San Antonio Water System

ANNUAL OPERATING BUDGET

& CAPITAL IMPROVEMENT PROGRAM

2023

SAN ANTONIO, TEXAS
FISCAL YEAR ENDING DECEMBER 31, 2023

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Annual Operating Budget
And
Capital Improvement Program

Fiscal Year Ending December 31, 2023

Douglas Evanson
Senior Vice President & Chief Financial Officer

Prepared By Financial Services & Engineering:
Cecilia Velasquez, Senior Director of Financial Services/Controller
Louis Lendman, Budget Manager
Vanessa Andrade, Financial Analyst
Patricia Arriola, Financial Analyst
Ben Benzaquen, Senior Financial Analyst
Leticia Castillo, Senior Revenue Analyst
Benjamin Kidd, Senior Financial Modeler
Robert Walker, Financial Analyst

Richard Donat, Senior Resource Analyst
Mark Schnur, Senior Resource Analyst

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GOVERNMENT FINANCE OFFICERS ASSOCIATION

Distinguished Budget Presentation Award

PRESENTED TO

San Antonio Water System
Texas

For the Fiscal Year Beginning

January 01, 2022

Christopher P. Morrill

Executive Director

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, 2022**. 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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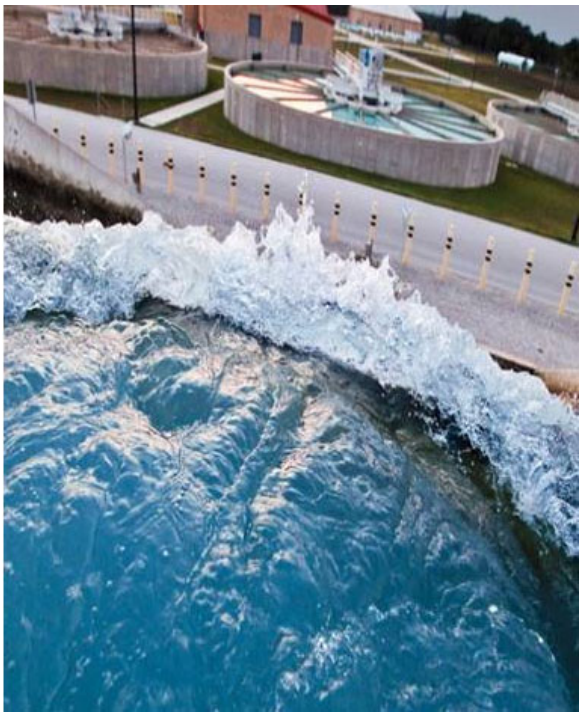

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CITY OF SAN ANTONIO
MAYOR AND CITY COUNCIL

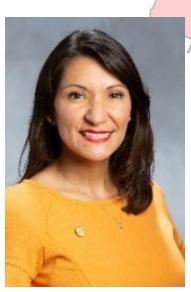
Ron Nirenberg
Mayor

Manny Peláez
District 8

John Courage
District 9

Ana Sandoval
District 7

Clayton Perry
District 10

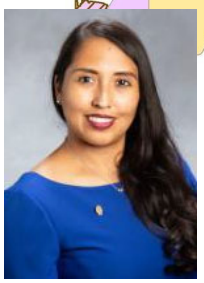


Melissa Cabello Havrda
District 6

Mario Bravo
District 1

Teri Castillo
District 5

Jalen McKee-Rodriguez
District 2



Dr. Adriana Rocha Garcia
District 4

Phyllis Viagran
District 3

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SAN ANTONIO WATER SYSTEM
BOARD OF TRUSTEES

Jelynne LeBlanc Jamison
Chairwoman

Edward Belmares
Trustee

Amy Hardberger
Assistant Secretary

David McGee
Vice Chairman

Eduardo Parra
Secretary

Marilu Reyna
Trustee

Mayor Ron Nirenberg
ex Officio

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SAN ANTONIO WATER SYSTEM
ORGANIZATION CHART

RATEPAYERS

MAYOR AND CITY COUNCIL

BOARD OF TRUSTEES

EXECUTIVE MANAGEMENT

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November 1, 2022

Ms. Jelynne LeBlanc Jamison, Chairwoman
Mr. David McGee, Vice Chairman
Mr. Eduardo Parra, Secretary
Ms. Amy Hardberger, Assistant Secretary
Mr. Edward Belmares, Trustee
Ms. Marilu Reyna, Trustee
Honorable Ron Nirenberg, Mayor

Honorable Mayor and Trustees:

I am pleased to present the 2023 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 (the Ordinance). Specifically, the Ordinance states that "The Board shall prepare an annual budget to serve as a tool in controlling and administering the management and operation of the System. The annual budget shall reflect an estimate of Gross Revenues and an estimate of the disposition of these revenues in accordance with the funds flow requirements of this ordinance."

The 2023 budget is consistent with the Board's Strategic Plan and achieves the following key objectives:

- Implementation of the 2022 Rate Advisory Committee's recommendations developed in connection with the 2022 Comprehensive Rate Study. These recommendations will:
    - Ensure that each of SAWS's customer classes will pay for the costs attributed to them as determined in the cost of service analysis.
    - Create a separate residential rate structure with reduced rates to replace the existing affordability discount program for low-income customers. The cost of the Uplift Assistance Program will be recovered from residential, general and irrigation class customers who are not enrolled in the program through a volumetric pass-through fee, which will be evaluated and adjusted annually, as needed.
    - Begin to close the cost recovery gap for recycled water customers with a five-year rate plan, which will include a 15% increase in 2023 and up to 10% increase per year from 2024 to 2027.
- The provision of expedited compensation adjustments in September 2022 to enhance retention and recruitment of employees to ensure service provision continuity in a tight labor market.
- Continued roll-out of the ConnectH2O Advanced Metering Infrastructure (AMI) project.
- Maintenance of infrastructure to ensure reliability of service and compliance with regulatory requirements.
- Continue implementation of technological advancements to increase productivity, enhance customer interactions and safeguard SAWS' assets.
- Balance the need for strong financial metrics and the maintenance of credit ratings with the affordability of our services.
- Continue to take steps to improve the financial condition of the chilled water core business through the implementation of a five-year rate plan, which will include a 12% increase in the demand charge for chilled water customers in 2023 with subsequent increases totaling approximately 38% during the period 2024-2027.

The 2023 budget balances revenue requirements for the fiscal year ending December 31, 2023, with available revenues and other funding sources. Highlights of the 2023 budget include:

- Assumes 2023 billed water usage of 69.5 billion gallons, which is 3.4% more than 2022 budgeted water usage and 6.8% more than 2021 budgeted water usage. The increase over 2022 budget levels reflects strong growth in the number of residential customers, and continued recovery from declines caused by the COVID-19 pandemic in commercial and industrial class usage. In addition, the budget assumes a 0.70% provision for uncollectible accounts, which was the average provision level prior to the pandemic.
- Assumes water customer growth of 2.1% and wastewater customer growth of approximately 2.0%. This is above SAWS' growth trend from 2015 to 2019 but less than what was experienced in 2020 and 2021.
- Includes estimated total Sources of Funds of $978.8 million, which is $38.1 million or 4.1% higher than the 2022 budgeted Sources of Funds. The estimated Sources of Funds for 2023 are comprised of the following:
  - Operating revenues totaling $854.8 million.
  - Non-Operating revenues totaling $23.9 million.
  - Capital recovery fees of $100.1 million.
- Provides for funding of $503.0 million in operations and maintenance costs, reflecting an increase of $31.7 million or 6.7% when compared to the 2022 Budget. The increase in O&M costs includes $18.3 million in increased employee salaries and benefits (which includes the expedited compensation adjustments implemented in September 2022); $4.7 million to pay for significant increases in the costs of chemicals used at the water recycling centers (WRCs) and H2Oaks; $3.6 million in additional water option costs; $2.8 million in additional maintenance expenses at Clouse WRC and Leon Creek WRC; $1.5 million in one-time contractual services expenses to include implementation of the new federal Lead and Copper Rule; $1.3 million to pay for increased fuel prices; and $500K in additional auto maintenance expenses.
- Assumes funding for $524.7 million in capital improvement projects:
  - $266.6 million in Wastewater projects.
  - $215.1 million in Water Delivery projects.
  - $25.2 million in Water Supply projects.
  - $17.8 million in Chilled Water projects.
- Provides for an increased level of investment in Water Delivery infrastructure for 2023, which is 52.2% higher than SAWS average annual investment over the last five years. The major driver consists of improvements to enhance the resiliency of the Water Delivery system during extreme weather events.
- Provides for $12.0 million in capital outlay funding for vehicles, equipment, and computer-related capital.
- Provides for $238.1 million in funding for debt service and expenses, which is $10.8 million or 4.8% higher than the 2022 budget for debt service and expenses.
- Projects 1.61 times debt coverage ratio on budgeted transfers to the Debt Service Fund for existing and projected debt, including obligations under the 2003 swap agreement.
- Includes a transfer of $33.6 million to the City of San Antonio to reflect SAWS 4.0% of gross revenues transfer payment to the City.

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 2023 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

Douglas P. Evanson
Senior Vice President/Chief Financial Officer

Budget Summary

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BUDGET SUMMARY

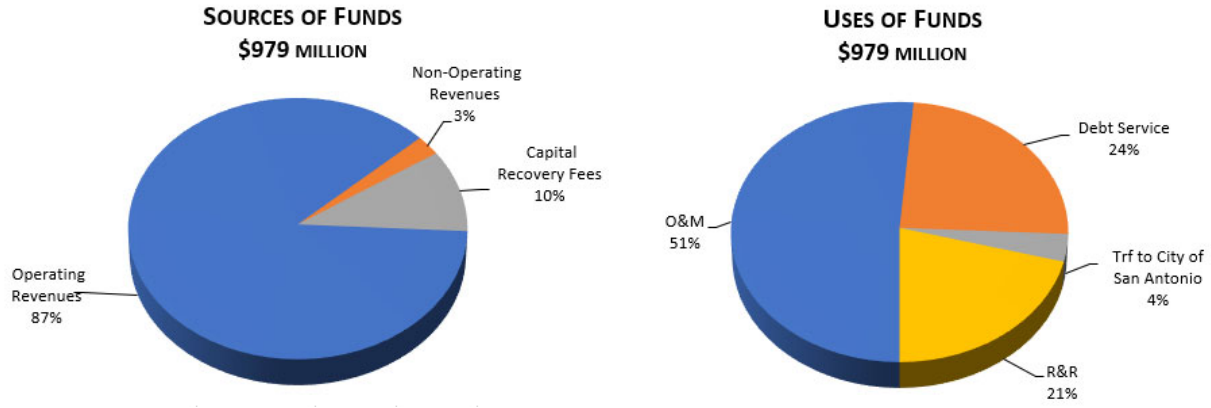
The 2023 Budget presents a comprehensive projection of San Antonio Water System (SAWS) operations from January 1, 2023 through December 31, 2023. This budget summary describes the key recommendations encompassing the 2023 Budget.

