0	4.0	4.0	5.0
Construction and Maintenance	191.0	203.0	204.0	206.0
Distribution and Collection Support Services	12.5	12.0	12.0	6.0
Eastern Service Centers	207.0	157.0	154.0	153.0
Facilities	118.0	122.0	141.0	143.0
Fleet Management	48.0	42.0	41.0	41.0
Western Service Centers	51.0	44.0	44.0	43.0
Distribution and Collection Operations Grou	**629.5**	**584.0**	**600.0**	**597.0**
Production and Treatment Operations and Maintenance				
Office of the VP - Production and Treatment				2.0
Chilled Water	4.0	4.0	5.0	2.0
Maintenance Management	21.0	12.0	11.0	10.0
Office of Dir. - Production and Treatment Opera	171.0	159.0	154.0	153.0
Production Department	67.0	65.0	71.0	71.0
Security	9.0	10.1	10.1	10.5
Treatment Operations Management	79.0	78.0	77.0	79.0
Production and Treatment Operations and M	**351.0**	**328.1**	**328.1**	**327.5**
Sewer System Improvements				
Program Administration	29.0	29.0	35.0	45.0
Structural Sewer Assessment			4.0	
Sewer System Improvements Total	**29.0**	**29.0**	**39.0**	**45.0**

FULL-TIME EQUIVALENTS SUMMARY BY DEPARTMENT *(CONTINUED)*

	2014 Budget	2015 Budget	2016 Budget	2017 Budget
Financial Services Group				
Office of the CFO	2.0	2.0	2.0	2.0
Accounting	20.0	21.5	21.5	21.5
Business Planning	6.0	6.0	7.0	7.0
Continuous Improvement and Innovation	3.0	3.0	3.0	4.0
Purchasing	7.0	7.0	7.0	7.0
Supply	17.0	17.0	17.0	17.0
Treasury	14.0	13.0	13.0	11.0
Financial Services Group Total	**69.0**	**69.5**	**70.5**	**69.5**
Information Systems				
Administration	10.0	4.0	3.0	3.0
Application Services Section	37.0	38.0	41.0	42.0
Control System Programming	5.0	5.0	5.0	5.0
Information Services Programs	6.0	7.0	8.0	8.0
Information Technology	36.0	42.5	45.5	45.5
Information Systems Total	**94.0**	**96.5**	**102.5**	**103.5**
Customer Service				
Customer Service Administration	6.0	10.0	9.0	2.0
Billing	34.0	31.5	32.0	44.0
Customer Care	66.0	58.0	68.0	83.5
Field Operations	124.0	107.0	113.0	120.0
Performance Analysis and Training	6.0	4.0	5.0	11.0
Customer Service Total	**236.0**	**210.5**	**227.0**	**260.5**
Legal Group				
Contracting Department	22.0	22.5	19.5	17.0
Corporate Real Estate Department	8.0	8.0	8.0	8.0
Legal Department	13.5	11.5	14.5	14.5
Legal Group Total	**43.5**	**42.0**	**42.0**	**39.5**
Human Resources Group				
Human Resources Div	16.0	27.0	26.0	26.0
Risk Management	1.0	18.0	19.0	18.0
Claims	8.5			
Corporate Training	7.0			
Office of the VP - Human Resources	4.0			
Safety and Environmental Health	13.0			
Human Resources Group Total	**49.5**	**45.0**	**45.0**	**44.0**
Communications and External Affairs				
Communications Administration	2.5	2.5	4.0	4.0
Communications	12.5	12.5	12.5	10.0
External Relations	13.5	14.0	7.0	8.5
Communications and External Affairs Total	**28.5**	**29.0**	**23.5**	**22.5**
Other Requirements	**-**	**6.0**	**3.0**	**7.0**
Grand Total	**1,888.4**	**1,783.5**	**1,830.0**	**1,868.9**

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Capital Improvement Program

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CAPITAL IMPROVEMENT PROGRAM

The Capital Improvement Program (CIP) is a planning and budgeting tool that provides information about SAWS infrastructure needs. It identifies requirements for sustaining, restoring and modernizing the facilities and infrastructure that support water supply and delivery, wastewater collection and treatment, and chilled water requirements in the SAWS service area. It also prioritizes and schedules projects for funding and execution through a multi-year plan.

The CIP supports four core businesses: Water Supply, Water Delivery, Wastewater and Chilled Water. Water Supply CIP consists of projects to develop long term water supplies from surface and groundwater sources, including any transmission pipelines required to deliver these water supplies to SAWS service area. Water Delivery provides for the expansion, improvement and replacement of infrastructure required to produce and deliver water to the customer while wastewater CIP focuses on infrastructure for the collection and treatment of wastewater. Chilled Water CIP provides for the expansion, improvement and replacement of infrastructure required to generate and deliver chilled water to customers in the downtown and Port San Antonio areas.

The 2017 program totals $367.5 million and is summarized in the table below.

($ in millions)	Water Supply	Water Delivery	Wastewater	Chilled Water	Total
Sources of Funds					
System Revenues	$ 29.3	$ 17.4	$ 37.9	$ -	$ 84.6
Capital Recovery Fees	36.0	18.3	15.0	-	69.3
Debt Proceeds	48.3	39.4	125.9	-	213.6
Total Sources of Funds	**$ 113.6**	**$ 75.1**	**$ 178.8**	**$ -**	**$ 367.5**
Uses of Funds					
Corporate	-	6.2	9.5	-	15.7
Water Resources	113.6				113.6
Collection Facilities			11.2		11.2
Governmental		25.9	20.3		46.2
Mains - New		9.4	1.1		10.5
Main Replacements		11.6	130.3		141.9
Production		22.0			22.0
Treatment			6.4		6.4
Chilled Water				-	-
Total Uses of Funds	**$ 113.6**	**$ 75.1**	**$ 178.8**	**$ -**	**$ 367.5**

The 2017 Water Supply CIP of $113.6 million is primarily related to designing infrastructure improvements and land acquisition necessary to integrate 50,000 acre-feet of new water supplies from the Vista Ridge project into the SAWS distribution system by 2020.

The 2017 Water Delivery CIP totals $75.1 million and includes $22.0 million for the rehabilitation of aging production facilities and production technology improvements. Also included is $25.9million for governmental projects that support street, highway and drainage improvements for the City of San Antonio, Bexar County, and TXDOT, $9.4 million to provide additional capacity in the distribution system including connecting three Joint Base San Antonio installations to SAWS water system, and $11.6 million in projects focused on replacing deteriorating infrastructure in order to reduce water loss.

The 2017 Wastewater CIP totals $178.8 million and includes $141.5 million for projects identified as necessary to reduce SSOs including the replacement or expansion of sewer mains due to condition or capacity deficiencies and the rehabilitation or elimination of lift stations that contribute to SSOs. Also included is $20.3 million for governmental projects and $6.4 million related to certain improvements to SAWS Recycling Centers.

The overall funding split for the 2017 water production and delivery and the wastewater collection and treatment program is 96% repairs and replacements and 4% additional capacity to support new growth and development.

The 2017 program was developed using a refined prioritization process started in 2006. Projects generated by the CIP stakeholder groups from SAWS' Treatment, Production, Master Planning, Facilities Engineering, Operations, and Distribution and Collection departments were reviewed and scored by a CIP Planning Group consisting of submitting vice presidents, directors and managers from SAWS Engineering and Operations groups. The scoring process addressed 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 were totaled by dollar amount and compared to the long term funding strategy. The CIP projects were developed using recent cost estimates, and SAWS overhead and an inflation factor of 2.8% per year were added to develop the programmed costs for 2017 and future years. The 2017 and 5-year CIP project lists were reviewed in detail by an executive CIP review committee. Projects were totaled by dollar amount and compared to the long term funding strategy and final selection was made by SAWS' Executive Management Team. Funding for the entire 2017 CIP is included in the 2017 Operating Budget.

SIGNIFICANT NON-ROUTINE CAPITAL EXPENDITURES

The majority of SAWS' CIP projects provide for routine, ongoing expenditures for major repair or replacement of infrastructure. Projects that are typically "one time" in nature and involve the construction or expansion of new facilities or infrastructure, extensive renovation of existing facilities, or the acquisition of new technology which will enhance service delivery could be considered significant non-routine capital expenditures. The 2017 CIP includes the Vista Ridge Integration Project, which could be considered significant and non-routine, and accounts for $ 111.3 million or 30% of the 2017 CIP.

The Vista Ridge Integration Project – This project represents the design and construction of infrastructure necessary to integrate water to be delivered to San Antonio from the Vista Ridge Water Supply Project into the SAWS water distribution system. The 2017 CIP includes $111.3 million to provide the majority of the funds necessary for the construction phase. Total capital improvements required to integrate the Vista Ridge water are projected to total $143.5 million and must be completed by early 2020.

2017 Capital Improvement Plan Summary

CIP Category / Project Title	Phase	Cost Estimate	Programmed Amount
Water Delivery Core Business			
Corporate			
General Legal Services	Acquisition	$ 55,000	$ 66,717
Northeast Operations Center Project	Acquisition	1,300,000	1,576,952
Owner Controlled Construction Changes - 6.5%	Construction	4,552,012	4,552,012
Corporate Total		**5,907,012**	**6,195,681**
Governmental	Construction	**21,400,000**	**25,959,056**
Mains - New			
16-inch Water Main Along Old Fredericksburg Rd. from Lost Creek Gap to Fahrenthold	Design	100,000	121,304
Joint Base San Antonio Water Mains - Ft. Sam Houston	Construction	1,000,000	1,213,040
Joint Base San Antonio Water Mains - Lackland and Medina	Construction	970,000	1,176,649
Micron to Anderson Water Main Extension Phase 2	Construction	2,200,000	2,668,688
PZ 1082 to PZ 7 Interconnection	Design	20,000	24,261
Water Main along entrance to Encino PS/Hwy. 281 to Encino Tank	Construction	635,000	770,280
Water Main Oversizing	Construction	2,750,000	3,335,860
Whispering Winds Dr. - Mogford to Riptide	Design	45,000	54,587
Mains - New Total		**7,720,000**	**9,364,669**
Mains - Replacement			
Construction Management Services	Construction	150,000	181,956
Open Cut Water Contract	Construction	1,500,000	1,819,560
SAWS Customer Water Meter Replacement	Construction	1,999,357	2,425,300
Valves, Services and Meter Replacements	Construction	5,000,000	6,065,200
Water Main Replacement Work Order Engineering Contract	Design	950,000	1,152,388
Mains - Replacement Total		**9,599,357**	**11,644,404**
Production			
Broadband Access Points & Programmable Logic Controllers Replacement – Phase 2	Design	750,000	909,780
Broadband Backhaul Network Improvements	Construction	1,500,000	1,819,560
Dietrich Storage Tank	Acquisition	243,750	295,679
Micron Additional Well	Construction	2,000,000	2,426,080
Production Facilities Engineering Work Order Contract	Design	500,000	606,520
Replace Loma Linda Tank with Medio EST Tank	Design	320,000	388,173
Turtle Creek No. 3 Well Field, GST, Well Pumps, HSPs	Design	2,000,000	2,426,080
Water Production Facilities Disinfection System Upgrades Phase 2	Design	400,000	485,216
Water Production Facility Upgrades Phase II	Design	250,000	303,260
West View Pump Station Improvements	Design	120,000	145,565
Zarzamora Pump Station Upgrade	Construction	10,028,920	12,165,481
Production Total		**18,112,670**	**21,971,393**
Water Delivery Core Business Total		**62,739,039**	**75,135,203**

2017 CAPITAL IMPROVEMENT PLAN (CONTINUED)

CIP Category / Project Title	Phase	Cost Estimate	Programmed Amount
Wastewater Core Business			
Corporate			
General Legal Services	Acquisition	105,000	123,052
Northeast Operations Center Project	Acquisition	700,000	820,344
Owner Controlled Construction Changes - 6.5%	Construction	8,513,608	8,513,608
Corporate Total		**9,318,608**	**9,457,004**
Collection Facilities			
Lift Stations 225, 251, and 267 Elimination	Construction	4,550,000	5,332,236
Lift Station Rehabilitation Phase 4	Construction	4,000,000	4,687,680
LS 11 and 111 Elimination	Design	1,000,000	1,171,920
Collection Facilities Total		**9,550,000**	**11,191,836**
Governmental	Construction	**17,300,000**	**20,274,216**
Mains - New			
Sewer Main Oversizing	Construction	1,000,000	1,171,920
Mains - New Total		**1,000,000**	**1,171,920**
Mains - Replacement			
C-13 Broadway Corridor: Josephine to South Alamo Package B.2	Construction	6,500,000	7,617,480
C-5: Culebra and Castroville to Laredo and C28: Zarzamora Creek – San Gabriel to NW 23rd Street Phase 2	Construction	5,000,000	5,859,600
Construction Management Services	Construction	1,350,000	1,582,092
E-19 Seguin Road to Nacogdoches Road	Construction	35,100,000	41,134,392
Main Replacements - Sewer - SAWS Crews	Construction	2,800,000	3,281,376
Sewer Laterals	Construction	4,200,000	4,922,064
Small and Large Diameter Condition Remedial Measures	Construction	45,000,000	52,736,400
W-2 Huebner Creek: Eckhert to Bandera (formerly W-06)	Acquisition	200,000	234,384
Wastewater Main Replacement Work Order Engineering Contract	Design	11,000,000	12,891,120
Mains - Replacement Total		**111,150,000**	**130,258,908**
Treatment			
Dos Rios and Leon Creek WRC Tertiary Filter Expansion Project	Design	1,500,000	1,757,880
Dos Rios WRC Electrical System Improvements - Phase 2	Design	2,000,000	2,343,840
Leon Creek WRC RAS Pump Station Replacement	Construction	1,500,000	1,757,880
Treatment Facilities Engineering Work Order Contract	Design	500,000	585,960
Treatment Total		**5,500,000**	**6,445,560**
Wastewater Core Business Total		**153,818,608**	**178,799,444**
Water Supply Core Business			
Water Supply			
General Legal Services	Acquisition	560,000	621,734
Regional Carrizo Emergency Interconnect	Construction	1,184,155	1,314,696
Vista Ridge Integration	Construction	100,283,154	111,338,369
Water Supply Total		**102,027,309**	**113,274,800**
Recycled Water			
Recycled Water Customer Lines	Construction	200,000	257,000
Recycled Water Total		**200,000**	**257,000**
Water Supply Core Business Total		**102,227,309**	**113,531,800**
Grand Total		**$ 318,784,956**	**$ 367,466,446**

CIP Project Data

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Water Delivery

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SAN ANTONIO WATER SYSTEM
2017 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-00155
Project:	General Legal Services - WD - 2017
Programmed Amount:	$66,717
Core Business:	WD - Water Delivery
Category:	Corporate WD
Phase:	Acquisition
Council District:	System Wide

Description and Scope:

Specialized legal support is required for critical projects. The actual expenditures are applied to the specific CIP project.

Justification:

External legal support is sought only when there is insufficient internal legal staff to support the effort, or specialized legal expertise is required.

FAILURE ANALYSIS AND RISK RATINGS

Failure Mode:	**Failure Impact:**	**Failure Root Cause:**	
Corporate Mandate	Regulatory Non-compliance	Conflict with City or State	
Impact Severity:	**Likelihood of Occurrence:**	**Risk Mitigation:**	**Risk Exposure:**
10	10	10	1000

Funding Information:	**Acquisition Year:**	**Design Year:**	**Construction Year:**
Amounts shown are estimated costs without SAWS overhead.	2017	2017	2017
	$55,000	$0	$0

SAN ANTONIO WATER SYSTEM
2017 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-10302
Project:	Northeast Operations Center Project - WD
Programmed Amount:	$1,576,952
Core Business:	WD - Water Delivery
Category:	Corporate WD
Phase:	Acquisition
Council District:	District 10

Description and Scope:

Property acquisition of land for the development of the Northeast Operations Center Project. The Property was selected due to its size and the location being in the far northeast side of Bexar County, Texas. SAWS staff will complete all necessary due diligence, including a Phase 1 Environmental, to determine that the Property is suitable for its use. If purchase is approved by the Board of Trustees, the Property will then be secured and fenced until construction of the Northeast Operations Center is implemented.

Justification:

The Property will provide space for the construction of the proposed North East Operations Center.

FAILURE ANALYSIS AND RISK RATINGS

Failure Mode:	**Failure Impact:**	**Failure Root Cause:**	
Corporate Mandate	Customer Dissatisfaction, Environmental Impact	Age/Deterioration	
Impact Severity:	**Likelihood of Occurrence:**	**Risk Mitigation:**	**Risk Exposure:**
6	7	6	252

Funding Information:	**Acquisition Year:**	**Design Year:**	**Construction Year:**
Amounts shown are estimated costs without SAWS overhead.	2017	2019	2021
	$1,300,0000	$750,0000	$10,500,0000

SAN ANTONIO WATER SYSTEM
2017 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-10469
Project:	Water Delivery 2017 Owner Controlled Construction Changes (OCCC)
Programmed Amount:	$4,552,012
Core Business:	WD - Water Delivery
Category:	Corporate WD
Phase:	Construction
Council District:	System Wide

Description and Scope:

Funds unforeseen changes to projects after construction contracts are awarded

Justification:

Funds for Owner Controlled Construction Changes.

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

Funding Information:	Acquisition Year:	Design Year:	Construction Year:
Amounts shown are estimated costs without SAWS overhead.		2017	2017
	$0	$0	$4,552,012

SAN ANTONIO WATER SYSTEM
2017 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-00128
Project:	Governmental Water - SAWS - 2017
Programmed Amount:	$25,959,056
Core Business:	WD - Water Delivery
Category:	Governmental Water
Phase:	Construction
Council District:	System Wide

Description and Scope:

The governmental program consists of projects implemented in conjunction with other government agencies infrastructure work. The program includes replacement of water mains in poor condition, adjustment of water mains whose existing alignment conflicts with proposed new street alignment, and installation of new water mains needed to provide additional capacity.

SAWS participates in the Utility Coordination Council, and jointly plans and reviews infrastructure improvements with COSA, Bexar County, CPS, TXDOT, AT&T, and other agencies, to maximize effectiveness of public infrastructure.

Justification:

Replacing and/or adjusting aging infrastructure in conjunction with other agencies planned street work is the most cost effective approach to infrastructure management. It minimizes the cost of construction and minimizes the potential of utility failure under a new street.

FAILURE ANALYSIS AND RISK RATINGS

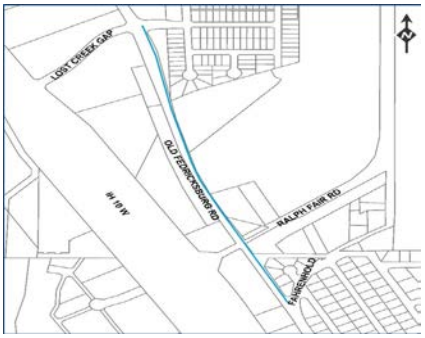
Failure Mode:	Failure Impact:	Failure Root Cause:	
Corporate Mandate	Customer Dissatisfaction	Conflict with City or State	
Impact Severity:	**Likelihood of Occurrence:**	**Risk Mitigation:**	**Risk Exposure:**
9	9	10	810

Funding Information:	Acquisition Year:	Design Year:	Construction Year:
Amounts shown are estimated costs without SAWS overhead.		2017	2017
	$0	$0	$21,400,000

SAN ANTONIO WATER SYSTEM
2017 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-10296
Project:	16-inch water main along Old Fredericksburg Rd. from Lost Creek Gap to Fahrenthold
Programmed Amount:	$121,304
Core Business:	WD - Water Delivery
Category:	Mains New - Water
Phase:	Design
Council District:	OCL



Description and Scope:

Install approximately 3100 feet of 16-inch water main along the east side of IH-10 to fill a gap in the Pressure Zone 10 infrastructure.

Justification:

SAWS experienced several main breaks in 2015 and 2016 that caused over 2000 residential and commercial customers to be cut off from water service. This connection will provide an option for continuing service to this area as well as provide much needed redundancy and additional capacity for water transfer between Pressure Zones 11 and 12.

FAILURE ANALYSIS AND RISK RATINGS

Failure Mode:	Failure Impact:	Failure Root Cause:	
Flow/Pressure Problems	Low Flow/Pressure	Lack of Redundancy	
Impact Severity:	**Likelihood of Occurrence:**	**Risk Mitigation:**	**Risk Exposure:**
9	10	9	810

Funding Information:	Acquisition Year:	Design Year:	Construction Year:
Amounts shown are estimated costs without SAWS overhead.		2017	2018
	$0	$100,000	$850,000

SAN ANTONIO WATER SYSTEM
2017 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-10266
Project:	Joint Base San Antonio Water Mains - Ft. Sam Houston
Programmed Amount:	$1,213,040
Core Business:	WD - Water Delivery
Category:	Mains New - Water
Phase:	Construction
Council District:	District 02, District 10

Description and Scope:

Design and construct approximately 1,900 feet of 16-inch and approximately 1,800 feet of 12-inch water main extensions to four different connections to Fort Sam Houston.

Justification:

SAWS is connecting the bases to the system to provide redundancy and to meet projected future water demands.

FAILURE ANALYSIS AND RISK RATINGS

Failure Mode:	Failure Impact:	Failure Root Cause:
Inadequate Capacity	Customer Dissatisfaction, Failure of Corporate Initiative, Service Interruption	Conflict with City or State, Corporate Mandate

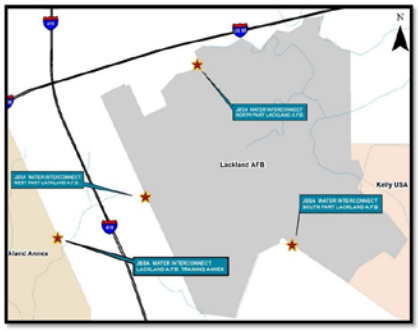
Impact Severity:	Likelihood of Occurrence:	Risk Mitigation:	Risk Exposure:
10	10	10	1000

Funding Information:	Acquisition Year:	Design Year:	Construction Year:
Amounts shown are estimated costs without SAWS overhead.		2016	2017
	$0	$180,810	$1,000,000

SAN ANTONIO WATER SYSTEM
2017 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-10272
Project:	Joint Base San Antonio Water Mains - Lackland and Medina
Programmed Amount:	$1,176,649
Core Business:	WD - Water Delivery
Category:	Mains New - Water
Phase:	Construction
Council District:	District 04



Description and Scope:

Lackland AFB: Install approximately 1600 feet of 12-inch water main from existing SAWS water mains at three points around the base to the property line.

Medina Annex: Install approximately 250 feet of 12-inch water main to the property line from Ray Ellison Blvd.

Justification:

SAWS is connecting the bases to the system to provide redundancy and to meet projected future water demands.

FAILURE ANALYSIS AND RISK RATINGS

Failure Mode:	Failure Impact:	Failure Root Cause:
Corporate Mandate, Service Interruption	Low Flow/Pressure, Service Interruption	System Improvement

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

Funding Information:	Acquisition Year:	Design Year:	Construction Year:
Amounts shown are estimated costs without SAWS overhead.		2016	2017
	$0	$0	$970,000

SAN ANTONIO WATER SYSTEM
2017 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-00126
Project:	Micron 48-inch Water Main Extension to Anderson Tank Phase 2
Programmed Amount:	$2,668,688
Core Business:	WD - Water Delivery
Category:	Mains New - Water
Phase:	Construction
Council District:	District 06

Description and Scope:

Construction was halted on the final section of connecting Micron Pump Station to Anderson Pump Station, because of the identification of a possible endangered species. A short segment (2000 feet) of pipe remains that must be installed to complete this interconnect. Construction is ready to commence in 2017.

Justification:

This project is important to provide needed interconnection between two critical pump stations that support the Northeastern sector of the county (Sea World to IH-10 area).

FAILURE ANALYSIS AND RISK RATINGS

Failure Mode:	Failure Impact:	Failure Root Cause:
Flow/Pressure Problems, Inadequate Capacity	Failure of Corporate Initiative, Low Flow/Pressure	Conflict with City or State, Lack of Redundancy

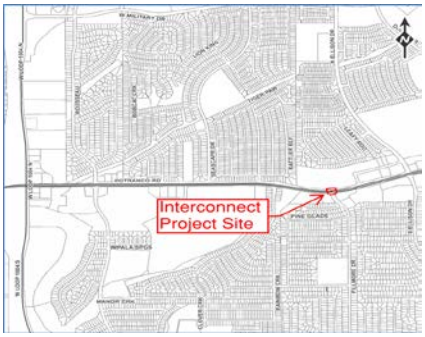
Impact Severity:	Likelihood of Occurrence:	Risk Mitigation:	Risk Exposure:
9	9	9	729

Funding Information:	Acquisition Year:	Design Year:	Construction Year:
Amounts shown are estimated costs without SAWS overhead.		2010	2017
	$0	$28,430	$2,200,000

SAN ANTONIO WATER SYSTEM
2017 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-10297
Project:	PZ 1082 to PZ 7 Interconnection
Programmed Amount:	$24,261
Core Business:	WD - Water Delivery
Category:	Mains New - Water
Phase:	Design
Council District:	District 04



Description and Scope:

SAWS recommends that Pressure Zone 1082 be interconnected with PZ 7, due to the constant running of the booster pumps at the PZ 1082 Tippecanoe facility. This project will install 120 feet of 12-inch main from the existing 12-inch PZ 7 main traversing Potranco Rd connecting to the existing DSP 12-inch main along Fillmore Dr. An 8-inch master PRV and main must be constructed by 2018 in order to retire the Tippecanoe facility.

Justification:

The constant running of the Tippecanoe facility booster pumps is inefficient and increases maintenance and operating costs.

FAILURE ANALYSIS AND RISK RATINGS

Failure Mode:	Failure Impact:	Failure Root Cause:	
Inadequate Capacity	Low Flow/Pressure	Lack of Redundancy	
Impact Severity:	**Likelihood of Occurrence:**	**Risk Mitigation:**	**Risk Exposure:**
7	10	5	350

Funding Information:	Acquisition Year:	Design Year:	Construction Year:
Amounts shown are estimated costs without SAWS overhead.		2017	2018
	$0	$20,000	$180,000

SAN ANTONIO WATER SYSTEM
2017 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-10260
Project:	Water Main Along Entrance to Encino PS/Hwy. 281 to Encino Tank
Programmed Amount:	$770,280
Core Business:	WD - Water Delivery
Category:	Mains New - Water
Phase:	Construction
Council District:	District 09

Description and Scope:

Install approximately 700 feet of 20 to 24-inch water main to supplement and replace the undersized 12-inch water main supplying the Encino Tank from Pressure Zone 7.

Justification:

Increased demands in Pressure Zone 7 require pumps in the zone to be used to maximum capacity. The undersized inlet into Encino Tank restricts flow into the tank and the pumps must be turned off when needed for peak demands.