A summary of the 2023 revenue requirements, as well as the sources of funding to meet the requirements are provided in the table below.

	2022 Budget	2023 Budget	Change	% Change
Sources of Funds				
Operating Revenues	$ 833.8	$ 854.8	$ 21.0	2.5%
Non-Operating Revenues	6.8	23.9	17.1	251.5%
Capital Recovery Fees	100.1	100.1	-	0.0%
Total	**$ 940.7**	**$ 978.8**	**$ 38.1**	**4.1%**
Uses of Funds				
Operations and Maintenance	$ 471.3	$ 503.0	$ 31.7	6.7%
Debt Service and Expenses	227.3	238.1	10.8	4.8%
Transfer to City of San Antonio	32.2	33.6	1.4	4.3%
Available for Renewal and Replacement - Restricted	101.5	108.1	6.6	6.5%
Available for Renewal and Replacement - Unrestricted	108.4	96.0	(12.4)	-11.4%
Total	**$ 940.7**	**$ 978.8**	**$ 38.1**	**4.1%**

The 2023 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 the plan are:

- Implementation of the 2022 Rate Advisory Committee's recommendations developed in connection with the 2022 Comprehensive Rate Study,
- Continued implementation of infrastructure improvements to improve the resiliency of the water delivery and wastewater systems during extreme weather events such as those experienced in February 2021,
- Further deployment of the ConnectH2O Advanced Metering Infrastructure (AMI) improvements throughout the community, which started in 2022,
- Maintain compliance with the requirements of the Consent Decree entered into with the United States Environmental Protection Agency and Texas Commission on Environmental Quality relating to the reduction of sanitary sewer overflows (SSOs), and
- Continued repair and replacement of aging infrastructure as well as a continuation in the expansion of our infrastructure to serve San Antonio's growing population.



OPERATIONS AND MAINTENANCE (O&M) BUDGET HIGHLIGHTS

The 2023 O&M budget totals $503.0 million. This is an increase of $31.7 million, or 6.7% compared to $471.3 million in 2022.

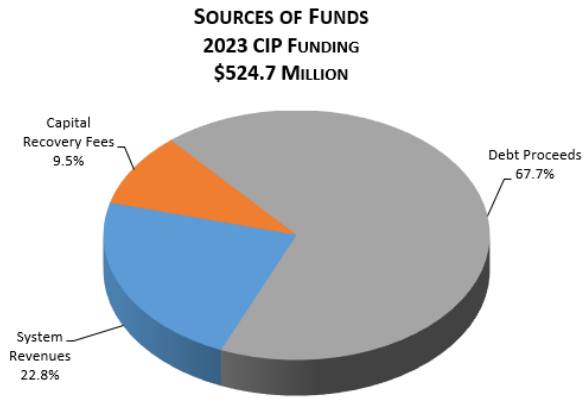
($ in millions)		
2022 O&M Budget		**$ 471.3**
Added Salaries/Benefits (Employee Retention & Insurance Costs)	$ 18.3	
Added Chemical Cost	4.7	
Added Water Option Cost	3.6	
Added Maintenance Costs (Tank Maint. & SMCWRC Equip. Maint.)	2.8	
Added Contractual Professional Services (Lead & Copper Rule)	1.5	
Added Motor Fuel Cost	1.3	
Reduced Utility Cost	(1.3)	
Other Costs	0.8	
Net Increase in O&M		**$ 31.7**
2023 O&M Budget		**$ 503.0**

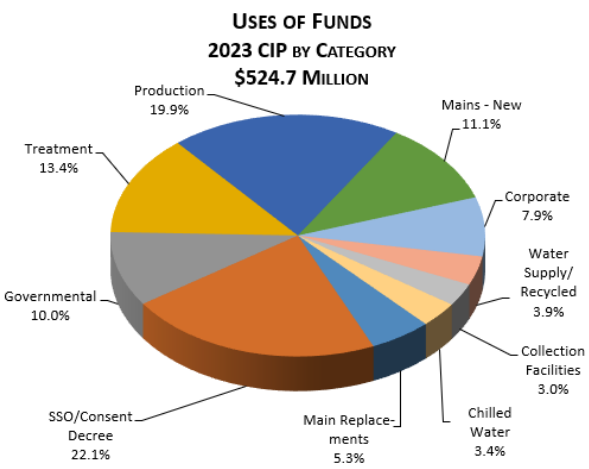
CAPITAL IMPROVEMENT PROGRAM (CIP) HIGHLIGHTS

The projected 2023 Capital Improvement Program (CIP) totals $524.7 million. The planned projects include:

- Improvements to address the recently completed wastewater Treatment Master Plan, which outlines the holistic needs for our wastewater treatment facilities over the next 30 years,
- Improvements necessary to comply with the federal Consent Decree requiring major capital improvements to address SSOs,
- Improvements to enhance the resiliency of SAWS infrastructure during future extreme weather events, such as those experienced by the community in February 2021,
- Improvements to enhance the reliability of the chilled water system infrastructure,
- Water and sewer main replacements and relocations that support City of San Antonio, Bexar County and Texas Department of Transportation (TXDOT) street, highway and drainage improvements, and
- New water and sewer mains in support of growth within SAWS service area.

The 2023 budget assumes approximately 32.3% of the funds necessary to complete the 2023 CIP will be provided by existing renewal and replacement funds, capital recovery fees and investment income with the remaining funds to be provided by the issuance of additional debt. The planned level of cash funding is somewhat below SAWS targeted level of 50% but reflects the overall level of budgeted CIP needs.





FIVE-YEAR CIP PROJECTION BY CATEGORY

Over the next five years, SAWS expects to invest $2.9 billion in capital improvements, a significant portion of which will be focused on improvements to our wastewater system in support of our obligations under the federal Consent Decree and to begin the work on the wastewater Treatment Master Plan. Increasing amounts are also projected to be invested in improvements to SAWS' water production and distribution infrastructure as well as to improve the resiliency of both water and sewer infrastructure during future extreme weather events such as those experienced by the community in February 2021.

Core Business/ Category ($ in millions)	2023	2024	2025	2026	2027	Total 2023-2027
Water Delivery						
Corporate	$ 4.2	$ 8.1	$ 4.5	$ 4.6	$ 4.7	$ 26.1
Governmental	31.5	27.0	27.7	28.5	29.3	144.1
Mains - New	35.6	66.6	56.1	35.7	47.8	241.8
Main Replacements	28.0	38.1	69.0	59.9	68.6	263.6
Production	104.6	103.8	86.9	62.5	96.7	454.5
Overhead	11.3	11.3	11.3	11.3	11.3	56.5
Water Delivery Total	**215.2**	**254.9**	**255.5**	**202.5**	**258.5**	**1,186.7**
Wastewater						
Corporate	9.8	13.9	10.4	10.7	11.0	55.8
Governmental	21.0	27.0	27.7	28.5	29.3	133.6
Mains - New	22.4	9.2	13.9	19.0	23.6	88.1
Main Replacements	115.7	129.3	68.6	83.3	107.4	504.2
Collection Facilities	15.9	-	14.0	-	13.5	43.4
Treatment	70.5	127.8	192.5	111.7	104.8	607.3
Overhead	11.3	11.3	11.3	11.3	11.3	56.3
Wastewater Total	**266.5**	**318.4**	**338.4**	**264.5**	**300.9**	**1,488.7**
Water Resources						
Corporate	1.1	0.8	0.8	0.9	0.9	4.4
Desalination	-	-	1.2	-	8.2	9.4
Aquifer Storage & Recovery	14.8	0.8	18.6	5.3	4.1	43.6
Overhead	3.8	3.8	3.8	3.8	3.8	19.0
Water Resources Total	**19.7**	**5.4**	**24.4**	**10.0**	**17.0**	**76.3**
Recycled Water	**5.5**	**27.0**	**1.0**	**9.4**	**9.8**	**52.8**
Chilled Water	**17.8**	**22.9**	**6.5**	**4.5**	**5.2**	**56.9**
Grand Total	**$ 524.7**	**$ 628.6**	**$ 625.8**	**$ 490.9**	**$ 591.4**	**$ 2,861.4**

IMPACT ON RATES

Rate Study

SAWS completes a rate study approximately every five years. This industry best practice helps ensure water and wastewater rates are:

- Based on an equitable allocation of those costs to each customer class (residential, commercial, etc.).
- A reflection of the values of the community served.

As part of the rate study process, SAWS convened a group of citizen volunteers — the Rate Advisory Committee, or RAC — to help evaluate proposed updates and changes to the rate structure. The committee's purpose was to:

- Represent and communicate the views of the community.
- Provide input on rate structure options and associated customer impacts.
- Formulate a recommendation for the SAWS Board of Trustees and the San Antonio City Council.

The RAC worked with SAWS staff and a nationally recognized rate consulting firm for approximately five months in public meetings to develop a set of fair and equitable rate structures.

One of the overarching goals of the 2023 Budget process is to continue full delivery of water and wastewater services with sufficient revenues from the rates recommended by the 2022 Rate Advisory Committee.

Rate Advisory Committee Recommendations

In summary, the recommended structures for water and wastewater services would reduce 83% of residential water bills (all bill reflecting monthly usage of 9,000 gallons or less) and 100% of residential wastewater bills. Additionally, the recommended rate structures propose the creation of a new Uplift Assistance Program (UAP) rate structure, which would lower 98% of the bills for SAWS UAP customers and replace the existing affordability discount program to acknowledge that low-income households may use more water due to larger household size and/or older plumbing. The UAP cost will be recovered from residential, general and irrigation class customers not enrolled in the UAP through separate water and wastewater pass-through fees.

In addition, the RAC recommended a five-year rate adjustment plan for recycled water customers, which included a 15% rate increase in 2023 followed by 10% annual rate increases for the next four years, 2024-2027. The recommended recycled water rate adjustments will begin to close the cost recovery gap, while still providing an affordable alternative to potable water. The maximum rate percentage adjustments for 2023-2027 are provided in the table below.

	2023	2024	2025	2026	2027
RAC Recommended Recycled Water Rate Adjustments (Monthly Service Availability Fees and Monthly Volume Charges)					
Edwards Exchange Customers	15.0%	10.0%	10.0%	10.0%	10.0%
Non-Edwards Exchange Customers	15.0%	10.0%	10.0%	10.0%	10.0%

Chilled Water

With respect to Chilled Water services, prior to 2022, there had been no increase in the demand charge rate for Downtown Chilled Water customers since 1999 and no increase in the Port San Antonio Chilled Water demand charge since 2005. In 2022, an increase of 10% was approved for both the Downton and Port San Antonio demand charges. SAWS engaged a consultant to develop a long-term business plan, which was used to inform the 2023 rate plan. To implement and adequately fund the capital improvements within the business plan, SAWS is implementing an additional rate increase of 12% for both Downtown and Port San Antonio customers in 2023 and 2024, followed by slightly lower maximum rate adjustments for 2025 to 2027, as outlined below.

	2023	2024	2025	2026	2027
Chilled Water Demand Rate Adjustment (per ton hour)					
% Change	**12.0%**	**12.0%**	**10.0%**	**8.0%**	**8.0%**
Downtown	$ 22.67	$ 25.39	$ 27.93	$ 30.16	$ 32.57
Port San Antonio	$ 25.28	$ 28.31	$ 31.14	$ 33.63	$ 36.32

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STRATEGIC PLANNING, GOALS & OBJECTIVES

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STRATEGIC PLANNING, GOALS & OBJECTIVES

STRATEGIC PLANNING

SAWS Board and executive management are committed to continuing to provide high quality water and sewer services to this growing community. The mission and vision statements, combined with SAWS' intrinsic core values, guide the activities, goals and objectives of SAWS leadership team and workforce.

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

Long-range planning is critical for SAWS to accomplish its mission. Strategic priorities include, but are not limited to, water supply needs, system expansion, infrastructure replacement, environmental sustainability, system reliability, technological development, innovation and financial strength.

SAWS is a part of the South Central Texas Regional Water Planning Group, Region L. This group is one of 16 Texas water-planning groups established by the Texas Water Development Board to develop regional water plans as required by Senate Bill 1 of the 75th Legislative Session. This group is tasked with developing a regional water plan, which identifies both short and long-term water supply needs and recommends water management strategies for addressing them. The regional plan provides for water conservation and drought management policies while ensuring the health of the public, the economy and the natural environment.

Additionally, SAWS updates its own Water Management Plan approximately every five years to specifically meet San Antonio's future water needs by incorporating changes in population, water demand patterns, regulations and water supply options. The combined impacts of geography, geology and climate impact both water supply and water demand in complex ways. SAWS deploys a variety of strategies to manage these challenges that include supply diversification, the addition of drought-firm supplies, and reducing weather-related water demand through focused water conservation initiatives. Acknowledging that the climate may become more challenging in the future, the 2017 Water Management Plan includes comprehensive preparations for historic drought scenarios, by merging the duration of the 1950's Drought of Record with the intensity of the more recent 2011-2014 drought.

In collaboration with the City of San Antonio and CPS Energy, SAWS is implementing new resiliency measures to account for changing climatic conditions and to further enhance its overall service reliability. SAWS also enforces the regulatory requirements established to protect regional water quality as well as its wastewater operations.

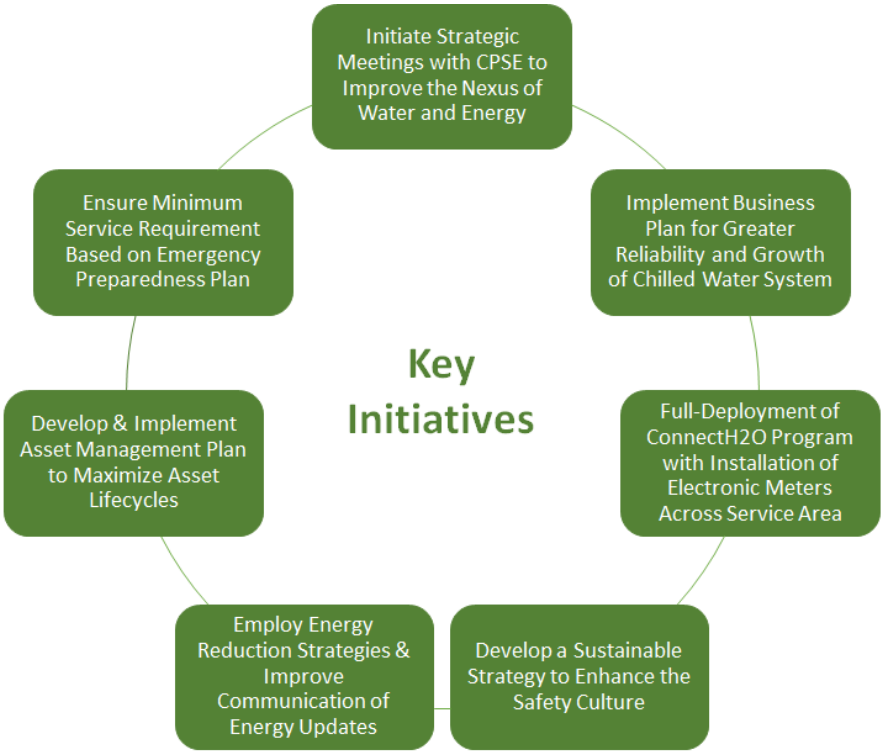
A crucial component of SAWS strategic plan is its comprehensive 20-year multi-year financial plan, which serves as the foundation for SAWS' overall planning efforts. Executive management evaluates the outcome scenarios to reach the optimum balance of limited resources with organizational needs and customer concerns. The strategic planning process guides the development of the budget and the five-year capital improvement plan to ensure that necessary resources are provided to implement the identified objectives.

Strategic Goals & Objectives

In 2019, SAWS undertook an initiative to track its strategic goals through a tiered metric program. In coordination with an outside consulting firm, the SAWS Board of Trustees and executive management developed the following six strategic goals. These goals serve as the foundation for all of SAWS' activities and support the budget objectives each year.

Customer Service	Achieving an unwavering focus on serving our customers and meeting their expectations
Community Accountability	Remaining accountable to our community through continued education and stakeholder engagement. Ensuring key partners stay informed, have a voice and are supportive of our strategic mission
Employee Engagement & Safety	Recruiting and retaining highly qualified talent and equipping them with the tools and skills needed to effectively meet the expectations of our customers
Financial Efficiency & Affordability	Efficiently managing finances to balance financial health with the impact on our community and our customers
Operational Excellence	Ensuring reliable water and wastewater services through efficient operations, assessment, repair, replacement and growth of our infrastructure
Water Stewardship	Effectively managing water resources under our stewardship, procuring sustainable water supplies, maintaining the highest conservation ethic and ensuring safe water processes

In addition to these overarching strategic goals, the process also requires the identification of current year "Key Initiatives", which ultimately shape the long-term future of SAWS. The 2023 key initiatives are as follows:



Tier 1 objectives were identified for the Strategic Goals. In addition, strategic measures were developed to assist in the evaluation of the degree to which the objectives were achieved.

For 2021, SAWS also began tracking Tier 2 objectives that were directly correlated to the performance of each respective Tier 1 objective. These Tier 2 objectives also serve as predictive indicators of any unfavorable data trends. Tier 2 objectives/metrics are reported to the Office of the CEO, while Tier 1 objectives/metrics are reported to the Board. Although Tier 2 metrics have been developed, historical data will be analyzed for five years in order to appropriately establish targets for these metrics.

Validation Process

In order to validate the achievement of the specific objectives, data gathering sessions were conducted to better understand the calculation sources, systems and processes as well as to review the documentation confirming the outcomes and the communication of these activities.

Goals of Validation

The validation effort had four goals:

- Validate the calculations were accurate, sound and reasonable.
- Validate the data in the system of record was verified, confirmed and reliable.
- Validate the data flow is traceable and documented.
- Validate the result is communicated and approved.

The Tier 1 and Tier 2 metrics, along with the actual levels achieved during 2021 as well as the metric thresholds and targets for 2022 and 2023 are reported in the following chart.

Strategic Goals	Objective	Department	Metrics	2021	2022 & 2023	
				Actual	Threshold	Target
Customer Service	**Tier 1**					
	Customer Satisfaction Score	Customer Service	Baselice & Associates Inc. Customer Survey Results	90.0%	80.0%	82.0%
	Tier 2					
	Complaints per 1,000 Accounts	Customer Service	(# of Escalated Service Requests plus Complaint emails) / (# of Residential Accounts + Non-Residential Accounts)	0.4%	TBD	TBD
Community Acccountability	**Tier 1**					
	Reputation Management	Communications & External Affairs	Baselice & Associates Inc. Customer Survey Results	72%	70%	73%
	Tier 2					
	Community Outreach	Communications & External Affairs	# of Community Outreach Events	128	TBD	TBD
Employee Engagement and Safety	**Tier 1**					
	Total Recordable Incident Rate	Human Resources	(# of OSHA Reportable Incidents * 200,000) / # of Productive Work Hours	3.91	4.14	3.00
	Employee Engagement	Human Resources	Energage Survey Results	54%	51%	53%
	Tier 2					
	Days Away, Restricted or Transferred	Human Resources	(# of OSHA Recordable injuries & illnesses resulting in Days Away * 200,000) / Hours Worked	2.50	TBD	TBD
	Survey Participation Rate	Human Resources	(# of Survey Responses / # of Surveys Sent)	70%	TBD	TBD
Financial Efficiency and Affordability	**Tier 1**					
	Service Affordability	Financial Services	(Annual Residential W&WW Rates * Rolling 5-Year Avg. W&WW Consumption + Fees) / Annual Median Household Income for Metro Area Served	44%	50.0%	45.0%
	Tier 2					
	Total O&M Cost of Water	Financial Services	Total O&M Cost of Potable Water Services / Average # of Accounts	$48.62	TBD	TBD
	Total O&M Cost of Wastewater	Financial Services	Total O&M Cost of Wastewater Services / Average # of Accounts	$19.79	TBD	TBD
Operational Excellence	**Tier 1**					
	Regulatory Compliance	Water Resources	# Unique Notice of Enforcements Issued by TCEQ, EPA and ECAP	0	1	0
	Water Quality and Reliability	Water Resources	# of Unique Boil Water Advisories issued by SAWS for more than 100 customer connections	0	3	2
	Wastewater Control (Sanitary Sewer Overflows SSOs)	Production & Treatment	(# of SSOs & Plant Permit Violations (Excluding Mitchell Lake & 0800 Violations) - Storm Events Exceeding Capacity)/Miles of Sewer Main *100	2.6	3.6	2.8
	Tier 2					
	Regulatory Compliance	Water Resources	# Unique Notice of Violations Issued by TCEQ, EPA and ECAP + Plant Permit Violations	44	TBD	TBD
	Distribution System Sampling	Water Resources	Positive coliform samples, within the SAWS public water systems	0.19%	TBD	TBD
	System Maintenance	Production & Treatment	# of Miles of WW Mains Cleaned	1,050	TBD	TBD
	Execution to Planned	Engineering	# of Miles of Condition & Capacity Projects Completed / # of Miles of Condition & Capacity Projects Planned	55.4%	TBD	TBD
Water Stewardship	**Tier 1**					
	Gallons per person per day (GPCD)	Water Resources	(Total System Input Volume / Retail Population Served) / 365	111	120	117
	Tier 2					
	Infrastructure Leak Index (ILI)	Water Resources	(5.4 * miles of mains) + (0.15 * # of active and inactive connections) * (Avg annual system pressure * 365) {AWWA/TWDB Audit Figures}	2.8	TBD	TBD