FAILURE ANALYSIS AND RISK RATINGS

Failure Mode:	Failure Impact:	Failure Root Cause:	
Flow/Pressure Problems	Low Flow/Pressure	Lack of Redundancy	
Impact Severity:	**Likelihood of Occurrence:**	**Risk Mitigation:**	**Risk Exposure:**
8	10	5	400

Funding Information:	Acquisition Year:	Design Year:	Construction Year:
Amounts shown are estimated costs without SAWS overhead.		2016	2017
	$0	$0	$635,000

SAN ANTONIO WATER SYSTEM
2017 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-00102
Project:	Water Main Oversizing 2017- SAWS
Programmed Amount:	$3,335,860
Core Business:	WD - Water Delivery
Category:	Mains New - Water
Phase:	Construction
Council District:	System Wide

Description and Scope:

Funds 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. Developers are required to build necessary offsite infrastructure to meet the needs of their development. When growth is projected in adjacent tracts, SAWS contributes money to increase the size of the mains to serve the additional growth. Sharing in the cost is beneficial to both SAWS and the developer and prevents the construction of parallel smaller sized mains.

Justification:

Participating in oversizing is a cost effective way to meet the needs of growth. It is funded by impact fees collected from new development.

FAILURE ANALYSIS AND RISK RATINGS

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

Impact Severity:	Likelihood of Occurrence:	Risk Mitigation:	Risk Exposure:
5	8	10	400

Funding Information:	Acquisition Year:	Design Year:	Construction Year:
Amounts shown are estimated costs without SAWS overhead.		2017	2017
	$0	$0	$2,750,000

SAN ANTONIO WATER SYSTEM
2017 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-10298
Project:	Whispering Winds Dr. - Mogford to Riptide
Programmed Amount:	$54,587
Core Business:	WD - Water Delivery
Category:	Mains New - Water
Phase:	Design
Council District:	OCL

Description and Scope:

Install approximately 4500 feet of 12-inch water main that will replace an existing 8-inch water main to improve water flow and pressure throughout the Whispering Winds neighborhood.

Justification:

This project is necessary due to numerous main breaks in and around this area caused by undersized water mains and increasing demand. The main breaks have caused several boil water notices in this area.

FAILURE ANALYSIS AND RISK RATINGS

Failure Mode:	Failure Impact:	Failure Root Cause:
Inadequate Capacity, Repeated Line Breaks	Customer Dissatisfaction, Low Flow/Pressure	Lack of Redundancy, Undersized Lines

Impact Severity:	Likelihood of Occurrence:	Risk Mitigation:	Risk Exposure:
9	10	5	450

Funding Information:	Acquisition Year:	Design Year:	Construction Year:
Amounts shown are estimated costs without SAWS overhead.		2017	2018
	$0	$45,000	$450,000

SAN ANTONIO WATER SYSTEM
2017 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-10374
Project:	Construction Management Services 2017 - Water Delivery
Programmed Amount:	$181,956
Core Business:	WD - Water Delivery
Category:	Main Replacement - Water
Phase:	Construction
Council District:	System Wide

Description and Scope:

SAWS requires construction management services to inspect and manage numerous ongoing construction projects to ensure that each project meets SAWS rigorous standards and specifications for health, safety, environmental and regulatory compliance. SAWS also requires inspection of projects to ensure the reliability of the project, testing to be performed in accordance with State requirements and regulations, and to ensure proper water quality requirements for all of our ratepayers for a clean reliable water source. This program will provide the extra construction contractual services to meet the inspection demands.

Justification:

These services will ensure that each project is constructed to standard and does not risk public health, safety, or environmental violations.

FAILURE ANALYSIS AND RISK RATINGS

Failure Mode:	Failure Impact:	Failure Root Cause:	
Unsustainable Process	Customer Dissatisfaction	System Improvement	
Impact Severity:	**Likelihood of Occurrence:**	**Risk Mitigation:**	**Risk Exposure:**
10	10	10	1000

Funding Information:	Acquisition Year:	Design Year:	Construction Year:
Amounts shown are estimated costs without SAWS overhead.		2017	2017
	$0	$0	$150,000

SAN ANTONIO WATER SYSTEM
2017 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-00212
Project:	Open Cut Water Contract - SAWS - 2017
Programmed Amount:	$1,819,560
Core Business:	WD - Water Delivery
Category:	Main Replacement - Water
Phase:	Construction
Council District:	System Wide

Description and Scope:

This annual contract provides for the replacement of water mains that cannot be repaired quickly and economically by SAWS crews.

Justification:

Replacement of mains is necessary to restore and maintain water service in areas of multiple failures.

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:	Acquisition Year:	Design Year:	Construction Year:
Amounts shown are estimated costs without SAWS overhead.		2017	2017
	$0	$0	$1,500,000

SAN ANTONIO WATER SYSTEM
2017 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-00197
Project:	SAWS Customer Water Meter Replacements - 2017
Programmed Amount:	$2,425,300
Core Business:	WD - Water Delivery
Category:	Main Replacement - Water
Phase:	Construction
Council District:	System Wide

Description and Scope:

Replace 15,000 water meters throughout the SAWS service area. Aging meters tend to under-register flow. Replacement of meters is necessary to insure that flow is accurately calculated for billing purposes and to be able to accurately account for water usage. SAWS has over 500,000 meters in the system; replacement of meters is an annual requirement.

Justification:

Replacement of meters will increase billing accuracy, and enable SAWS to better account for water usage and reduce non-revenue water

FAILURE ANALYSIS AND RISK RATINGS

Failure Mode:	Failure Impact:	Failure Root Cause:	
Corporate Mandate	Customer Dissatisfaction	Corporate Mandate	
Impact Severity:	**Likelihood of Occurrence:**	**Risk Mitigation:**	**Risk Exposure:**
8	10	9	720

Funding Information:	Acquisition Year:	Design Year:	Construction Year:
Amounts shown are estimated costs without SAWS overhead.		2017	2017
	$0	$0	$1,999,357

SAN ANTONIO WATER SYSTEM
2017 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-00202
Project:	Valves Services and Meter Replacements - SAWS - 2017
Programmed Amount:	$6,065,200
Core Business:	WD - Water Delivery
Category:	Main Replacement - Water
Phase:	Construction
Council District:	System Wide

Description and Scope:

This project funds the replacement of water mains, valves, hydrants, and meters within the SAWS distribution system. When infrastructure fails, it is evaluated to determine the best repair method. When replacement is necessary, it is evaluated to determine whether replacement by SAWS crews or a contractor would be more effective and efficient.

Justification:

Replacement work is necessary to restore service and is more efficient than repair.

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:
8	10	8	640

Funding Information:	Acquisition Year:	Design Year:	Construction Year:
Amounts shown are estimated costs without SAWS overhead.		2017	2017
	$0	$0	$5,000,000

SAN ANTONIO WATER SYSTEM
2017 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-00192
Project:	Water Main Replacement Work Order Engineering Contract - SAWS - 2017
Programmed Amount:	$1,152,388
Core Business:	WD - Water Delivery
Category:	Main Replacement - Water
Phase:	Design
Council District:	System Wide

Description and Scope:

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

Justification:

Design of mains to be replaced or repaired is necessary to restore and maintain wastewater service.

FAILURE ANALYSIS AND RISK RATINGS

Failure Mode:	**Failure Impact:**	**Failure Root Cause:**
Repeated Line Breaks	Failure of Corporate Initiative	Age/Deterioration

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

Funding Information:	**Acquisition Year:**	**Design Year:**	**Construction Year:**
Amounts shown are estimated costs without SAWS overhead.		2017	2017
	$0	$950,000	$0

SAN ANTONIO WATER SYSTEM
2017 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-10292
Project:	Broadband Access Points and Programmable Logic Controllers Replacement - Phase 2
Programmed Amount:	$909,780
Core Business:	WD - Water Delivery
Category:	Production
Phase:	Design
Council District:	System Wide

Description and Scope:

This project replaces the aging radio communication system used to receive data from the water production and pumping stations with new wireless communication infrastructure to upgrade communication capability and replace obsolete control equipment.

The upgrades will increase efficiency by allowing development of standardized, automated control strategies for stopping and starting pumping equipment based on equipment efficiency, customer demand patterns and energy costs. Additionally, control and monitoring equipment can be programmed from the control center through the broadband system, reducing the labor time involved in driving to the pump station, and the time for a signal to be sent to the pump station will be greatly reduced.

The master plan for upgrade of the Supervisory Control and Data Acquisition (SCADA) system recommends this upgrade. Phase 2 will address the facilities that were deemed medium criticality. Phase 1 is currently addressing the high criticality facilities.

Justification:

Replacing and upgrading the control and communication systems for the pump stations is necessary for continued service and for increased efficiency. Improving technology is needed to be able to manage the expanding system without adding additional staff.

FAILURE ANALYSIS AND RISK RATINGS

Failure Mode:	Failure Impact:	Failure Root Cause:
Unsustainable Equipment, Unsustainable Process	Excessive Downtime	Age/Deterioration, Obsolescence

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

Funding Information:	Acquisition Year:	Design Year:	Construction Year:
Amounts shown are estimated costs without SAWS overhead.		2017	2018
	$0	$750,000	$4,500,000

SAN ANTONIO WATER SYSTEM
2017 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-10293
Project:	Broadband Backhaul Network Improvements
Programmed Amount:	$1,819,560
Core Business:	WD - Water Delivery
Category:	Production
Phase:	Construction
Council District:	System Wide

Description and Scope:

The broadband network improvements project will increase reliability and performance by upgrading backhaul communications, provide expanded coverage by constructing new communications repeater sites, and improve cyber security defenses.

Justification:

Replacing and upgrading the control and communication network systems is necessary for continued service and for increased efficiency. Improved technology is needed to be able to manage the expanding system without adding additional staff.

FAILURE ANALYSIS AND RISK RATINGS

Failure Mode:	**Failure Impact:**	**Failure Root Cause:**	
Inadequate Facilities	Failure of Corporate Initiative	Obsolescence	
Impact Severity:	**Likelihood of Occurrence:**	**Risk Mitigation:**	**Risk Exposure:**
10	8	9	720

Funding Information:	**Acquisition Year:**	**Design Year:**	**Construction Year:**
Amounts shown are estimated costs without SAWS overhead.		2016	2017
	$0	$0	$1,500,000

SAN ANTONIO WATER SYSTEM
2017 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-00297
Project:	Dietrich Storage Tank
Programmed Amount:	$295,679
Core Business:	WD - Water Delivery
Category:	Production
Phase:	Acquisition
Council District:	District 05

Description and Scope:

SAWS needs to acquire land for a master planned project that is required to provide 2.5 million gallons of elevated storage for Pressure Zone (PZ) 3 to meet TCEQ capacity requirements for future growth projected in this area.

This project connects SAWS PZ 3 to DSP PZ 828 via one-quarter mile of 12-inch main along Patton Blvd, connecting to two existing 12-inch water mains in DSP PZ 828.

Justification:

DSP PZ 828 and SAWS PZ 3 are adjacent to each other and share multiple surface streets. Based on the number of connections anticipated by 2017, DSP PZ 828 will need additional pump capacity that can be transferred, through this interconnect, from SAWS PZ 3.

FAILURE ANALYSIS AND RISK RATINGS

Failure Mode:	Failure Impact:	Failure Root Cause:	
Regulatory Compliance	Low Flow/Pressure	Lack of Redundancy	
Impact Severity:	**Likelihood of Occurrence:**	**Risk Mitigation:**	**Risk Exposure:**
8	7	7	392

Funding Information:	Acquisition Year:	Design Year:	Construction Year:
Amounts shown are estimated costs without SAWS overhead.	2017	2018	2020
	$243,750	$487,500	$4,875,000

SAN ANTONIO WATER SYSTEM
2017 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-10284
Project:	Micron - Additional Wells
Programmed Amount:	$2,426,080
Core Business:	WD - Water Delivery
Category:	Production
Phase:	Construction
Council District:	District 06

Description and Scope:

SAWS has been working to address numerous operational issues at the Anderson Pump Station located at State Highway 151 and Loop 1604 in the rapidly growing far west area of the city. During the peak summer demand period, it was determined that additional supplies will be needed to back up this pump station and meet customer demands. This project will consist of designing and installing one groundwater well, well pump, well head structures, electrical service, road/access structures, and connect piping to the existing system.

Justification:

The Micron Pump Station was initially planned to provide up to seven groundwater wells. SAWS will install one well to supplement peak demands at this time.

FAILURE ANALYSIS AND RISK RATINGS

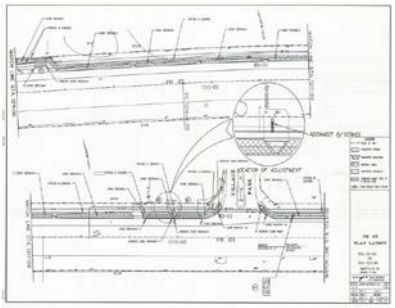
Failure Mode:	Failure Impact:	Failure Root Cause:	
Inadequate Facilities	Low Flow/Pressure	System Improvement	
Impact Severity:	**Likelihood of Occurrence:**	**Risk Mitigation:**	**Risk Exposure:**
9	9	9	729

Funding Information:	Acquisition Year:	Design Year:	Construction Year:
Amounts shown are estimated costs without SAWS overhead.		2016	2017
	$0	$300,000	$2,000,000

SAN ANTONIO WATER SYSTEM
2017 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-10375
Project:	Production Facilities Engineering Work Order Contract 2017
Programmed Amount:	$606,520
Core Business:	WD - Water Delivery
Category:	Production
Phase:	Design
Council District:	System Wide



Description and Scope:

The San Antonio Water System periodically has need for general types of projects that entail evaluation, rehabilitation, improvement upgrades, addition/demolition, replacement/expansion of equipment and facilities. These include:
-water production primary and secondary pump station facilities
-elevated storage tank and ground storage tank sites
-transmission mains (20-inch diameter and larger)
-valve & control valve replacement, yard piping, electrical upgrades, SCADA, programming
-other related projects of similar nature as above
The scope of work may include, but is not limited to, geotechnical and field survey, potholing and subsurface utility investigation, right of way services, permit application assistance, public meetings/hearings attendance, coordination with other utilities, agencies and consultants, civil, structural, mechanical, electrical and environmental services related to potable water facilities, preliminary engineering evaluation and recommendations, preparation of design plans, specifications, cost estimates, and bid documents, assistance during construction by reviewing contractor submittals and shop drawings, preparation of pay estimates, participating in equipment performance testing, final inspection and project completion and other construction phase services.