FUTURE ROADMAP

Results of the validation process were documented on the SAWS strategic scorecard and were ultimately reported to the SAWS Board of Trustees. Any processes that did not meet the threshold or were not able to be validated will be addressed and closely monitored. The program will continue to develop and evolve in the coming years. Next steps include periodic monitoring of the Tier 1 Metrics and Key Initiatives in addition to establishing targets for Tier 2 Metrics to ensure alignment with SAWS' overall strategic goals and objectives.

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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. 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 south of Dallas
- 200 miles west of 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. Based on the National Oceanic & Atmospheric Administration's 1991-2020 climate data for San Antonio, average high temperatures ranged from 63 degrees in January to the mid-90s in July and August. Summers are hot, with daily temperatures above 90 degrees over 80% of the time, and San Antonio experienced an average of 17 days over 100 degrees each year. During the same 30-year period, mild weather prevailed during the winter months, with daily low temperatures below freezing occurring on average 14 days per year. Average yearly rainfall was approximately 32 inches, with the extremes ranging from 10.11 inches in 1917 to 52.28 inches in 1973.

POPULATION

According to the 2021 American Community Survey by the U.S. Census Bureau, the City of San Antonio is the seventh most populous city in the United States and the second most populous city in Texas.

From 2020 to 2021:

- The City of San Antonio had the largest numeric and percentage population growth of any of the top 10 U.S. cities in terms of population with an increase of 13,626 new residents and percentage increase of 1.0%.
- The San Antonio-New Braunfels Metropolitan Statistical Area (MSA), which includes Atascosa, Bandera, Bexar, Comal, Guadalupe, Kendall, Medina, and Wilson counties, was estimated to contain 2.6 million people in 2021 with the eighth largest numeric growth among U.S. MSA's.
- The San Antonio MSA ranked twenty-fifth in population among national MSAs and third among those in Texas. The MSA experienced a higher percentage population growth in 2021 than either of the Dallas or Houston MSAs.

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

Year	City of San Antonio	Bexar County	San Antonio-New Braunfels MSA
2021	1,451,853	2,028,236	2,601,788
2020	1,438,227	2,009,324	2,558,143
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

Beginning in 2000, the number of counties in the MSA was increased from four to eight: Atascosa, Bandera, Kendall and Medina counties were added to Bexar, Comal, Guadalupe and Wilson counties.

Source: U.S. Census Bureau

EDUCATION

Within 50 miles of San Antonio, 15 colleges and universities offer degrees in all major fields of study and educate over 165,000 students.

Institution	Certified Fall 2020	Certified Fall 2021	Change	Percent Change
Texas State University	37,812	37,864	52	0.14%
University of Texas at San Antonio	34,402	34,177	(225)	-0.65%
San Antonio College	19,231	17,677	(1,554)	-8.08%
Northwest Vista College	18,542	16,604	(1,938)	-10.45%
St. Philip's Collecge	12,696	12,455	(241)	-1.90%
Palo Alto College	11,193	10,559	(634)	-5.66%
University of the Incarnate Word	7,103	6,891	(212)	-2.98%
Texas A&M University-San Antonio	6,741	6,858	117	1.74%
Northeast Lakeview College	6,657	6,704	47	0.71%
Univ. of Tex. Health Science Ctr. at San Antonio	3,439	3,463	24	0.70%
St. Mary's University	2,748	3,419	671	24.42%
Trinity University	2,677	2,745	68	2.54%
Wayland Baptist University	2,957	2,563	(394)	-13.32%
Our Lady of the Lake University	2,771	2,550	(221)	-7.98%
Texas Lutheran University	1,498	1,435	(63)	-4.21%
Total	**170,467**	**165,964**	**(4,503)**	**-2.64%**

Source: Texas Higher Education Coordinating Board

ECONOMY

The local economy has significantly rebounded in 2021 and in the first half of 2022 from the disruptions caused by the COVID-19 pandemic in 2020 and 2021. Overall, as of July 2022, total non-farm employment in the MSA has increased by 67,500 jobs or 6.5% since December 2020. The unemployment rate within the MSA declined from 13.1% in April of 2020 to 6.0% by the end of 2020 and has further declined to 4.0% in July 2022.

San Antonio's economy going forward will likely be impacted by somewhat challenging national economic trends. Economic activity across the U.S. has cooled down especially during the first two quarters of 2022. Inflation continues to be a significant area of concern having risen 13.7% from December 2020 through July 2022, after only rising 1.4% from December 2019 through December 2020. In August 2022, the U.S. Bureau of Economic Analysis (BEA) reported that national Real Gross Domestic Product (Real GDP) decreased 1.6% in first quarter 2022 and 0.6% in the second quarter. The smaller decrease in the second quarter 2022 reflected an upturn in exports offset, in part, by a slowdown in consumer spending and private inventory investment.

Despite the strong national economic rebound during 2021, in August 2022, the Conference Board (Board) forecasted that economic weakness would intensify and in the second half of 2022 with expectations for a recession to begin prior to the end of the year. While the Board expects the coming recession to be relatively short and somewhat mild, the U.S. economy will likely emerge from a slowdown in 2023 still grappling with inflation well above the Federal Reserve's 2-percent target.

Nevertheless, good news for the national economy can also be found in the fact that the U.S. unemployment rate stands at 5.7% as of July 2022 compared to 6.7% as of December 2020 and to 14.8% at the height of the pandemic in April 2020.

Local economic activity has improved dramatically aided by the fact that San Antonio boasts a widely diversified group of industries that have major operations in the city, including aerospace, bioscience/healthcare, environmental/green technology, financial services, information technology/cybersecurity, manufacturing and military/defense.

EMPLOYMENT

The San Antonio economy experienced consistent, sustained job growth from 2012 until the onset of the pandemic in 2020. In the first six months of 2022, total MSA employment has grown by 22,000 jobs or 2.0%. Overall, jobs increased by 22.1% since the end of 2012. Consequently, with the strength of its economic sectors and robust growth, San Antonio remains well positioned to mitigate adverse effects from a potential economic downturn.

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. Most of the 9,900 jobs (as of a 2022 report from the Greater SATX Regional Economic Partnership) 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, pharmaceutical and medical device manufacturing. The Greater SATX Regional Economic Partnership states that one out of every six workers are in the Bioscience/ Healthcare sector. In the Hospitals and Ambulatory Health Care Services employment subsectors, there are 103,800 jobs in the local area as of the end of July 2022 increasing by 8,100 persons since the end of 2021 and exceeding the previous record number of employed in 2019 (100,600). There has been a 25.2% increase in employment in these subsectors since the end of 2012.

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. The Greater SATX Regional Economic Partnership calls the local financial services sector the fastest growing industry in San Antonio. This sector employed 98,700 persons as of the end of July 2022 increasing by 2,900 persons since the end of 2021. There has been a 29.4% increase in Financial Services employment since the end of 2012.

INFORMATION TECHNOLOGY/CYBERSECURITY

The Information Technology/Cybersecurity industry plays a stable employment role in San Antonio. According to the Greater San Antonio Chamber of Commerce, San Antonio is the second largest cyber hub in the United States. During the period from 2011 to 2019, the number of local jobs has fluctuated around 20,000. As of July 2022, the sector had 18,100 jobs reflecting a 5.2% increase since December 2021.

MANUFACTURING

San Antonio has a large diverse manufacturing industry, with representation from every major sector of U.S. manufacturing present in the community, including materials and electricity, equipment and metal, transportation-related and diversified products. This sector employs 54,200 people in the San Antonio area as of July 2022 representing a 2.5% increase since December 2021. This sector has grown by 15.3% overall since the end of 2012.

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). According to the Texas Comptroller, in 2019, JBSA contributed at least $41.3 billion to the Texas economy. In 2019, JBSA directly employed over 73,700, directly and indirectly provided jobs for almost 211,000 persons, and generated an annual disposable personal income of approximately $13 billion.

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 1, 2017, SAWS completed all legally required steps to fully integrate the operations and customers of the former Bexar Metropolitan Water District (BexarMet) with SAWS. The final step of full integration included the application of consistent rates for both existing SAWS and former BexarMet customers.

GOVERNANCE

San Antonio Water System is a public utility owned by the City of San Antonio. 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 AREA

WATER DELIVERY AND WASTEWATER

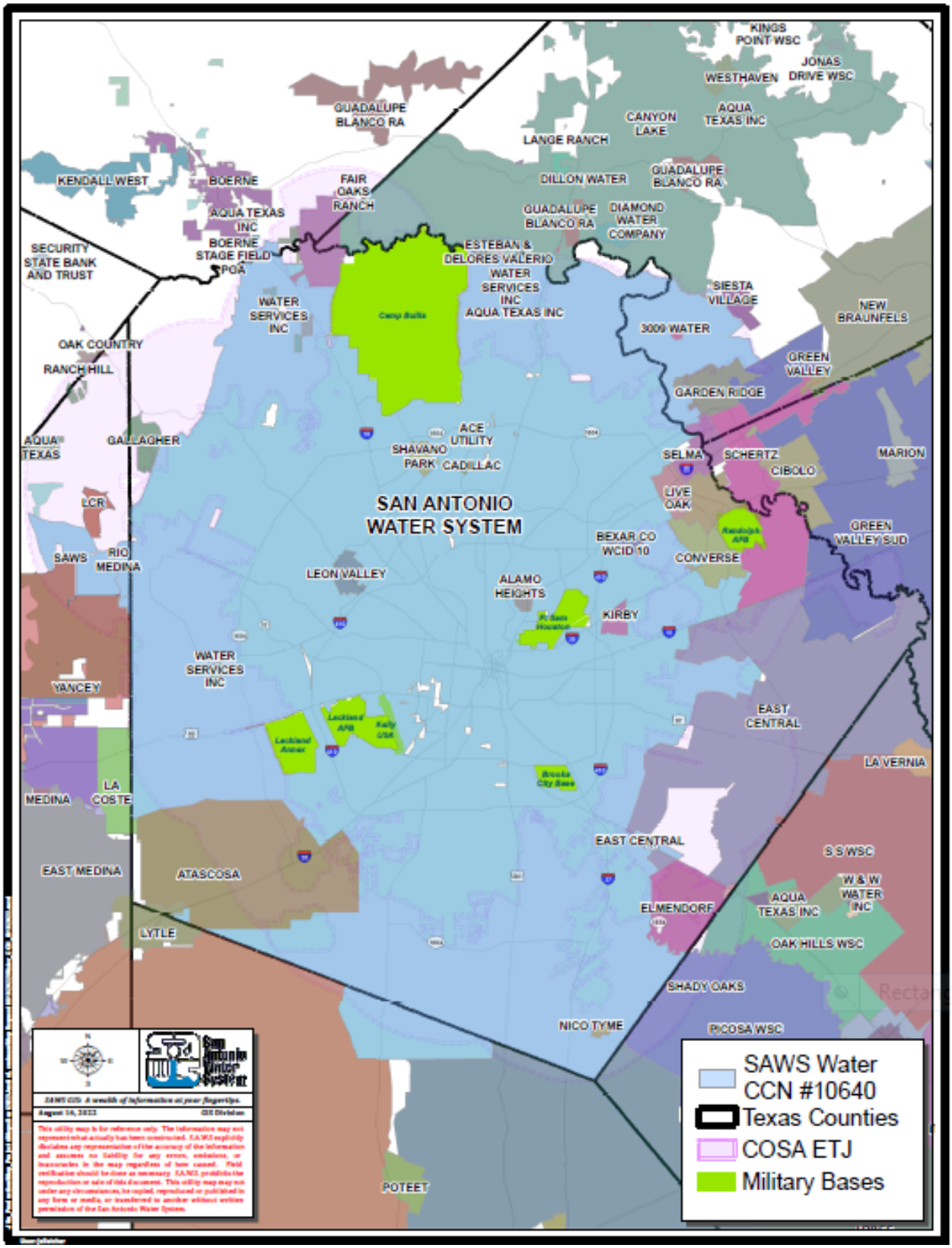
SAWS' water delivery service area currently extends over approximately 929 square miles, making it the largest water purveyor in Bexar County. The service area includes most of Bexar County, several suburban municipalities and parts of adjacent counties. In addition to serving its own retail customers, SAWS also provides wholesale water to four smaller utility systems within this area.

SAWS provides potable water service to residential, commercial, multifamily, industrial, and wholesale accounts. As of August 31, 2022, the water delivery system provides potable water service to 554,309 customer connections.

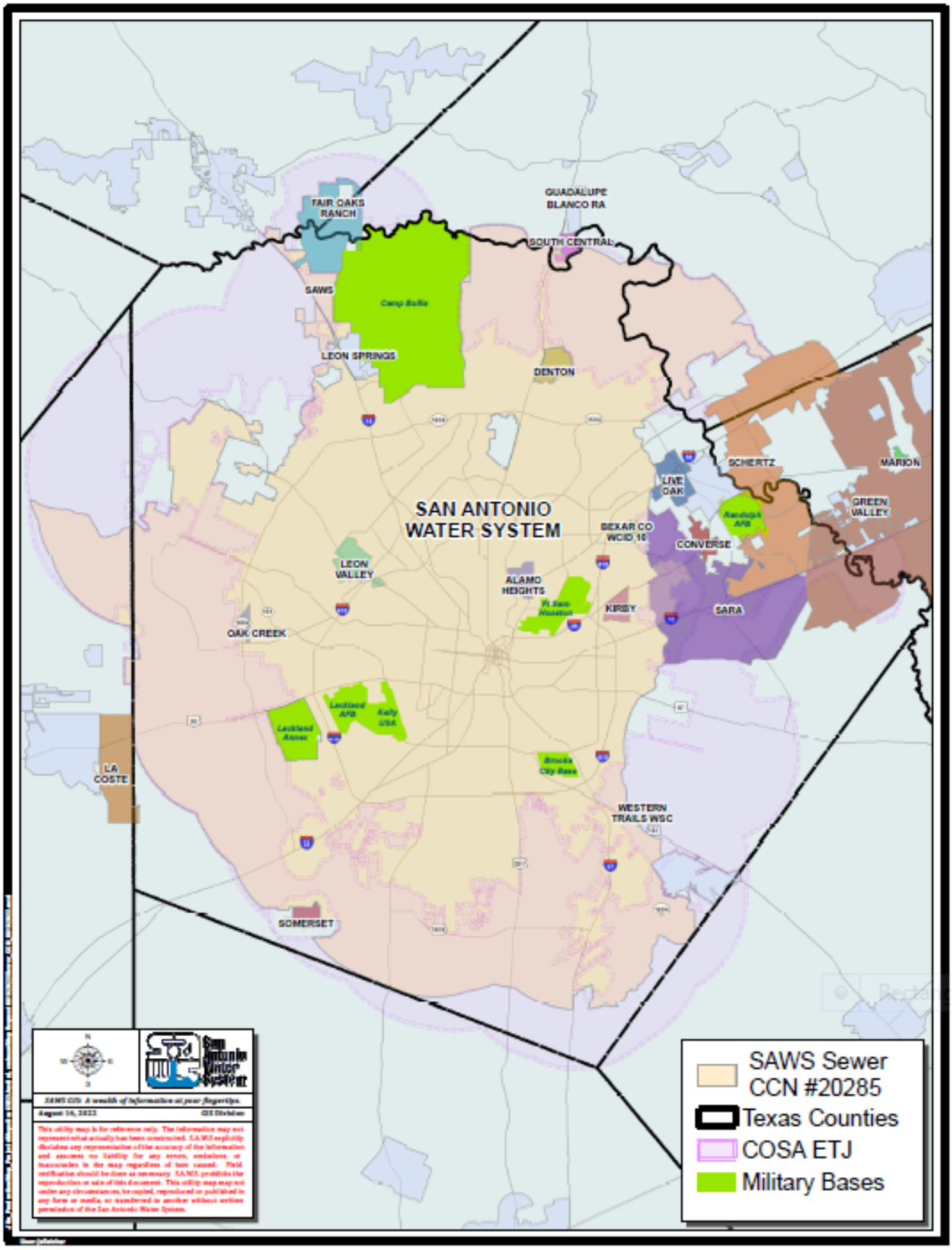
The water delivery system currently utilizes 120 elevated and ground storage tanks with a combined storage capacity of 308.4 million gallons. The system also includes the water treatment plant operating at the Agua Vista Station which receives, treats, and transmits water received from the Vista Ridge Pipeline Project. As of August 31, 2022, SAWS had installed 7,607 miles of water lines, ranging in size from 1 inch to 96 inches in diameter and 45,106 fire hydrants were in service.

A somewhat different area, following natural watersheds, is defined for SAWS' wastewater collection and treatment service area, which covers an area of approximately 854 square miles. 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. As of August 31, 2022, SAWS provides wastewater services to 495,781 customer connections, including 12 wholesale sewer connections through a collection system composed of 5,867 miles of sewer mains and three major treatment plants: Steven M. Clouse Water Recycling Center (formerly called Dos Rios), Leon Creek Water Recycling Center and Medio Creek Water Recycling Center.

Water Service Area



Wastewater Service Area

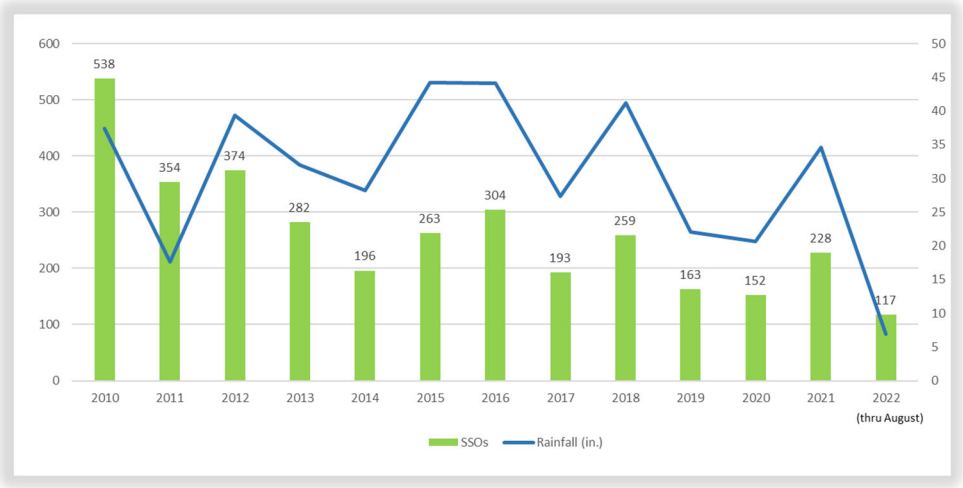


CHILLED WATER SYSTEM

SAWS owns, operates and maintains four thermal energy plants providing chilled water services to governmental and private entities. Two of the plants, located in the City of San Antonio's downtown area, provide chilled water to twenty-one customers, including various City of San Antonio 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, these two plants also provide chilled water service to a number of major hotels and other private facilities in the downtown area. The other two thermal energy plants, owned and operated by SAWS, are located at the Port San Antonio industrial area, and provide chilled water to three large industrial customers as well as U.S. Air Force and Port San Antonio facilities

SEWER MANAGEMENT

In June 2013, SAWS approved a settlement with the U.S. Environmental Protection Agency (EPA) that required additional work over the subsequent 10 to 12-year period 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 required. The targeted replacement and rehabilitation program has been specifically tailored based on extensive condition assessments. SAWS has significantly reduced the number of SSOs as result of efforts made since 2010 to clean and replace sewer pipelines. The following chart shows the number of SSOs since 2010. In 2019, a record low 163 SSOs were experienced. This performance was followed with an even lower total of 152 SSOs in 2020. As a result of large rain events and the impacts of Winter Storm Uri, total SSOs in 2021 exceeded the 2020 total. Reflecting the lower-than-normal rainfall in 2022, only 117 SSOs have been recorded through August 31st.