Justification:

This Work Order Contract will be on an “as-needed” basis, and the scope of the services will depend on the nature of each individual project. A work order will be issued upon identification of a project and determination of its scope and schedule.

FAILURE ANALYSIS AND RISK RATINGS

Failure Mode:	**Failure Impact:**	**Failure Root Cause:**	
Inadequate Facilities	Customer Dissatisfaction	System Improvement	
Impact Severity:	**Likelihood of Occurrence:**	**Risk Mitigation:**	**Risk Exposure:**
8	8	8	512

Funding Information:	**Acquisition Year:**	**Design Year:**	**Construction Year:**
Amounts shown are estimated costs without SAWS overhead.		2017	2018
	$0	$500,000	$0

SAN ANTONIO WATER SYSTEM
2017 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-00224
Project:	Replace Loma Linda Tank with Medio Elevated Storage Tank
Programmed Amount:	$388,173
Core Business:	WD - Water Delivery
Category:	Production
Phase:	Design
Council District:	District 01, District 06

Description and Scope:

SAWS plans to retire the 1.0 million gallon (MG) Loma Linda tank, which currently has an overflow elevation that is 20 ft below the static gradient in the zone. This would increase the elevated storage deficit to 1.34 MG by 2027. The location of the new 1.5 MG tank will change to the Medio Creek site, but the capacity will be the same. The project will include a 1.5 mile 24-inch water main.

A consultant is under contract to design the tank.

Justification:

The new tank is needed to avoid a water storage deficit and TCEQ enforcement action.

FAILURE ANALYSIS AND RISK RATINGS

Failure Mode:	Failure Impact:	Failure Root Cause:	
Flow/Pressure Problems	Customer Dissatisfaction	Age/Deterioration	
Impact Severity:	**Likelihood of Occurrence:**	**Risk Mitigation:**	**Risk Exposure:**
9	8	8	576

Funding Information:	Acquisition Year:	Design Year:	Construction Year:
Amounts shown are estimated costs without SAWS overhead.		2017	2018
	$0	$320,000	$3,200,000

SAN ANTONIO WATER SYSTEM
2017 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-00080
Project:	Turtle Creek No 3 Well Field and Pumps Ground Storage Tank High Service Pumps
Programmed Amount:	$2,426,080
Core Business:	WD - Water Delivery
Category:	Production
Phase:	Design
Council District:	District 08

Description and Scope:

This project will design the well field of the future Turtle Creek #3 primary pump station, with construction funding for the well field to be included in the 2018 CIP. This pump station provides water to the densely populated Medical Center area. This will be the first of three consecutive projects, in the 2008 Water Infrastructure Plan, to construct a new 20 million gallon/day Pressure Zone 8 primary pump station. This primary station will replace the existing secondary pump station consisting of only one well. The station will be located at the same site as the existing Turtle Creek #3 pump station, where additional land has been acquired by SAWS.

Justification:

This station provides service to the Medical Center area. This critical area is currently served by Turtle Creek #2 (one of two wells remaining); Dreamhill (one well out of service for over a year); and the existing Turtle Creek #3 (one well). The failure of any, or a combination, of these three wells would seriously affect SAWS' ability to maintain reliable water service to the Medical Center area.

FAILURE ANALYSIS AND RISK RATINGS

Failure Mode:	Failure Impact:	Failure Root Cause:	
Inadequate Capacity	Low Flow/Pressure	Lack of Redundancy	
Impact Severity:	**Likelihood of Occurrence:**	**Risk Mitigation:**	**Risk Exposure:**
9	9	9	729

Funding Information:	Acquisition Year:	Design Year:	Construction Year:
Amounts shown are estimated costs without SAWS overhead.	2011	2017	2018
	$1,162,535	$2,000,000	$11,701,000

SAN ANTONIO WATER SYSTEM
2017 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-00229
Project:	Water Production Facilities Disinfection System Upgrades Phase 2
Programmed Amount:	$485,216
Core Business:	WD - Water Delivery
Category:	Production
Phase:	Design
Council District:	District 02

Description and Scope:

Replace chlorine gas containers with on-site sodium hypochlorite generation as a disinfectant for potable water. Sodium hypochlorite is a non-hazardous chemical. The three pump stations in are the Artesia, Randolph, and Seale pump stations. Design will start in 2017, and they will be upgraded in that order over four years beginning in 2018.

This is Phase 2 of a two phase project. Phase 1 construction was in 2014. The total cost of the project is $14.6 million.

Justification:

The project will be done to remove the risk of an accidental release of chlorine gas in populated areas adjacent to primary pump stations.

FAILURE ANALYSIS AND RISK RATINGS

Failure Mode:	Failure Impact:	Failure Root Cause:
Chlorine Release, HAZMAT Spill	Environmental Impact, Jeopardize Life/Safety	Age/Deterioration, Chemical/Deterioration

Impact Severity:	Likelihood of Occurrence:	Risk Mitigation:	Risk Exposure:
9	7	8	504

Funding Information:	Acquisition Year:	Design Year:	Construction Year:
Amounts shown are estimated costs without SAWS overhead.		2017	2018
	$0	$400,000	$3,750,000

SAN ANTONIO WATER SYSTEM
2017 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-00412
Project:	Water Production Facility Upgrades Phase II
Programmed Amount:	$303,260
Core Business:	WD - Water Delivery
Category:	Production
Phase:	Design
Council District:	District 05, OCL

Description and Scope:

This project will upgrade electrical services, pump starters, panels, replacement of all electrical switchgear, and replacement of miscellaneous valves and piping. The facilities include the Montgomery, Gibbs-Sprawl, Querida, and West Avenue pump stations.

Justification:

The project is needed to improve the reliability of these critical production facilities.

FAILURE ANALYSIS AND RISK RATINGS

Failure Mode:	Failure Impact:	Failure Root Cause:	
Equipment Failure, Inadequate Facilities	Enforcement Action, Increased Maintenance	Age/Deterioration, Critical Equipment Failure, Failed System Component	
Impact Severity:	**Likelihood of Occurrence:**	**Risk Mitigation:**	**Risk Exposure:**
8	8	8	512

Funding Information:	Acquisition Year:	Design Year:	Construction Year:
Amounts shown are estimated costs without SAWS overhead.		2017	2019
	$0	$250,000	$2,500,000

SAN ANTONIO WATER SYSTEM
2017 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-10295
Project:	West View Pump Station Improvements
Programmed Amount:	$145,565
Core Business:	WD - Water Delivery
Category:	Production
Phase:	Design
Council District:	OCL

Description and Scope:

Design new electrical equipment, wiring, yard piping, a new 1.5 MGD well, SCADA, security, lighting, and a new driveway.

Justification:

The West View production facility is in poor condition, has limited capacity, and requires constant monitoring by maintenance personnel. Its remote location results in inefficient maintenance activities. The estimate to connect to SAWS system and take the facility offline is approximately $6.5 million.

FAILURE ANALYSIS AND RISK RATINGS

Failure Mode:	Failure Impact:	Failure Root Cause:
Flow/Pressure Problems, Inadequate Capacity, Inadequate Facilities	Enforcement Action	Age/Deterioration

Impact Severity:	Likelihood of Occurrence:	Risk Mitigation:	Risk Exposure:
8	8	7	448

Funding Information:	Acquisition Year:	Design Year:	Construction Year:
Amounts shown are estimated costs without SAWS overhead.		2017	2019
	$0	$120,000	$1,200,000

SAN ANTONIO WATER SYSTEM
2017 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-00099
Project:	Zarzamora Pump Station Upgrade
Programmed Amount:	$12,165,481
Core Business:	WD - Water Delivery
Category:	Production
Phase:	Construction
Council District:	District 05

Description and Scope:

The Zarzamora Pump Station is a primary pump station which includes wells, tank, pumps, and a disinfection system. This is the main source of water to pressure zone 790 which covers a very densely populated neighborhood in the Southside area from Quintana Rd. in the west to Roosevelt Rd. in the east. This pump station runs continuously in order to keep up with water demands and SAWS crews have to deliver chlorine cylinders often since the chlorine gas disinfection system is undersized. The project consists of the replacement of existing electrical systems and installing a new sodium hypochlorite disinfection system. This pump station is located near Somerset Road and W. Southcross Blvd. The project will also rehabilitate aging, obsolete and unserviceable equipment and components including the replacement of belowground piping and valves. The complete replacement of electrical switchgear and SCADA systems will be part of the scope of work.

Justification:

The existing outdated equipment is unreliable. The existing disinfection system requires the use of chlorine gas, is currently undersized and is located in a densely populated area creating a potential health hazard in the event of a chlorine leak.

FAILURE ANALYSIS AND RISK RATINGS

Failure Mode:	Failure Impact:	Failure Root Cause:	
Inadequate Facilities	Enforcement Action, Excessive Downtime	Age/Deterioration	
Impact Severity:	**Likelihood of Occurrence:**	**Risk Mitigation:**	**Risk Exposure:**
8	8	8	512

Funding Information:	Acquisition Year:	Design Year:	Construction Year:
Amounts shown are estimated costs without SAWS overhead.		2015	2017
	$0	$0	$10,028,920

Wastewater

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SAN ANTONIO WATER SYSTEM
2017 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-00157
Project:	General Legal Services - WW -2017
Programmed Amount:	$123,052
Core Business:	WW - Wastewater
Category:	Corporate WW
Phase:	Acquisition
Council District:	System Wide

Description and Scope:

Specialized legal support is required for critical projects. The actual expenditures are applied to the specific CIP project.

Justification:

External legal support is sought only when there is insufficient internal legal staff to support the effort, or specialized legal expertise is required.

FAILURE ANALYSIS AND RISK RATINGS

Failure Mode:	Failure Impact:	Failure Root Cause:	
Corporate Mandate	Regulatory Non-compliance	Conflict with City or State	
Impact Severity:	**Likelihood of Occurrence:**	**Risk Mitigation:**	**Risk Exposure:**
10	10	10	1000

Funding Information:	Acquisition Year:	Design Year:	Construction Year:
Amounts shown are estimated costs without SAWS overhead.	2017	2017	2017
	$105,000	$0	$0

SAN ANTONIO WATER SYSTEM
2017 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-10303
Project:	Northeast Operations Center Project - WW
Programmed Amount:	$820,344
Core Business:	WW - Wastewater
Category:	Corporate WW
Phase:	Acquisition
Council District:	District 10

Description and Scope:

Property acquisition of land for the development of the Northeast Operations Center Project. The Property was selected due to its size and the location being in the far northeast side of Bexar County, Texas. SAWS staff will complete all necessary due diligence, including a Phase 1 Environmental, to determine that the Property is suitable for its use. If purchase is approved by the Board of Trustees, the Property will then be secured and fenced until construction of the Northeast Operations Center is implemented.

Justification:

The Property will provide space for the construction of the proposed North East Operations Center.

FAILURE ANALYSIS AND RISK RATINGS

Failure Mode:	**Failure Impact:**	**Failure Root Cause:**	
Corporate Mandate	Customer Dissatisfaction, Environmental Impact	Age/Deterioration	
Impact Severity:	**Likelihood of Occurrence:**	**Risk Mitigation:**	**Risk Exposure:**
6	7	6	252

Funding Information:	**Acquisition Year:**	**Design Year:**	**Construction Year:**
Amounts shown are estimated costs without SAWS overhead.	2017	2019	2021
	$700,000	$750,000	$10,500,000

SAN ANTONIO WATER SYSTEM
2017 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-10470
Project:	Wastewater 2017 Owner Controlled Construction Changes (OCCC)
Programmed Amount:	$8,513,608
Core Business:	WW - Wastewater
Category:	Corporate WW
Phase:	Construction
Council District:	System Wide

Description and Scope:

Funds unforeseen changes to projects after construction contracts are awarded.

Justification:

Funds for Owner Controlled Construction Changes.

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

Funding Information:	Acquisition Year:	Design Year:	Construction Year:
Amounts shown are estimated costs without SAWS overhead.		2017	2017
	$0	$0	$8,513,608

SAN ANTONIO WATER SYSTEM
2017 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-00283
Project:	Lift Stations 225, 251, and 267 Elimination
Programmed Amount:	$5,332,236
Core Business:	WW - Wastewater
Category:	Collection Facilities
Phase:	Construction
Council District:	District 04

Description and Scope:

This project will construct approximately 2.2 miles of 18-inch, 21-inch, and 24-inch gravity sewer main from Lift Station (LS) #251 (Solana Ridge) to an existing 24-inch stub out that flows to the Southwest Bexar Sewer Pipeline. Approximately 0.2 miles of 8-inch gravity sewer main from LS #267 (Carmona Hills) and 0.5 miles of 8-inch gravity sewer main from LS #225 (Valley Ridge) will also be constructed and connected to this main.

Justification:

This project is important because it will eliminate the potential for sanitary sewer overflows due to lift station failure, and will reduce operational and maintenance costs associated with upkeep of the facilities.