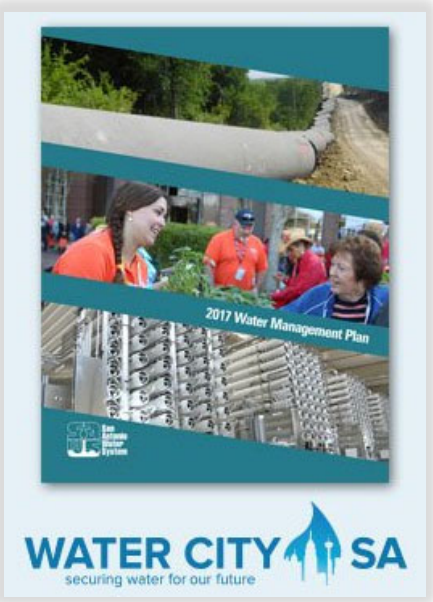


The 2023 O&M budget includes $23.7 million in operating costs related to program management, televising and cleaning sewer mains, capacity assessment activities, and repair of sewer infrastructure. Additionally, $115.7 million in capital project investments are planned in 2023 to continue to rehabilitate aging sewer infrastructure and address system capacity issues.

SAWS has performed its obligations and has met the requirements of the consent decree since its 2013 inception. Most of the consent decree requirements are expected to be completed by 2025, as originally required. A major modification to the consent decree was approved in August 2021 for the extension of the deadline for the W-9 and W-52 projects to July 2027. Design contracts for these projects were awarded in December 2021 and the construction contract will be awarded in 2024. The Rilling Road Flow Management Facility project is currently under design and construction will be awarded in 2023. This project has a consent decree deadline of July 2025. SAWS will continue implementing best practices after the consent decree requirements are met to ensure proper management of the sewer system going forward.

WATER SUPPLY

Historically, San Antonio obtained nearly all 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. These powers include increasing the recharge of and limiting withdrawals from the Edwards Aquifer through a permitting system that ensures continuous minimum spring flows of the Comal Springs (in New Braunfels) and the San Marcos Springs 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, to fund water supply development and water quality protection.

The *1998 Water Resource Plan* has been updated periodically. The *2017 Water Management Plan* is the last completed version of SAWS long range planning efforts. The 2017 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. As this plan is updated approximately once every five years, this process is currently underway with anticipated completion in early 2023.

CURRENT SOURCES OF WATER SUPPLY

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

Available Sources of Water Supply Budgeted for 2023 Under Non-Drought Conditions	
Source	**Acre-Feet**
Edwards Aquifer	258,304
Recycled Water (CPS Energy Power Plants	50,000
Vista Ridge	50,000
Recycled Water (Direct Customers)	25,000
Trinity Aquifer	12,156
Regional Carrizo	12,188
Brackish Groundwater Desalination	11,200
Local Carrizo	9,900
Canyon Lake	7,400
Canyon Regional Water Authority	6,300
Medina Surface Water	-
Total	**442,448**

EDWARDS AQUIFER

The largest amount of SAWS water holdings is Edwards Aquifer permitted groundwater withdrawal rights. In 2023, SAWS has budgeted for a total inventory of 258,304 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%. The following table shows annual cutbacks and average aquifer level for the last five years.

Year	EAA Cutback	J-17 Index Well Average Level
2018	8.68%	664.3'
2019	0.00%	677.2'
2020	6.25%	664.5'
2021	5.71%	662.8'
2022	14.74%	647.8'*

* Year to date average as of August 31, 2022

As of August 31, 2022, the J-17 Index Well was at 634.8' mean sea level (msl) and was slightly decreasing due to demand.

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 customer demands. As of August 31, 2022, 184,264 acre-feet of Edwards Aquifer water had been stored in the 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. Over a four-year period, these entities 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 direct recycled water system in the United States and is permitted to sell Type I (high quality) recycled water from its water recycling centers (formerly known as wastewater treatment plants). The water recycling program supply is 25,000 acre-feet per year of recycled water to serve commercial and industrial businesses in the City. This water recycling system was originally comprised of two transmission lines, running north and south on the eastern and western sides of the city. 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 140 customer connections. Recycled water is being delivered for industrial processes, cooling towers, irrigation of golf courses, landscapes 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 river and creek flows. The result has been significant and lasting environmental improvements for the aquatic ecosystems in these streams.

Under a recycled water supply contract, SAWS also provides up to 50,000 acre-feet of water to San Antonio's municipally owned electric and gas utility, CPS Energy. This water is discharged by San Antonio's three Water Recycling Centers and then flows to a downstream location on the San Antonio River where CPS Energy diverts the water into Braunig and Calaveras Lakes to provide cooling water for its nearby power plants.

Recently, SAWS and the City finalized a renegotiated recycled water agreement providing for continued discharge of recycled water into the San Antonio River and Salado Creek. Under the new agreement, which replaces one reached in 2001, approximately 1,275 acre-feet of under-utilized City and 3rd party operator recycled water will be returned to SAWS' recycled water supply plus an additional 1,000 acre-feet from sites that did not get connected under the original 2001 agreement. Also, the recycled water discharge volume to the San Antonio River and Salado Creek has been increased from 5,823 acre-feet to 6,590 acre-feet. SAWS will now collect payment from the City for such discharges.

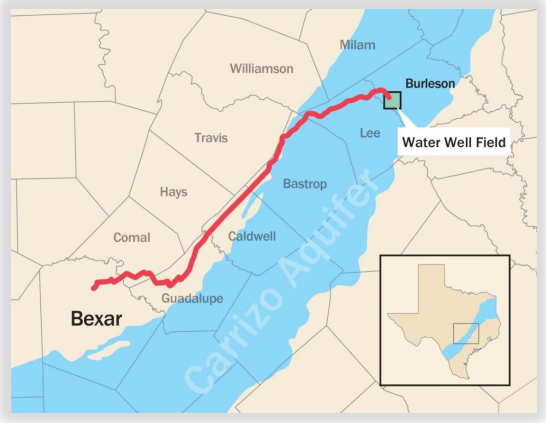
Regional Carrizo

As part of diversifying SAWS' water portfolio, a regional partnership was entered into with Schertz-Seguin Local Government Corporation (SSLGC). SAWS' Regional Carrizo project is located in Gonzales County, approximately 50 miles from San Antonio. This partnership with SSLGC allows SAWS to utilize available capacity in an existing pipeline and water treatment plant owned and operated by SSLGC. In 2023, SAWS has budgeted to produce the full permitted allotment of 11,688 acre-feet of water from the Buckhorn well field and plans to purchase an additional 500 acre-feet of water from SSLGC.

Brackish Groundwater Desalination

The Brackish Groundwater Desalination (BGD) plant produces brackish water from the Wilcox Aquifer in southern Bexar County and treats it to drinking water quality standards. The initial phase of the plant has the capacity to provide up to 11,200 acre-feet per year of drought-proof desalinated groundwater to San Antonio's taps. Current plans provide for future phases to be constructed around the 2040 timeframe and will eventually bring the total supply from this program to 33,600 acre-feet per year. The desalination plant is located at the SAWS H_2Oaks Center in south Bexar County, where three sources of water are managed: Brackish Groundwater, Aquifer Storage and Recovery (ASR) and Local Carrizo. The Center also provides research facilities for college/university students to help improve water technology and processes and offers educational tours to the public.

Vista Ridge – Regional Water Supply



In October 2014, the City Council adopted an ordinance, approving the execution of a Water Transmission and Purchase Agreement (WTPA) between the City, acting by and through SAWS, and Vista Ridge LLC to provide up to

50,000 acre-feet of potable water per year for an initial period of 30 years. The Vista Ridge Pipeline Project represents a significant diversification of SAWS' water sources as the water provided during its first full year of operations (2021) accounted for approximately 20% of the potable water distributed by SAWS.

In May 2016, SAWS exercised its contractual right to fix the Capital and Raw Groundwater Unit Price (CRGWUP) under the WTPA based on the methodology provided for therein. This action served to lock in the price of the water component of SAWS annual payment requirement at $1,606 per acre foot for the entire 30-year term of the WTPA. The project achieved financial close in November 2016.

Vista Ridge, LLC constructed well fields to withdraw water from the Carrizo and Simsboro aquifers in Burleson County, Texas pursuant to currently held long-term leases with landowners and constructed a 142-mile pipeline from this well field to northern Bexar County. The pipeline was connected to the SAWS distribution system at the Agua Vista Station, the delivery point in northern Bexar County, to treat the Vista Ridge water. Construction was completed in early 2020.

Vista Ridge LLC began delivering water to SAWS on April 15, 2020. The start of water delivery initiated the 30-year operational phase, during which period SAWS is obligated to pay for water (up to 50,000 acre-feet annually) made available by Vista Ridge LLC. The budgeted operating and maintenance costs for 2022 and 2023 are listed in the table below. In 2023, a total of $105.9 million is budgeted for 50,000-acre feet (approximately $2,118 per acre foot). In 2023, in addition to the $80.3 million for contractually required water payments (based on $1,606 CRGWUP), SAWS will pay an estimated $12.5 million in operations and maintenance costs associated with the production and delivery of the Project water, as a direct pass-through under the WTPA, approximately $9.1 million for utility expenses and approximately $3.0 million to support operations of its Agua Vista Station.

Vista Ridge and Agua Vista Budgets
$ in Millions

Facility	Expenditure	2022	2023	Difference
Vista Ridge Pipeline	Water Payment	$ 80.30	$ 80.30	$ -
	O&M Payment	11.30	12.52	1.22
	Staffing Cost	0.08	0.08	0.00
	Utilities Cost	8.18	9.14	0.96
	Other Costs	0.38	0.84	0.46
Subtotal		**$ 100.24**	**$ 102.88**	**$ 2.64**
Agua Vista Station	Staffing Cost	1.03	0.86	$ (0.17)
	Utilities Cost	0.64	0.39	(0.25)
	Chemical Cost	1.28	1.28	-
	Other Costs	0.38	0.48	0.10
Subtotal		**$ 3.33**	**$ 3.01**	**$ (0.32)**
Totals		**$ 103.57**	**$ 105.89**	**$ 2.31**

At the end of the 30-year Operational Phase, the well field, pipeline and all related infrastructure will transfer to SAWS at no additional cost. Under an agreement with Blue Water Vista Ridge, LLC, the owner of the groundwater leases, SAWS will have the ability to continue production for an additional 30-year term, with the cost of the water at the end of the WTPA being tied to the costs of then-prevailing two-year Edwards Aquifer water leases.

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. The 2017 Water Management Plan assumes that conservation efforts will reduce customer demand from 117 gallons per capita per day (GPCD) to 88 GPCD by 2070. The GPCD outcomes have been in line with forecasted targets and goals. These long-term conservation targets are being reviewed during the ongoing process to update the Water Management Plan later in 2022, discussed previously.

INTEGRATION

Western Pipeline

The Western Pipeline was designed to provide the ability to integrate water produced from the various sources at the H_2Oaks Center and deliver that water to the very rapidly developing western portions of Bexar County. Phase I of the pipeline was completed in 2016 and includes 28 miles of large capacity water transmission pipeline and new pump stations at the H_2Oaks Center as well as SAWS' Old Pearsall Pump Station. Phase II was completed in October 2022 and extends the pipeline an additional 17 miles to SAWS' Anderson Pump Station on the far west side of San Antonio. With the addition of the Anderson Pump Station facility as a water integration point, the rated capacity of both phases of the pipeline is up to 75 million gallons per day (MGD).

Central Water Integration Pipeline

The Central Water Integration Pipeline (CWIP) project was designed to facilitate the conditioning, conveyance and distribution of the Vista Ridge water throughout the SAWS water transmission and distribution system. The pipeline, along with the construction of the Agua Vista Station was completed in 2020. The Agua Vista Station includes the tanks to receive up to 50,000 acre-feet per year of water from the Vista Ridge Pipeline Project as well as the treatment plant to condition the received water for the seamless transition and distribution through SAWS pipelines. The capital cost of the CWIP program, including all engineering, construction, and easement acquisition, was approximately $213 million.

Completion of the CWIP project included a number of benefits, including the automation of many existing water distribution facilities, rehabilitation of existing facilities to improve system reliability, and elimination of outdated former BexarMet facilities in need of major renovations.

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 an enterprise 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 Statements 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' water meters are read and bills are prepared monthly based on billing cycles. SAWS uses historical information to estimate and record earned revenue not yet billed at the end of the year.

REVENUE AND EXPENSE CLASSIFICATION

Enterprise funds distinguish operating revenues and expenses from non-operating items. Operating revenues and expenses generally result from providing services in connection with an enterprise fund's principal ongoing operations. The principal operating revenues of SAWS are charges to customers for water supply, water delivery, wastewater and chilled water 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 to the SAWS Board of Trustees 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 also 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, capital asset impairments and the Vista Ridge Pipeline Project. Contributions to employee retirement plans, both pension and post-retirement medical, are budgeted on a cash rather than accrual basis. Additionally, SAWS regularly provides for depreciation and amortization of its capital assets and periodically reviews such capital assets for possible impairment. Employee benefit expenses that do not require a current outlay of cash, depreciation and amortization and capital asset write-offs do not meet the definition of Operations and Maintenance Expense in accordance with Ordinance No. 76586, as they do not require current period expenditures of cash. The Vista Ridge Pipeline Project water payment, along with the related operations and maintenance and utility costs are budgeted entirely as Operations and Maintenance Expenses due to the fact that SAWS is only required to pay for water made available at the delivery point in north Bexar County. However, for accounting purposes, the infrastructure payment portion of the water payment will be treated as a financed purchase with the water lease portion being treated as an operating expense.

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 periodically reviewed by the CFO and the Executive Management Team.

All funds are appropriated in the 2023 Operating Budget. Capital Improvement Program financial projections are not appropriated. Any amendments to the 2023 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.

CORE BUSINESSES

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

- Water Delivery – the functions of distributing water to the customer
- Water Supply – the functions related to the development and provision of additional water supply
- 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

When an expenditure is made for purposes for which both restricted and unrestricted resources are available, it is SAWS policy to choose the appropriate resource based on the availability of resources and funding goals established by management for those expenditures.

CASH EQUIVALENTS

SAWS considers investments with an original maturity of three months or less at the time of purchase 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. Under the provisions of GASB Statement No. 31, 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. All other 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. Inventories are reported in the Statements of Net Position in Other Current Assets.

Restricted Assets

Assets restricted by City Ordinance (which incorporates the bond indentures) to pay current liabilities are reported as current assets in the Statements 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 Statements 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 and direct internal costs. As of 2020, however, interest expense during the construction period is no longer capitalized as part of the cost of capital assets. Included in capital assets are intangible assets, which consist of purchased water rights, 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 estimated acquisition value at date of acceptance. Maintenance, repairs, and minor renewals are charged to operating expense; major plant replacements are capitalized. Capital assets are depreciated 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 over an estimated average useful life of 50 years. Mains are included in the Distribution and Transmission System asset category. 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. As discussed previously, SAWS does not formally budget for depreciation and amortization.

Capital Contributions

Capital Contributions consist of plant contributions from developers, capital recovery fees, contributions in aid of construction and grant proceeds received from governmental agencies for facility expansion. Capital Contributions are recognized in the Statements 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. By Texas law, these fees are to be used for capital expenditures that expand infrastructure capacity or to reimburse SAWS for the cost associated with existing excess 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 abates future capital recovery fees due from the developer equal to the acquisition value of the excess capacity of the infrastructure contributed. These abatements are conditional based on the type of development and in certain instances, time requirements and geographic restrictions.

Contributions in aid of construction are funds advanced by developers to SAWS for the construction of certain water, sewer or other assets for the benefit of the developer.

Compensated Absences

It is SAWS' policy to accrue earned but unused employee vacation pay as well as the employer portion of Social Security taxes and required employer pension contributions related to the accrued vacation pay. Sick leave is not accrued since 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 is 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.

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:

A. Pay Operations and Maintenance expenses;
B. Produce Pledged Revenues sufficient to pay:
    1) 1.25 times the senior lien annual debt service requirements and
    2) The amounts required to be deposited in any reserve fund created for the payment and security of senior lien obligations;
C. Pay outstanding junior lien and subordinate lien debt service obligations;
D. Fund payments to the City of San Antonio; and
E. Pay any other debt payable from the net revenues.

Funds Flow

City Ordinance No. 75686 adopted April 30, 1992 requires that Gross Revenues of the System be applied in sequence to:

1. Pay Operations and Maintenance Expenses, including a two-month operating reserve
2. Deposit into Debt Service fund the amount required for:
    a. Senior Lien debt obligations and Reserve Fund obligations
    b. Junior Lien debt obligations
    c. Subordinate Lien debt obligations
    d. Inferior Lien debt obligations
3. Equal payments to the City of San Antonio's General Fund and to SAWS Renewal and Replacement Fund

Payments to the City of San Antonio 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% of Gross Revenues. Since the inception of SAWS in 1992, the transfer to the City had been set at 2.7% of Gross Revenues. After consultation with SAWS, the City increased the percentage to 4.0% in late 2019. Payments to the City are reported as non-operating expense in the Statements of Revenues, Expenses and Changes in Net Position.

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 operations and maintenance 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 operations and maintenance 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

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 investment earnings thereon. 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
2. Paying the costs of unexpected, extraordinary repairs or replacements for which System Funds are not available
3. Paying unexpected or extraordinary expenses of operations and maintenance 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
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 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, contributions in aid of construction 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

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. SAWS currently targets to maintain Net Revenues equal to at least 2.00 times Annual Senior Lien Debt Service and 1.70 to 1.75 times Total Annual Debt Service to ensure the required debt coverage in times of revenue fluctuations.
- SAWS shall analyze each new debt issue to ensure compliance with SAWS' debt policies and determine the impact of the new debt issue on SAWS' overall debt capacity.
- SAWS 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.
- SAWS' target is to maintain unrestricted 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 bonds issued or with unrestricted resources. SAWS may provide surety policies in amounts equal to all or part of the required reserve amount in lieu of depositing cash into the Reserve Fund.

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 SAWS financial planning, analysis and strategy development is to continue to maintain SAWS financial position while also meeting its short-term and long-term operational and strategic objectives. 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 SAWS' strategic, operational and financial needs and resources.

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, affordability of water for essential use, and improved resilience during extreme weather events. 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 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 of cash flow probabilities and risk, investment and financing opportunities and constraints, and strategic plan goals and targets, financial forecasts are made in the MYFP to assist executive management in the allocation of SAWS' resources.

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 SAWS' strategic outcomes and provide opportunities for new strategies and program development to allocate resource costs for various growth and replacement scenarios.

The fundamental purpose of the MYFP is the calculation of the flow of funds and rate adjustment requirements based on SAWS enabling Ordinance 75686, adopted on 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 of SAWS' core businesses: Water Supply, Water Delivery, Wastewater and Chilled Water.

ANNUAL BUDGET PROCESS

The annual budget process begins with updating the MYFP. As 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
- Capital investment requirements
- Future commitments and resource demands
- Other variables that could 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 is evaluated relative to the income of SAWS' customers and price competitiveness with other utilities. Key financial statistics include debt coverage ratios for total debt outstanding, percentage of capital financed with cash, and overall level of cash balances.

2023 BUDGET PROCESS

The 2023 budget process began with identifying SAWS' short-term priorities. The focus of the 2023-2027 financial forecast included the following objectives:

- Infrastructure is adequately maintained to ensure reliability of service and compliance with regulatory requirements, including additional infrastructure investments to improve service resilience during extreme weather events, such as those experienced in February 2021.
- Employee pay and benefits are fair and competitive
- Retirement obligations are valued appropriately and adequately funded
- Technology advancements are implemented to increase productivity and enhance customer interactions
- Strong financial metrics and debt ratings are maintained

REVENUE FORECAST

The following table includes a sample of the issues driving the 2023 revenue forecast.

Revenue Source	Drivers
Operating Revenues	Adjust rates by customer class to recover calculated Cost of Service
	Effect of conservation programs and tiered water rates on customer usage.
	Recovery from COVID-19 economic impacts and continued customer growth
Non-Operating Revenues	Anticipated sustained higher short-term interest rates.
Capital Recovery Fees	Utilized for capital funding - projected to remain strong, dependent on development activity

One of the key elements of the financial planning process 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 takes corrective action due to a 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 used 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.