FAILURE ANALYSIS AND RISK RATINGS

Failure Mode:	Failure Impact:	Failure Root Cause:
HAZMAT Spill	Enforcement Action	Conflict with City or State, Corporate Mandate

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

Funding Information:	Acquisition Year:	Design Year:	Construction Year:
Amounts shown are estimated costs without SAWS overhead.		2015	2017
	$0	$0	$4,550,000

SAN ANTONIO WATER SYSTEM
2017 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-00049
Project:	Lift Stations Rehabilitation - Phase 4
Programmed Amount:	$4,687,680
Core Business:	WW - Wastewater
Category:	Collection Facilities
Phase:	Construction
Council District:	District 02, District 05

Description and Scope:

Rehabilitate six existing lift stations that are located in the Central, East, and Far West sewersheds. The lift stations are Comanche Park #1 (#166), Comanche Park #2 (#167), Concord (#137), Hwy 90 W (#201), Near West (#187), and San Marcos (#026). The project will include safety and security upgrades, protection of three of the lift stations on the 100-year flood plain, and evaluation and rehabilitation of wet wells, pump replacement, and electrical panel upgrades. All of the lift stations will be connected to the remote Supervisory Control and Data Acquisition System (SCADA) monitoring system. Wet well storage capacity will be provided for TCEQ regulatory compliance as well as adequate response time in the event of an emergency. The pumping, wet well, and force main capacity will be increased if it is found that the current capacities are inadequate. The EPA Consent Decree requires that these lift stations be rehabilitated by 2018. Construction will start in 2017.

Phase 5 (2018) of the lift station rehabilitation program will address lift stations that are located at Port San Antonio and Lackland AFB

Justification:

These lift stations were installed 20 to 50 years ago. The typical life expectancy of pumps and associated equipment is 20 years. Rehabilitating the lift stations will reduce the probability of a sanitary sewer overflow.

FAILURE ANALYSIS AND RISK RATINGS

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

Impact Severity:	Likelihood of Occurrence:	Risk Mitigation:	Risk Exposure:
10	4	3	120

Funding Information:	Acquisition Year:	Design Year:	Construction Year:
Amounts shown are estimated costs without SAWS overhead.		2015	2017
	$0	$509,438	$4,000,000

SAN ANTONIO WATER SYSTEM
2017 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-00425
Project:	LS 11 Feathercrest and 111 Stone Ridge Elimination
Programmed Amount:	$1,171,920
Core Business:	WW - Wastewater
Category:	Collection Facilities
Phase:	Design
Council District:	District 09, District 10

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 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 has been identified as undersized and will need to be replaced or paralleled. This project is known as E-20 Salado Creek: Nacogdoches Rd. to Jones Maltsberger Rd.

Justification:

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), there is a high probability of multiple overflows at the station between now and then.

FAILURE ANALYSIS AND RISK RATINGS

Failure Mode:	Failure Impact:	Failure Root Cause:	
Corporate Mandate	Enforcement Action	Failed System Component	
Impact Severity:	**Likelihood of Occurrence:**	**Risk Mitigation:**	**Risk Exposure:**
10	10	10	1000

Funding Information:	Acquisition Year:	Design Year:	Construction Year:
Amounts shown are estimated costs without SAWS overhead.	2013	2017	2019
	$0	$1,000,000	$5,000,000

SAN ANTONIO WATER SYSTEM
2017 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-00231
Project:	Governmental Sewer - 2017
Programmed Amount:	$20,274,216
Core Business:	WW - Wastewater
Category:	Governmental Sewer
Phase:	Construction
Council District:	System Wide

Description and Scope:

The governmental program consists of projects implemented in conjunction with other government agencies infrastructure work. The program is broken out as follows: replacement of sewer mains in poor condition; adjustment of sewer mains whose existing alignment conflicts with proposed new street alignment; and installation of needed new sewer mains to provide additional capacity.

SAWS participates in the Utility Coordination Council, and jointly plans and reviews infrastructure improvements with COSA, Bexar County, CPS, TXDOT, AT&T, and other agencies, to maximize effectiveness of public infrastructure.

Justification:

Replacing and/or adjusting aging infrastructure in conjunction with other agencies planned street work is the most cost effective approach to infrastructure management. It minimizes the cost of construction and minimizes the potential of utility failure under a new street.

FAILURE ANALYSIS AND RISK RATINGS

Failure Mode:	Failure Impact:	Failure Root Cause:	
Corporate Mandate	Customer Dissatisfaction	Conflict with City or State	
Impact Severity:	**Likelihood of Occurrence:**	**Risk Mitigation:**	**Risk Exposure:**
9	9	10	810

Funding Information:	Acquisition Year:	Design Year:	Construction Year:
Amounts shown are estimated costs without SAWS overhead.		2017	2017
	$0	$0	$17,300,000

SAN ANTONIO WATER SYSTEM
2017 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-00107
Project:	Sewer Main Oversizing 2017 - SAWS
Programmed Amount:	$1,171,920
Core Business:	WW - Wastewater
Category:	Mains New - Sewer
Phase:	Construction
Council District:	System Wide

Description and Scope:

Funds 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. Developers are required to build necessary offsite infrastructure to meet the needs of their development. When growth is projected in adjacent tracts, SAWS contributes money to increase the size of the mains to serve the additional growth. Sharing in the cost is beneficial to both SAWS and the developer and prevents the construction of parallel smaller sized mains.

Justification:

Participating in oversizing is a cost effective way to meet the needs of growth. It is funded by impact fees collected from new development.

FAILURE ANALYSIS AND RISK RATINGS

Failure Mode:	Failure Impact:	Failure Root Cause:	
Inadequate Capacity	Line Surcharge	Undersized Lines	
Impact Severity:	**Likelihood of Occurrence:**	**Risk Mitigation:**	**Risk Exposure:**
5	8	10	400

Funding Information:	Acquisition Year:	Design Year:	Construction Year:
Amounts shown are estimated costs without SAWS overhead.		2017	2017
	$0	$0	$1,000,000

SAN ANTONIO WATER SYSTEM
2017 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-10383
Project:	C-13 Broadway Corridor: Josephine to South Alamo Package B.2
Programmed Amount:	$7,617,480
Core Business:	WW - Wastewater
Category:	Main Replacement - Sewer
Phase:	Construction
Council District:	District 01

Description and Scope:

This project includes the rehabilitation of approximately 3,000 feet of 60-inch gravity sewer main and the installation of approximately 3,000 feet of 36-inch and 42-inch gravity sewer main. Package B.1 was funded in the 2016 CIP. The two packages will be awarded as one contract.

Justification:

The existing 60-inch sewer main is in poor condition and does not provide sufficient capacity to carry the peak wet weather flow of 53 MGD. The C-13 Project Package B is the final construction contract of the C-13 project and will complete the project. This project is part of Early Action Phase 1 on the EPA Consent Decree and must be completed by July 2019.

FAILURE ANALYSIS AND RISK RATINGS

Failure Mode:	Failure Impact:	Failure Root Cause:
Line Collapse, Regulatory Compliance	Line Surcharge	Age/Deterioration, System Improvement

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

Funding Information:	Acquisition Year:	Design Year:	Construction Year:
Amounts shown are estimated costs without SAWS overhead.		2011	2017
	$0	$0	$6,500,000

SAN ANTONIO WATER SYSTEM
2017 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-10193
Project:	C-5 Culebra and Castroville to Laredo and C-28 Zarzamora Creek - San Gabriel to NW 23rd Street - Phase 2
Programmed Amount:	$5,859,600
Core Business:	WW - Wastewater
Category:	Main Replacement - Sewer
Phase:	Construction
Council District:	District 05, District 06

Description and Scope:

This project consists of the replacement of 12" to 36” pipe in two segments: approximately 3,900 feet along the west side of Apache Creek from Vera Cruz to NW 19th Street and 3,600 feet along Colima from Nueva Leon to Barclay. This pipe is being replaced due to its poor condition and includes the relocation of a siphon structure. An additional phase will be contructed in 2018 at an estimated cost of $6 million.

The projects are required to improve the wastewater flow through the south-central part of the city, upgrade the capacity to accommodate increased flow volumes, and eliminate or rehabilitate structures that are causing system degradation. The San Antonio River Authority and COSA Parks and Recreation are involved in this project.

Justification:

This project falls under the EPA Consent Decree, Early Action Program Phase 1.

FAILURE ANALYSIS AND RISK RATINGS

Failure Mode:	**Failure Impact:**	**Failure Root Cause:**	
Inadequate Capacity	Sanitary Sewer Overflow	Age/Deterioration	
Impact Severity:	**Likelihood of Occurrence:**	**Risk Mitigation:**	**Risk Exposure:**
10	10	10	1000

Funding Information:	**Acquisition Year:**	**Design Year:**	**Construction Year:**
Amounts shown are estimated costs without SAWS overhead.		2011	2017
	$0	$0	$5,000,000

SAN ANTONIO WATER SYSTEM
2017 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-10373
Project:	Construction Management Services 2017 - Wastewater
Programmed Amount:	$1,582,092
Core Business:	WW - Wastewater
Category:	Main Replacement - Sewer
Phase:	Construction
Council District:	System Wide

Description and Scope:

SAWS requires construction management services to inspect and manage numerous ongoing construction projects to ensure that each project meets SAWS rigorous standards and specifications for health, safety, environmental and regulatory compliance. SAWS also requires inspection of projects to ensure the reliability of the project, testing to be performed in accordance with State requirements and regulations. This program will provide the extra construction contractual services to meet the inspection demands.

Justification:

These services will ensure that each project is constructed to standard and does not risk public health, safety, or environmental violations.

FAILURE ANALYSIS AND RISK RATINGS

Failure Mode:	Failure Impact:	Failure Root Cause:	
Unsustainable Process	Customer Dissatisfaction	System Improvement	
Impact Severity:	**Likelihood of Occurrence:**	**Risk Mitigation:**	**Risk Exposure:**
10	10	10	1000

Funding Information:	Acquisition Year:	Design Year:	Construction Year:
Amounts shown are estimated costs without SAWS overhead.		2017	2017
	$0	$0	$1,350,000

SAN ANTONIO WATER SYSTEM
2017 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID: Pro-00030

Project: E-19 Segment 1

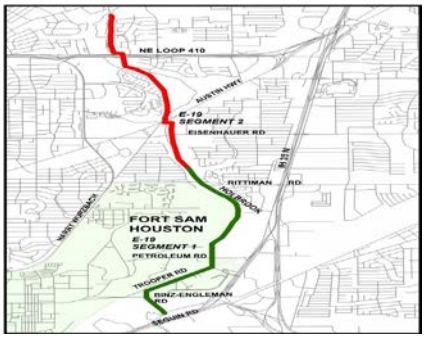
Programmed Amount: $41,134,392

Core Business: WW - Wastewater

Category: Main Replacement - Sewer

Phase: Construction

Council District: District 02, District 10



Description and Scope:

This project consists of designing and constructing the replacement and upsizing of 3 miles of 34-inch to 48-inch gravity wastewater mains with larger mains. The sewer mains are in the Eastern Sewershed and run north from Seguin Road (just south of Binz Engleman Rd) generally along Salado Creek to a point near Rittiman Road. This is the first of two segments of the overall E-19 project.

Justification:

These sewer mains have experienced numerous sanitary sewer overflows and must be replaced. This project is part of the EPA Consent Decree.

FAILURE ANALYSIS AND RISK RATINGS

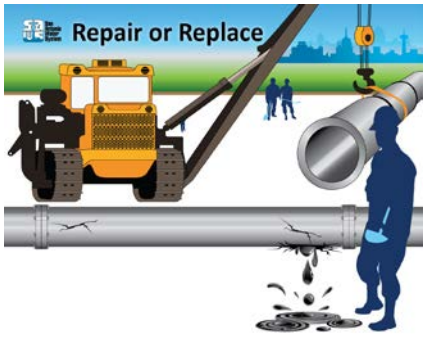
Failure Mode:	Failure Impact:	Failure Root Cause:	
Inadequate Capacity	Sanitary Sewer Overflow	Age/Deterioration, Undersized Lines	
Impact Severity:	**Likelihood of Occurrence:**	**Risk Mitigation:**	**Risk Exposure:**
10	10	10	1000

Funding Information:	Acquisition Year:	Design Year:	Construction Year:
Amounts shown are estimated costs without SAWS overhead.		2015	2017
	$0	$5,281,944	$35,100,000

SAN ANTONIO WATER SYSTEM
2017 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-00238
Project:	Main Replacements - Sewer - SAWS Crews - 2017
Programmed Amount:	$3,281,376
Core Business:	WW - Wastewater
Category:	Main Replacement - Sewer
Phase:	Construction
Council District:	System Wide



Description and Scope:

Replacement of sewer mains by SAWS crews. When failures in the sewer system are encountered, SAWS crews determine the best method to restore service. When portions of the system must be replaced, the project is evaluated to determine if SAWS crews or contractors will be the most effective or efficient means to complete the replacement.

Justification:

The replacement work is necessary to restore service and is required to comply with the EPA Consent Decree.

FAILURE ANALYSIS AND RISK RATINGS

Failure Mode:	Failure Impact:	Failure Root Cause:	
Repeated Line Breaks	Sanitary Sewer Overflow	Age/Deterioration	
Impact Severity:	**Likelihood of Occurrence:**	**Risk Mitigation:**	**Risk Exposure:**
10	10	10	1000

Funding Information:	Acquisition Year:	Design Year:	Construction Year:
Amounts shown are estimated costs without SAWS overhead.		2017	2017
	$0	$0	$2,800,000

SAN ANTONIO WATER SYSTEM
2017 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-00246
Project:	Sewer Laterals - 2017
Programmed Amount:	$4,922,064
Core Business:	WW - Wastewater
Category:	Main Replacement - Sewer
Phase:	Construction
Council District:	System Wide

Description and Scope:

Replace deteriorated customer sewer upper laterals from the sewer main to the customer's property line. Each year SAWS crews replace customer laterals (the section of pipe from the main in the street to a customer's property line) when televising or reported problems indicate the lateral has become unserviceable.

In 1999 City Council directed SAWS to assume ownership and maintenance of sewer laterals, which had previously been the responsibility of property owners.

Justification:

Replacement of sewer laterals is necessary to restore service and reduces inflow and infiltration, which reduces sewer overflows, and is required by the EPA Consent Decree.

FAILURE ANALYSIS AND RISK RATINGS

Failure Mode:	Failure Impact:	Failure Root Cause:	
Line Collapse	Customer Dissatisfaction	Conflict with City or State	
Impact Severity:	**Likelihood of Occurrence:**	**Risk Mitigation:**	**Risk Exposure:**
8	10	10	800

Funding Information:	Acquisition Year:	Design Year:	Construction Year:
Amounts shown are estimated costs without SAWS overhead.		2017	2017
	$0	$0	$4,200,000

SAN ANTONIO WATER SYSTEM
2017 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-00256
Project:	Small and Large Diameter Condition Remedial Measures 2017
Programmed Amount:	$52,736,400
Core Business:	WW - Wastewater
Category:	Main Replacement - Sewer
Phase:	Construction
Council District:	System Wide

Description and Scope:

Rehabilitate sewer mains that have been identified by televised inspection to be in very poor condition. This project will fund the rehabilitation of approximately 40 miles of small and 5 miles of large diameter sewer mains. Areas identified for rehabilitation are evaluated to determine the most cost effective method (conventional open trench replacement, cured in place pipe, or pipe bursting) of rehabilitation. This project is part of the EPA Consent Decree Early Action Program.

Each year, SAWS is required to inspect high risk pipes to evaluate condition and to take necessary action to prevent sewer overflows.

Justification:

Rehabilitation of the sewer system is required by the EPA Consent Decree, Appendix F, Phase 1 Early Action Program. All phases of the project must be complete by July 23, 2019.

FAILURE ANALYSIS AND RISK RATINGS

Failure Mode:	Failure Impact:	Failure Root Cause:
HAZMAT Spill, Inadequate Capacity, Line Collapse, Regulatory Compliance, Repeated Line Breaks	Enforcement Action, Environmental Impact, Increased Maintenance, Line Surcharge, Public Health Impact, Sanitary Sewer Overflow	Age/Deterioration, Clogged Lines, Undersized Lines

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

Funding Information:	Acquisition Year:	Design Year:	Construction Year:
Amounts shown are estimated costs without SAWS overhead.		2017	2017
	$0	$0	$45,000,000

SAN ANTONIO WATER SYSTEM
2017 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-00266
Project:	W-2 Huebner Creek - Eckhert to Bandera - formerly W-06
Programmed Amount:	$234,384
Core Business:	WW - Wastewater
Category:	Main Replacement - Sewer
Phase:	Acquisition
Council District:	District 06, District 07

Description and Scope:

The W-2 Huebner Creek Eckhert to Bandera Project consists of replacement and upsizing approximately 11,550 feet of existing 24-inch to 42-inch gravity sewer mains along Huebner Creek in the SAWS Western Sewershed. The majority of this project is within Leon Valley.

Justification:

This project is needed to correct capacity deficiencies in the existing sanitary sewer infrastructure.

FAILURE ANALYSIS AND RISK RATINGS

Failure Mode:	**Failure Impact:**	**Failure Root Cause:**
Line Collapse, Regulatory Compliance	Sanitary Sewer Overflow	Age/Deterioration

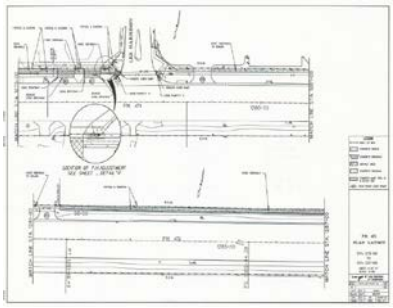
Impact Severity:	**Likelihood of Occurrence:**	**Risk Mitigation:**	**Risk Exposure:**
10	10	10	1000

Funding Information:	**Acquisition Year:**	**Design Year:**	**Construction Year:**
Amounts shown are estimated costs without SAWS overhead.	2017	2016	2019
	$200,000	$0	$9,430,000

SAN ANTONIO WATER SYSTEM
2017 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-00251
Project:	Wastewater Main Replacement Work Order Engineering Contract - 2017
Programmed Amount:	$12,891,120
Core Business:	WW - Wastewater
Category:	Main Replacement - Sewer
Phase:	Design
Council District:	System Wide



Description and Scope:

This annual project will fund design services to repair/replace sewer mains that have experienced cave-ins and overflows and areas that have had overflows due to capacity constraints. 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, and are primarily projects required by the EPA Consent Decree. The additional funds in 2017 will enable SAWS to accelerate design work to allow SAWS to address capacity constraint projects that have been identified to provide a more consistent cash flow over the term of the EPA Consent Decree.

Justification:

Design of replacement/repair mains is necessary to restore and maintain wastewater service.

FAILURE ANALYSIS AND RISK RATINGS

Failure Mode:	Failure Impact:	Failure Root Cause:
HAZMAT Spill, Inadequate Capacity, Inadequate Facilities, Line Collapse, Regulatory Compliance, Repeated Line Breaks	Customer Dissatisfaction, Enforcement Action, Environmental Impact, Failure of Corporate Initiative, Line Surcharge, Public Health Impact, Regulatory Non-compliance, Sanitary Sewer Overflow	Age/Deterioration, Clogged Lines, Undersized Lines

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

Funding Information:	Acquisition Year:	Design Year:	Construction Year:
Amounts shown are estimated costs without SAWS overhead.		2017	2017
	$0	$11,000,000	$0

SAN ANTONIO WATER SYSTEM
2017 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-00408
Project:	Dos Rios and Leon Creek WRC - Tertiary Filters Expansion
Programmed Amount:	$1,757,880
Core Business:	WW - Wastewater
Category:	Treatment
Phase:	Design
Council District:	District 03

Description and Scope:

This project installs four additional cloth media filters in two existing filter tanks at the Dos Rios WRC, and one additional filter at the Leon Creek WRC.

Ten existing cloth media filters were installed in 2010 in five existing filter tanks to replace half of the original antiquated traveling bridge sand filters. The plant still currently relies on two of the original filters to meet the regulatory requirements. This project provides the additional cloth media filters required to meet the permitted peak demands at both plants.

Justification:

There is a lack of redundancy of filters when one filtration unit is out of service. Redundancy is specifically needed during wet weather flows.

FAILURE ANALYSIS AND RISK RATINGS

Failure Mode:	Failure Impact:	Failure Root Cause:
Inadequate Capacity, Inadequate Facilities	Enforcement Action	Age/Deterioration, Lack of Redundancy

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

Funding Information:	Acquisition Year:	Design Year:	Construction Year:
Amounts shown are estimated costs without SAWS overhead.		2017	2018
	$0	$1,500,000	$10,000,000

SAN ANTONIO WATER SYSTEM
2017 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-00120
Project:	Dos Rios WRC Electrical System Improvements – Phase 2
Programmed Amount:	$2,343,840
Core Business:	WW - Wastewater
Category:	Treatment
Phase:	Design
Council District:	District 03

Description and Scope:

This project replaces various electrical switchgear, motor control centers, transformers and generators that are aging and in poor condition at the Dos Rios WRC. All plant electrical equipment was assessed and evaluated by the Dos Rios Electrical System Assessment Project, and assigned a rating of 1 to 6, with 1 being in the poorest condition and 6 being in the best condition. The electrical equipment to be replaced in Phase 2 received low scores and was deemed in poor condition. Phase 2 will be constructed in 2019 at an estimated cost of $18 million, and Phase 3 will be constructed in 2022 at an estimated cost of $15 million. An additional phase may be needed in 2025. The total cost of the project is $49 million.

Justification:

The Dos Rios WRC has been in operation since 1987, and the plant electrical equipment is in poor condition. Failure of this equipment could interrupt the treatment process, require emergency generators, and cause a fire or other safety issue.

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:**
10	9	8	720

Funding Information:	**Acquisition Year:**	**Design Year:**	**Construction Year:**
Amounts shown are estimated costs without SAWS overhead.		2017	2019
	$0	$2,000,000	$18,000,000

SAN ANTONIO WATER SYSTEM
2017 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-10382
Project:	Leon Creek WRC RAS Pump Station Replacement
Programmed Amount:	$1,757,880
Core Business:	WW - Wastewater
Category:	Treatment
Phase:	Construction
Council District:	District 03

Description and Scope:

The two existing Return Activated Sludge (RAS) pump stations were originally constructed with the plant in 1965. The pumps are so old that their parts are no longer being manufactured. The pipes and valves have also deteriorated, and the flow meters are non-functional. This project at a minimum will provide for new pumps, piping, valving and flow metering at the two RAS pump stations. One of the pump stations will be replaced in 2017 and the second one in 2018.

Justification:

The two RAS pump stations are original as they were built when the plant was built in1965. The equipment for these stations have reached the end of their service life and must be rehabilitated to reliably and efficiently return the biological sludge from the secondary clarifiers to the aeration basins.

FAILURE ANALYSIS AND RISK RATINGS

Failure Mode:	Failure Impact:	Failure Root Cause:
Inadequate Facilities, Unsustainable Equipment, Unsustainable Process	Excessive Downtime, Increased Maintenance, Regulatory Non-compliance	Age/Deterioration, Failed System Component, Obsolescence

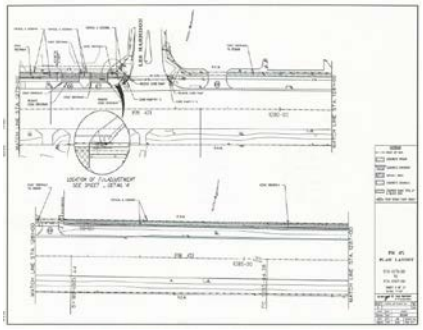
Impact Severity:	Likelihood of Occurrence:	Risk Mitigation:	Risk Exposure:
10	10	9	900

Funding Information:	Acquisition Year:	Design Year:	Construction Year:
Amounts shown are estimated costs without SAWS overhead.		2016	2017
	$0	$0	$1,500,000

SAN ANTONIO WATER SYSTEM
2017 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-10376
Project:	Treatment Facilities Engineering Work Order Design Contract 2017
Programmed Amount:	$585,960
Core Business:	WW - Wastewater
Category:	Treatment
Phase:	Design
Council District:	System Wide



Description and Scope:

Work order contracts for engineering of small but urgent projects that are not executable by SAWS engineering and operations staff. These contracts allow flexibility to execute projects without pulling funds from budgeted projects, and avoid delays associated with conventional solicitation processes.

Justification:

This Work Order Contract will be on an "as-needed" basis, and the scope of the project will depend on the nature of each individual project. A work order will be issued upon identification of a need for an urgent project, and determination of its scope and schedule.

FAILURE ANALYSIS AND RISK RATINGS

Failure Mode:	**Failure Impact:**	**Failure Root Cause:**
Equipment Failure	Customer Dissatisfaction, Increased Maintenance	Age/Deterioration

Impact Severity:	**Likelihood of Occurrence:**	**Risk Mitigation:**	**Risk Exposure:**
8	7	7	392

Funding Information:	**Acquisition Year:**	**Design Year:**	**Construction Year:**
Amounts shown are estimated costs without SAWS overhead.	2016	2017	2018
	$0	$500,000	$0

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Water Supply

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SAN ANTONIO WATER SYSTEM
2017 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-00156
Project:	General Legal Services - WR - 2017
Programmed Amount:	$621,734
Core Business:	WR - Water Resources
Category:	Corporate WR
Phase:	Acquisition
Council District:	System Wide

Description and Scope:

Specialized legal support is required for critical projects. The actual expenditures are applied to the specific CIP project.

Justification:

External legal support is sought only when there is insufficient internal legal staff to support the effort, or specialized legal expertise is required.

FAILURE ANALYSIS AND RISK RATINGS

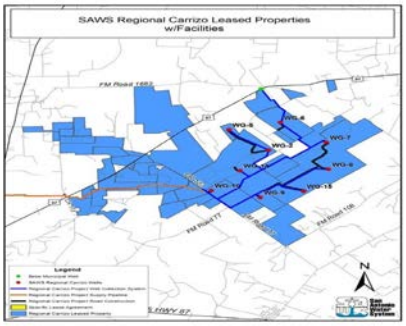
Failure Mode:	Failure Impact:	Failure Root Cause:	
Corporate Mandate	Regulatory Non-compliance	Conflict with City or State	
Impact Severity:	**Likelihood of Occurrence:**	**Risk Mitigation:**	**Risk Exposure:**
10	10	10	1000

Funding Information:	Acquisition Year:	Design Year:	Construction Year:
Amounts shown are estimated costs without SAWS overhead.	2017	2017	2017
	$560,000	$0	$0

SAN ANTONIO WATER SYSTEM
2017 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-10150
Project:	Regional Carrizo Emergency Interconnect
Programmed Amount:	$1,314,696
Core Business:	WR - Water Resources
Category:	Regional Carrizo
Phase:	Design
Council District:	Unknown



Description and Scope:

The emergency interconnect is a result of a mitigation settlement agreement between the Gonzales County Water Supply Corporation and SAWS. Gonzales County WSC agreed to withdraw protest to the SAWS groundwater withdrawal permit application in exchange for the items identified in the mitigation settlement agreement.

Justification:

If the project is not completed, SAWS would be out of compliance with the mitigation settlement. Gonzales County WSC could file a lawsuit and use this to protest the permit issued to SAWS. The Gonzales County WSC general manager is a current board member of the Gonzales County Underground Water Conservation District which holds SAWS permit. SAWS could lose access to its 11,688 AF of permits that are the basis of the Regional Carrizo project.

FAILURE ANALYSIS AND RISK RATINGS

Failure Mode:	Failure Impact:	Failure Root Cause:	
Corporate Mandate	Regulatory Non-compliance	Conflict with City or State	
Impact Severity:	**Likelihood of Occurrence:**	**Risk Mitigation:**	**Risk Exposure:**
9	9	8	648

Funding Information:	Acquisition Year:	Design Year:	Construction Year:
Amounts shown are estimated costs without SAWS overhead.		2016	2017
	$0	$102,800	$1,184,155

SAN ANTONIO WATER SYSTEM
2017 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID: Pro-00085

Project: Vista Ridge Integration Pipeline

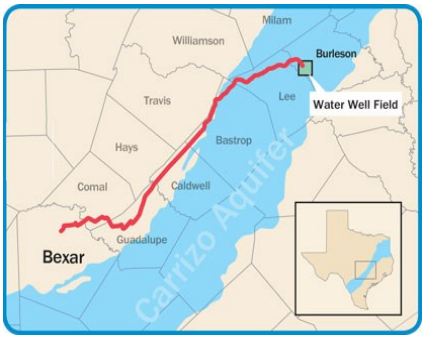
Programmed Amount: $111,338,369

Core Business: WR - Water Resources

Category: Vista Ridge Integration

Phase: Construction

Council District: System Wide



Description and Scope:

In 2017, SAWS will begin the construction phase with completion planned for 2019. SAWS will build a new pump station with treatment facilities and ground storage tanks in the Stone Oak area, modify the Bitters, Maltsberger and Basin pump stations to include the installation of new control valves and yard piping, construct a new 5 million gallon (mg) ground storage tank at Maltsberger, construct water transmission main from: the new Vista Ridge pump station to Stone Oak, new Vista Ridge pump station to the existing 48" pipeline, and from Maltsberger to Basin. In addition, funds are included for the rehabilitation and replacement of roughly 15% of the existing pipe pending the condition assessment results.

This project will help meet the expected growth of 20,000 new people every year in San Antonio, and will be the largest non-Edwards Aquifer water supply in San Antonio's history. This project will increase our water supply portfolio by 20% of current demand.

Justification:

The existing infrastructure will undergo significant improvements to make sure this new water source can be efficiently integrated along with others in our diversified supply.

FAILURE ANALYSIS AND RISK RATINGS

Failure Mode:	Failure Impact:	Failure Root Cause:
Corporate Mandate	Customer Dissatisfaction Failure of Corporate Initiative	Corporate Mandate Undersized Equipment Undersized Lines

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

Funding Information:	Acquisition Year:	Design Year:	Construction Year:
Amounts shown are estimated costs without SAWS overhead.		2015	2017
		0	$100,283,154

SAN ANTONIO WATER SYSTEM
2017 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID: Pro-00142

Project: Recycled Water Customer Lines - 2017

Programmed Amount: $257,000

Core Business: RW - Recycled Water

Category: Recycled Water

Phase: Construction

Council District: System Wide

Description and Scope:

Construct extensions of recycled water mains to new customers. The recycled water system delivers non-potable water, which offsets the use of more valuable potable water. Additional recycled water is available, however summer peak water (primarily for irrigation) is limited.

Justification:

Providing low cost recycled water extensions supports the growth of the recycled system to preferred type (non-summer peaking) customers.

FAILURE ANALYSIS AND RISK RATINGS

Failure Mode:	Failure Impact:	Failure Root Cause:	
Inadequate Capacity	Customer Dissatisfaction	System Optimization	
Impact Severity:	**Likelihood of Occurrence:**	**Risk Mitigation:**	**Risk Exposure:**
9	9	9	729

Funding Information:	Acquisition Year:	Design Year:	Construction Year:
Amounts shown are estimated costs without SAWS overhead.		2017	2017
	$0	$0	$200,000

Supplemental Information

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SUPPLEMENTAL INFORMATION

WATER AND SEWER RATE SCHEDULES

RESIDENTIAL WATER RATES

The Service Availability Charge (minimum bill) for all residential water service 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.

2016
MONTHLY SERVICE AVAILABILITY CHARGE

METER SIZE	INSIDE CITY LIMITS NET SERVICE AVAILABILITY FEE*	OUTSIDE CITY LIMITS NET SERVICE AVAILABILITY FEE*
5/8"	$10.72	$13.94
3/4"	14.19	18.44
1"	21.09	27.42
1 1/2"	38.33	49.83
2"	59.01	76.70
3"	107.30	139.49
4"	176.26	229.13
6"	348.68	453.29
8"	555.59	722.26
10"	796.97	1036.06
12"	1,486.66	1,932.66

* Water Service Availability Charge shall be reduced by $2.14 Inside City Limits and $2.79 Outside City Limits, if usage does not exceed 2,992 gallons.

2017
MONTHLY SERVICE AVAILABILITY CHARGE

METER SIZE	INSIDE CITY LIMITS NET SERVICE AVAILABILITY FEE*	OUTSIDE CITY LIMITS NET SERVICE AVAILABILITY FEE*
5/8"	$11.64	$15.41
3/4"	15.41	20.03
1"	22.90	29.78
1 1/2"	41.63	54.12
2"	64.08	83.30
3"	116.53	151.49
4"	191.42	248.84
6"	378.67	492.27
8"	603.37	784.37
10"	865.51	1,125.16
12"	1,614.51	2,098.87

* Water Service Availability Charge shall be reduced by $2.32 Inside City Limits and $3.03 Outside City Limits, if usage does not exceed 2,992 gallons.

2016
MONTHLY VOLUME CHARGE

Usage Gallon - Block Threshold	INSIDE CITY LIMITS RATE PER 100 GALLONS	OUTSIDE CITY LIMITS RATE PER 100 GALLONS
2,992	$0.0619	$0.0804
4,489	0.1083	0.1407
5,985	0.1391	0.1809
7,481	0.1701	0.2211
10,473	0.2010	0.2613
14,962	0.2320	0.3016
20,199	0.2784	0.3619
Over 20,199	0.4020	0.5227

2017
MONTHLY VOLUME CHARGE

Usage Gallon - Block Threshold	INSIDE CITY LIMITS RATE PER 100 GALLONS	OUTSIDE CITY LIMITS RATE PER 100 GALLONS
2,992	$0.0672	$0.0873
4,489	0.1176	0.1528
5,985	0.1511	0.1965
7,481	0.1847	0.2401
10,473	0.2183	0.2838
14,962	0.2520	0.3275
20,199	0.3023	0.3930
Over 20,199	0.4366	0.5677

WATER AND SEWER RATE SCHEDULES *(CONTINUED)*

RESIDENTIAL SEWER RATES

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.

2016 MONTHLY SEWER SERVICE AVAILABILITY CHARGE

METER SIZE	INSIDE CITY LIMITS NET SERVICE AVAILABILITY FEE*	OUTSIDE CITY LIMITS NET SERVICE AVAILABILITY FEE*
5/8"	$12.29	$14.75
3/4"	13.52	16.23
1"	15.36	18.44
1 1/2"	21.51	25.81
2"	30.73	36.88
3"	61.45	73.74
4"	92.18	110.62
6"	153.63	184.36
8"	245.80	294.97
10"	368.71	442.45
12"	491.61	589.93

2016 MONTHLY SEWER VOLUME CHARGE

Usage Gallon - Block Threshold	INSIDE CITY LIMITS RATE PER 100 GALLONS	OUTSIDE CITY LIMITS RATE PER 100 GALLONS
1,496	$0.000	$0.000
2,992	0.2627	0.3153
Over 2,992	0.3941	0.4729

Customers who do not have a winter record of water usage or an interim average will be billed will be billed for sewer service assuming 7,481 gallons monthly sewer usage. Customers with no San Antonio Water System or District Special Project water meter will be charged the Sewer Service Availability Charge based on a 5/8" meter size.

2017 MONTHLY SEWER SERVICE AVAILABILITY CHARGE

METER SIZE	INSIDE CITY LIMITS NET SERVICE AVAILABILITY FEE*	OUTSIDE CITY LIMITS NET SERVICE AVAILABILITY FEE*
5/8"	$12.98	$15.58
3/4"	14.28	17.14
1"	16.22	19.47
1 1/2"	22.71	27.26
2"	32.45	38.95
3"	64.89	77.87
4"	97.34	116.81
6"	162.23	194.68
8"	259.56	311.49
10"	389.36	467.23
12"	519.14	622.97

2017 MONTHLY SEWER VOLUME CHARGE

Usage Gallon - Block Threshold	INSIDE CITY LIMITS RATE PER 100 GALLONS	OUTSIDE CITY LIMITS RATE PER 100 GALLONS
1,496	$0.000	$0.000
2,992	0.2774	0.3330
Over 2,992	0.4162	0.4994

Customers who do not have a winter record of water usage or an interim average will be billed will be billed for sewer service assuming 6,733 gallons monthly sewer usage. Customers with no San Antonio Water System water meter will be charged the Sewer Service Availability Charge based on a 5/8" meter size.

WATER AND SEWER RATE SCHEDULES *(CONTINUED)*

GENERAL CLASS WATER RATES

Including Apartment, Commercial, Industrial and Municipal

Effective for consumption on or about January 1, 2017

For business customers, a multi-step, base-excess use structure has been developed called the General Class. The base amount for General Class customers is 100% of customer's average annual usage. Increased unit rates apply as usage exceeds each customer's base amount.

Monthly Service Availability and Volume Charge

The Monthly Service Availability Charge (minimum bill) for all general 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 month or fraction thereof shall be as follows:

2016 MONTHLY SERVICE AVAILABILITY FEE

METER SIZE	INSIDE CITY LIMITS NET SERVICE AVAILABILITY FEE	OUTSIDE CITY LIMITS NET SERVICE AVAILABILITY FEE
5/8"	$11.58	$14.16
3/4"	16.55	20.17
1"	26.46	32.15
1 1/2""	51.24	62.09
2"	80.92	97.98
3"	150.27	181.81
4"	249.30	301.52
6"	496.88	600.85
8"	794.02	960.05
10"	1,140.64	1,379.09
12"	2,131.04	2,576.40

2017 MONTHLY SERVICE AVAILABILITY FEE

METER SIZE	INSIDE CITY LIMITS NET SERVICE AVAILABILITY FEE	OUTSIDE CITY LIMITS NET SERVICE AVAILABILITY FEE
5/8"	$12.58	$15.38
3/4"	17.97	21.90
1"	28.74	34.91
1 1/2""	55.65	67.43
2"	87.88	106.41
3"	163.19	197.45
4"	270.74	327.45
6"	539.61	652.52
8"	862.31	1,042.61
10"	1,238.74	1,497.69
12"	2,314.31	2,797.97

2016 MONTHLY VOLUME CHARGE

USAGE BLOCKS	INSIDE CITY LIMITS RATE PER 100 GALLONS	OUTSIDE CITY LIMITS RATE PER 100 GALLONS
Base	$0.1514	$0.1969
>100-125% of Base	0.1742	0.2265
>125-175% of Base	0.2272	0.2954
>175% of Base	0.2651	0.3446

2017 MONTHLY VOLUME CHARGE

USAGE BLOCKS	INSIDE CITY LIMITS RATE PER 100 GALLONS	OUTSIDE CITY LIMITS RATE PER 100 GALLONS
Base	$0.1644	$0.2138
>100-125% of Base	0.1892	0.2460
>125-175% of Base	0.2467	0.3208
>175% of Base	0.2879	0.3742

The Base Use is defined as 100% of the Annual Average Consumption

WATER AND SEWER RATE SCHEDULES *(CONTINUED)*

GENERAL CLASS SEWER RATES

2016
MONTHLY SEWER SERVICE AVAILABILITY CHARGE

METER SIZE	INSIDE CITY LIMITS NET SERVICE AVAILABILITY FEE*	OUTSIDE CITY LIMITS NET SERVICE AVAILABILITY FEE*
5/8"	$12.29	$14.75
3/4"	13.52	16.23
1"	15.36	18.44
1 1/2"	21.51	25.81
2"	30.73	36.88
3"	61.45	73.74
4"	92.18	110.62
6"	153.63	184.36
8"	245.80	294.97
10"	368.71	442.45
12"	491.61	589.93

Customers with no San Antonio Water System or District Special Project water meter will be charged the Sewer Service Availability Charge based on a 2" meter size.

2016
MONTHLY SEWER VOLUME CHARGE

Usage Blocks Base*	INSIDE CITY LIMITS RATE PER 100 GALLONS	OUTSIDE CITY LIMITS RATE PER 100 GALLONS
1,496	$0.000	$0.000
Over 1,496	0.3520	0.4224

*The Base Use is defined as 100% of the Annual Average Consumption

2017
MONTHLY SEWER SERVICE AVAILABILITY CHARGE

METER SIZE	INSIDE CITY LIMITS NET SERVICE AVAILABILITY FEE*	OUTSIDE CITY LIMITS NET SERVICE AVAILABILITY FEE*
5/8"	$12.98	$15.58
3/4"	14.28	17.14
1"	16.22	19.47
1 1/2"	22.71	27.26
2"	32.45	38.95
3"	64.89	77.87
4"	97.34	116.81
6"	162.23	194.68
8"	259.56	311.49
10"	389.36	467.23
12"	519.14	622.97

Customers with no San Antonio Water System water meter will be charged the Sewer Service Availability Charge based on a 2" meter size.

2017
MONTHLY SEWER VOLUME CHARGE

Usage Blocks Base*	INSIDE CITY LIMITS RATE PER 100 GALLONS	OUTSIDE CITY LIMITS RATE PER 100 GALLONS
1,496	$0.000	$0.000
Over 1,496	0.3717	0.4461

*The Base Use is defined as 100% of the Annual Average Consumption

WATER AND SEWER RATE SCHEDULES *(CONTINUED)*

WHOLESALE WATER AND SEWER RATES

Effective for Consumption on or about January 1, 2017

Water service charges for all metered wholesale water connections shall be the sum of the appropriate Water Service Availability Charge and the application of the Water Monthly Volume Charges to metered water usage in every instance of service for each month or fraction thereof and are billed according to the schedule below.

2016 MONTHLY SERVICE AVAILABILITY FEE

METER SIZE	NET SERVICE AVAILABILITY FEE
6"	$450.50
8"	719.48
10"	1,033.28
12"	1,929.88

2017 MONTHLY SERVICE AVAILABILITY FEE

METER SIZE	NET SERVICE AVAILABILITY FEE
6"	$489.24
8"	781.36
10"	1,122.14
12"	2,095.85

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."

2016 MONTHLY VOLUME CHARGE

USAGE BLOCKS	RATE PER 100 GALLONS
Base*	$0.1755
Over Base	0.5266

2017 MONTHLY VOLUME CHARGE

USAGE BLOCKS	RATE PER 100 GALLONS
Base*	$0.1906
Over Base	0.5719

The Base Use is defined as 100% of the Annual Average Consumption

Wholesale Sewer Rates

Sewer service charges for all metered wholesale water connections shall be the sum of the appropriate Sewer Service Availability Charge and the application of the Sewer Monthly Volume Charges to metered water usage and are billed according to the schedule below.

2016 MONTHLY VOLUME CHARGE

Sewer Service Availability Charge	$287.82
Monthly Volume All Usage	$0.3756

2017 MONTHLY VOLUME CHARGE

Sewer Service Availability Charge	$303.94
Monthly Volume All Usage	$0.3966

WATER AND SEWER RATE SCHEDULES *(CONTINUED)*

LANDSCAPE IRRIGATION SERVICE RATES

Effective for consumption on or about January 1, 2017.

The landscape irrigation rate applies to all "landscape irrigation" accounts. These exclude irrigation meters using water as part of their business function (e.g. process water and nurseries) as well as when used for health and safety purposes (e.g. school athletic fields). New business service accounts are required to install separate landscape irrigation meters. Existing accounts will be retrofitted where possible. Accounts not retrofitted will be prorated based on estimated irrigation water use.

Monthly Service Availability and Volume Charge
The Monthly Service Availability Charge (minimum bill) for all irrigation 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 month or fraction thereof shall be as follows:

2016 MONTHLY SERVICE AVAILABILITY FEE

METER SIZE	INSIDE CITY LIMITS NET SERVICE AVAILABILITY FEE	OUTSIDE CITY LIMITS NET SERVICE AVAILABILITY FEE
5/8"	$11.58	$14.16
3/4"	16.55	20.17
1"	26.46	32.15
1 1/2""	51.24	62.09
2"	80.92	97.98
3"	150.27	181.81
4"	249.30	301.52
6"	496.88	600.85
8"	794.02	960.05
10"	1,140.64	1,379.09
12"	2,131.04	2,576.40

2017 MONTHLY SERVICE AVAILABILITY FEE

METER SIZE	INSIDE CITY LIMITS NET SERVICE AVAILABILITY FEE	OUTSIDE CITY LIMITS NET SERVICE AVAILABILITY FEE
5/8"	$12.58	$15.38
3/4"	17.97	21.90
1"	28.74	34.91
1 1/2""	55.65	67.43
2"	87.88	106.41
3"	163.19	197.45
4"	270.74	327.45
6"	539.61	652.52
8"	862.31	1,042.61
10"	1,238.74	1,497.69
12"	2,314.31	2,797.97

2016 MONTHLY VOLUME CHARGE

USAGE GALLON - Block Threshold	INSIDE CITY LIMITS RATE PER 100 GALLONS	OUTSIDE CITY LIMITS RATE PER 100 GALLONS
8,229 Gallons	$0.2752	$0.3577
17,954	0.3852	0.5008
162,316	0.4953	0.6439
Over 162,316	0.6329	0.8227

2017 MONTHLY VOLUME CHARGE

USAGE GALLON - Block Threshold	INSIDE CITY LIMITS RATE PER 100 GALLONS	OUTSIDE CITY LIMITS RATE PER 100 GALLONS
8,229 Gallons	$0.2989	$0.3885
17,954	0.4183	0.5439
162,316	0.5379	0.6993
Over 162,316	0.6873	0.8935

WATER AND SEWER RATE SCHEDULES *(CONTINUED)*

RECYCLED WATER RATES

Effective for consumption on or about January 1, 2017

Monthly Service Availability and Volume Charge
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 month of fraction thereof shall be as follows:

Edwards Exchange Customers

2016 MONTHLY SERVICE AVAILABILITY FEE

METER SIZE	NET SERVICE AVAILABILITY FEE
5/8"	$10.42
3/4"	13.56
1"	17.66
1 1/2""	28.07
2"	41.05
3"	109.17
4"	162.27
6"	309.55
8"	466.60
10"	639.81
12"	789.42

2017 MONTHLY SERVICE AVAILABILITY FEE

METER SIZE	NET SERVICE AVAILABILITY FEE
5/8"	$11.24
3/4"	14.63
1"	19.06
1 1/2""	30.29
2"	44.29
3"	117.79
4"	175.09
6"	334.00
8"	503.46
10"	690.35
12"	851.78

2016 MONTHLY VOLUME CHARGE

RATE PER 100 GALLONS

USAGE IN GALLONS	Standard	Seasonal
Transferred Amount	$ 0.0274	$ 0.0274
All in excess of transferred amount	0.1028	0.1093

2017 MONTHLY VOLUME CHARGE

RATE PER 100 GALLONS

USAGE IN GALLONS	Standard	Seasonal
Transferred Amount	$ 0.0296	$ 0.0296
All in excess of transferred amount	0.1109	0.1179

The Volume Charge "Seasonal" Rate Per 100 Gallons shall be applied to all billings beginning on or about May 1 and ending after five complete billing months on or about September 30 of each year. At all other times the Volume Charge "Standard" Rate Per 100 Gallons shall be utilized.

WATER AND SEWER RATE SCHEDULES *(CONTINUED)*

RECYCLED WATER RATES

Non Edwards Exchange Customers

2016 MONTHLY SERVICE AVAILABILITY FEE

METER SIZE	NET SERVICE AVAILABILITY FEE
5/8"	$10.42
3/4"	13.56
1"	17.66
1 1/2""	28.07
2"	41.05
3"	109.17
4"	162.27
6"	309.55
8"	466.60
10"	639.81
12"	789.42

2017 MONTHLY SERVICE AVAILABILITY FEE

METER SIZE	NET SERVICE AVAILABILITY FEE
5/8"	$11.24
3/4"	14.63
1"	19.06
1 1/2""	30.29
2"	44.29
3"	117.79
4"	175.09
6"	334.00
8"	503.46
10"	690.35
12"	851.78

2016 MONTHLY VOLUME CHARGE

	RATE PER 100 GALLONS	
USAGE IN GALLONS	Standard	Seasonal
First 748,000	$ 0.1100	$ 0.1183
Over 748,000	0.1124	0.1194

2017 MONTHLY VOLUME CHARGE

	RATE PER 100 GALLONS	
USAGE IN GALLONS	Standard	Seasonal
First 748,000	$ 0.1187	$ 0.1276
Over 748,000	0.1213	0.1288

The Volume Charge "Seasonal" Rate Per 100 Gallons shall be applied to all billings beginning on or about May 1 and ending after five complete billing months on or about September 30 of each year. At all other times the Volume Charge "Standard" Rate Per 100 Gallons shall be utilized.

WATER AND SEWER RATE SCHEDULES *(CONTINUED)*

WATER SUPPLY FEE

Effective for consumption on or about January 1, 2017

This fee directly funds the acquisition of new water supplies to reduce San Antonio's dependence on the Edwards Aquifer.

The Water Supply Fee shall be assessed on all potable water service for water usage in every instance of service for each month or fraction thereof according to the schedule below:

2016

RATE CLASS	Usage Gallon - Block Threshold	**Assessed Fee** RATE PER 100 GALLONS
Residential	2,992	$0.0892
	4,489	0.1561
	5,985	0.2007
	7,481	0.2454
	10,473	0.2900
	14,962	0.3346
	20,199	0.4015
	Over 20,199	0.5798
General	Base*	0.1683
	125% of Base	0.1936
	175% of Base	0.2525
	Over 175% of Base	0.2946
Wholesale	Base**	0.2193
	Over Base	0.6579
Irrigation	8,229	0.2202
	17,954	0.3083
	162,316	0.3964
	Over 162,316	0.5066

* The Base Use for General Class is defined as 100% of the Annual Average Consumption.

**The Base Use for the Wholesale Class is defined as 100% of the Annual Average Consumption or as agreed to by the wholesale customer and approved by the SAWS Board of Trustees.

2017

RATE CLASS	Usage Gallon - Block Threshold	**Assessed Fee** RATE PER 100 GALLONS
Residential	2,992	$0.0954
	4,489	0.1669
	5,985	0.2145
	7,481	0.2623
	10,473	0.3100
	14,962	0.3577
	20,199	0.4292
	Over 20,199	0.6198
General	Base*	0.1799
	125% of Base	0.2070
	175% of Base	0.2699
	Over 175% of Base	0.3149
Wholesale	Base**	0.2344
	Over Base	0.7033
Irrigation	8,229	0.2354
	17,954	0.3296
	162,316	0.4238
	Over 162,316	0.5416

* The Base Use for General Class is defined as 100% of the Annual Average Consumption.

**The Base Use for the Wholesale Class is defined as 100% of the Annual Average Consumption or as agreed to by the wholesale customer and approved by the SAWS Board of Trustees.

WATER AND SEWER RATE SCHEDULES *(CONTINUED)*

EDWARDS AQUIFER AUTHORITY PERMIT FEE

Ordinance No. 87042 provides for the establishment and assessment of a pass-through charge of the Edwards Aquifer Authority Permit Fee to all San Antonio Water System water customers.

Year	EAA Fee *(per 100 gallons)*
2005	0.01549
2006	0.01482
2007	0.01352
2008	0.01769
2009	0.01222
2010	0.01841
2011	0.01407
2012	0.01719
2012*	0.03901
2013	0.03425
2014	0.03295
2015	0.03311
2016	0.04259
2017	.03612

* Increased April 1, 2012 to include funding for EAA Habitat Conservation Plan Program

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.
Balanced Budget	A budget in which planned revenues generated from various user fees and receipts are sufficient to fund planned expenditures.
Board	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.
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 Aquifer HCP	Edwards Aquifer Habitat Conservation Program
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.
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 Unites States 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
La Niña	Weather periods of below-average sea surface temperatures across the east-central Equatorial Pacific. During a La Niña year, winter temperatures are warmer than normal in the Southeast and cooler than normal in the Northwest.
Lift Station	Lift stations are facilities designed to move wastewater from lower to higher elevation, particularly where the elevation of the source is not sufficient for gravity flow and/or when the use of gravity conveyance will result in excessive excavation depths and high sewer construction costs.
Net Revenues	Gross Revenues of the System, with respect to any period, after deducting the System's Operating and Maintenance Expenses during such period.
Operations 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.
Sewershed	An area were the rain runoff flows are determined by curbs, storm drains, settling basins, pipes and outfalls to streams.
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.
Watershed	An area or ridge of land that separates waters flowing to different rivers and basins.
Water Resources Integration Program	Approximately 45 miles of water transmission pipeline and a pump station that will convey water from SAWS' Twin Oaks Auqifer Storage and Recovery (ASR), Carrizo and Brackish Desalination programs located at the SAWS Twin Oaks Facility property in south Bexar County to new and existing facilities in western and northwestern Bexar County.
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
AVR	Abengoa Vista Ridge
AWC	Average Winter Consumption
BGD	Brackish Groundwater Desalination
BRAC	Base Realignment and Closure
CIP	Capital Improvement Program
COSA (CoSA)	City of San Antonio
CCTV	Closed circuit television
CMOM	Capacity Management Operation and Maintenance
CPMS	Contracts and Project Management System
CPS	City Public Service Energy
DSP	District Special Project (Formerly Bexar Metropolitan Water District)
EAA	Edwards Aquifer Authority
EAHCP	Edwards Aquifer Habitat Conservation Program
EARIP	Edwards Aquifer Recovery Implementation Program
ELS	Environmental Laboratory Services
EMT	SAWS Executive Management Team
EPA	U.S. Environmental Protection Agency
ETJ	Extraterritorial jurisdiction
FMEA	Failure Methods and Effects Analysis
FTE	Full-time equivalent
GASB	Government Accounting Standards Board
GFOA	Government Finance Officers Association
GIS	Geographic Information System
GPCD	Gallons per capita per day

GPS	Global Positioning System
HCP (EAHCP)	Edwards Aquifer Habitat Conservation Program
HVAC	Heating, ventilation and air conditioning system
JBSA	Joint Base San Antonio
LCRA	Lower Colorado River Authority
ITP	Incidental take Permit
LS	Lift Station
MGD	Million gallons per day
MSA	Metropolitan Statistical Area
MYFP	Multi-year Financial Plan
O&M	Operations and Maintenance
OCCC	Owner Controlled Construction Changes
OPEB	Other Post-Employment Benefits
PRV	Pressure Reducing Valve
PZ	Pressure Zone
R&R	Renewal and Replacement
SAWS	San Antonio Water System
SCADA	Supervisory Control and Data Acquisition system
SIFMA	Securities Industry and Financial Markets Association
SSLGC	Schertz-Seguin Local Governmental Corporation
SSI	Sanitary sewer improvements
SSO	Sanitary sewer overflow
TCEQ	Texas Commission on Environmental Quality
TECP	Tax exempt commercial paper
TXDOT	Texas Department of Transportation
USFWS	U.S. Fish and Wildlife Service
WCTS	Wastewater collection and transmission system

WD	Water Delivery
WMP	Water Management Plan
WRC	Water Recycling Center
WRIP	Water Resources Integration Program
WW	Wastewater

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