Operations and Maintenance Budget

Current Services Level

The 2023 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 2023. The Current Services Level budget served as the baseline for all subsequent 2023 budget changes and was developed from the following components:

- Snapshot of employee wage and benefit costs as of May 2022.
- Estimated 2023 utility costs, including a provision for any electric and gas utility rate increases
- Estimated 2023 fuel costs
- Elimination of one-time 2022 budgeted expenses

Improvements and/or Mandates

Departments requiring additional funding for improvements or newly identified mandates that exceeded the 2022 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.
- During individual departmental reviews, 2022 spending levels were compared to 2023 budget spending levels, with appropriate adjustments being made.
- 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.

Capital Improvement Program

The 2023 program was developed using a project prioritization process. Projects generated by the CIP stakeholder groups from SAWS Treatment, Production, Master Planning, Plants & Major Projects, Operations, Information Services and Distribution & Collection Operations were reviewed and evaluated by a CIP Planning Group consisting of vice presidents, directors and managers from SAWS Engineering and Operations groups. The evaluation and prioritization process addressed the business and information system risk exposures, independent of available funds, by prioritizing the projects as either Mandatory, Critical or High priority, using the following criteria.

Mandatory	Critical	High
Safety - Loss of life or limb	Safety - Risk of injury	Corporate initiatives
Legal/Regulatory requirements	Legal/Regulatory implications	Pipeline conflicts with City or State
High customer dissatisfaction	Medium customer dissatisfaction	Slight customer dissatisfaction
Significant mission disruption	Mission delay	Needed system improvements

Water Delivery
In coordination with the Vice Presidents of Distribution & Collection and Engineering & Construction, and the Chief Operating Officer, these criteria were applied to the selection of water main replacement and new water main projects. The remaining water delivery projects were also evaluated considering the criteria in deliberations with the Director of Plants and Major Projects and the managers in that group. This resulted in several projects being categorized as non-Mandatory allowing them to be delayed for implementation in years beyond 2022 to meet budget requirements and to balance the CIP level of expenditure in future years.

Wastewater
Wastewater main replacements were driven by the Consent Decree requirements, with most of the projects being designated as Mandatory and the rest as Critical. Treatment projects were evaluated, and the projects selected by the Vice Presidents of Production & Treatment and Engineering & Construction were deemed either Mandatory or Critical.

Water Supply
Water Supply projects were focused on improvements at the high capacity Artesia and Seal pump stations and recycled water-related improvements at the Brooks Pump Station.

Overall, the 2023 CIP has 61.8% of projects prioritized as Mandatory, 38.1% critical, and less than 1% as High priority. See the table below for a breakout by Core Business and Priority.

Core Business	Mandatory	Critical	High	Total
Water Delivery	$ 113,553,687	$ 101,647,461	$ -	$ 215,201,148
Wastewater	194,146,875	71,899,800	567,000	266,613,675
Water Supply	16,043,750	8,904,000	210,000	25,157,750
Chilled Water	386,900	17,382,750	-	17,769,650
2023 CIP Total	**$ 324,131,212**	**$ 199,834,011**	**$ 777,000**	**$ 524,742,223**

The 2023 CIP has been developed using recent cost estimates to include SAWS overhead expenses and an annual inflation assumption of 5.0% for 2023 and 2.8% for each year from 2024 to 2027. The 2023 and 5-year CIP project lists were reviewed in detail, and final selection was recommended by the SAWS Executive Management Team.

The 2023 CIP projects were collected, reviewed and summarized in the SAWS Capital Projects Management System (CPMS), which was brought online in mid-2015. This enterprise project management system streamlines the CIP process and increases the efficiency and visibility of the program.

Please note the Capital Improvement Program project list is subject to change due to changes in the cost and/or the availability of funding, project needs and emergencies.

2023 BUDGET TIMELINE

Action		Jan - Mar	Apr - Jun	Jul - Sep	Oct - Dec	Jan
Develop Multi-Year Financial Plan	Review financial outlook.					
	Compile assumptions for Multi Year Financial Plan (MYFP).					
	Review budget and rates plan with key internal stakeholders.					
	Management review and approval of MYFP.					
	Develop revenue forecast.					
Establish Executive Directives	Review policy and guideline statements.					
	Provide guidance on employee compensation issues.					
	Establish O&M and CIP expectations.					
Budget Development	Review and update CIP needs.					
	Develop workforce budget from current workforce data.					
	Develop Current Services Level Budget.					
	Develop departmental budgets.					
Review and Analysis	Review of O&M and CIP budgets by Business Planning staff.					
	Review of O&M and CIP budgets by Executive Mgt.					
Develop Budget Documents	Prepare Budget / Rates presentation.					
	Develop Draft Budget document.					
	Develop Adopted Budget document.					
Board Review and Approval	Budget briefings for Board of Trustees.					
	Formal Board approval of 2023 budget and Water, Sewer Recycled Water and Chilled Water rates changes approval.					
	Submit Budget to City Council for review and Water, Sewer, Recycled Water and Chilled Water rates changes approval.					
Implementation	2023 Annual Operating Budget and Capital Improvement Program and rate changes become effective.					

SHORT-TERM FIVE-YEAR FORECAST

The current projection of SAWS sources and uses of funds for the period 2023 – 2027 is shown in the table below.

$ in Millions	2023 Budget	2024 Forecast	2025 Forecast	2026 For6cast	2027 Forecast
Sources of Funds					
Revenue, incl. prior adjustments	$ 854.8	$ 870.9	$ 933.8	$ 1,008.6	$ 1,048.2
Rate Adjustment, incremental	-	47.8	62.3	34.5	31.0
Nonoperating Revenues	23.9	20.2	18.1	17.0	17.0
Draw on Equity	-	-	-	-	-
Capital Recovery Fees	100.1	100.1	100.1	100.1	100.1
Total Sources of Funds	**$ 978.8**	**$ 1,039.0**	**$ 1,114.3**	**$ 1,160.2**	**$ 1,196.3**
Uses of Funds					
Operations and Maintenance	$ 503.0	$ 505.9	$ 514.5	$ 524.1	$ 533.9
Debt Service & Expenses	238.1	275.2	310.5	326.2	353.3
Transfer to City of San Antonio	33.6	36.1	39.1	41.0	42.4
Available for R&R Restricted	108.1	105.1	104.9	104.7	104.8
Available for R&R Unrestricted	96.0	116.7	145.3	164.2	161.9
Total Uses of Funds	**$ 978.8**	**$ 1,039.0**	**$ 1,114.3**	**$ 1,160.2**	**$ 1,196.3**

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.

Projected increases in operations and maintenance costs over the forecast period are driven by inflationary pressures.

The growth in debt service reflects the allocation of capital resources toward major strategic priorities of water supply, infrastructure replacement, system growth, and sustainability. The five-year 2023 – 2027 capital improvement program is projected at $2.86 billion as shown below. Significant priorities include wastewater capital replacement projects associated with the wastewater Sanitary Sewer Overflow Reduction Program (SSORP), improvements to improve the resiliency of SAWS infrastructure during extreme weather events, and improvement or replacement of aging SAWS Chilled Water infrastructure.

CIP by Core Business ($ in millions)	2023	2024	2025	2026	2027	2023-2027
Water Supply	$ 25.2	$ 32.4	$ 25.4	$ 19.4	$ 26.8	$ 129.2
Water Delivery	215.2	254.9	255.5	202.5	258.5	1,186.6
Wastewater	266.5	318.4	338.4	264.5	300.9	1,488.7
Chilled Water	17.8	22.9	6.5	4.5	5.2	56.9
Total	**$ 524.7**	**$ 628.6**	**$ 625.8**	**$ 490.9**	**$ 591.4**	**$ 2,861.4**

Funding for the five-year capital improvement program is projected to come from a mixture of renewal and replacement funds, impact fees, investment income, and bond proceeds. While SAWS long-term goal is for approximately 50% of capital improvements to be funded from non-debt sources, during the 2023-2027 five-year forecast, the percentage of the capital improvements funded with non-debt sources is currently projected to average 31.4%.

($ in millions)	2023	2024	2025	2026	2027
CIP Budget					
Total Budget	$ 524.7	$ 628.6	$ 625.8	$ 490.9	$ 591.4
CIP Funding Source					
Revenue/Renewal & Replacement	22.8%	14.7%	17.3%	27.7%	26.0%
Capital Recovery Fees	9.5%	8.7%	8.8%	11.2%	10.3%
Bonds/Commercial Paper	67.7%	76.6%	73.9%	61.1%	63.7%
Cash Funding	$ 169.5	$ 148.1	$ 163.3	$ 190.8	$ 214.8
Debt Funding	$ 355.2	$ 480.6	$ 462.5	$ 300.1	$ 376.5

The forecasted amounts for 2023-2027 will continue to be analyzed and adjusted as additional efficiencies are identified, circumstances change or priorities shift.

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Annual Operating Budget

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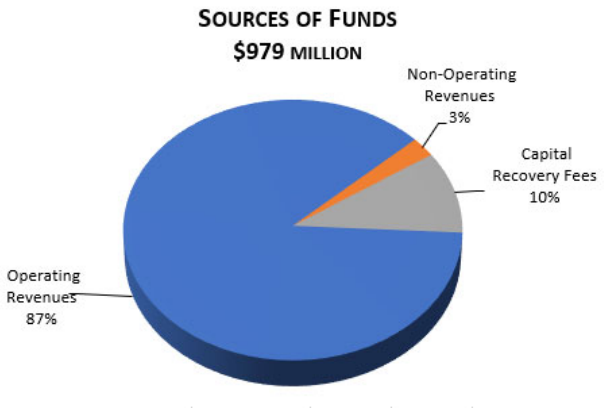
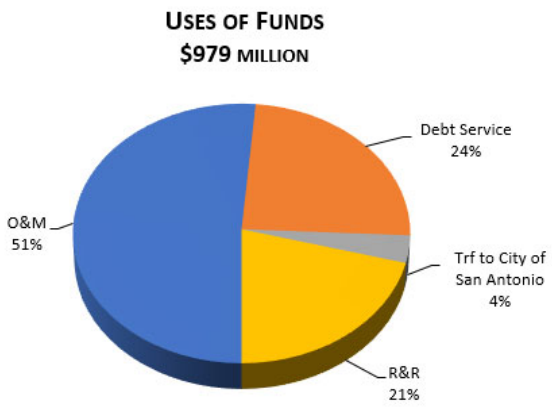
ANNUAL OPERATING BUDGET

FINANCIAL PLAN SUMMARY

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

(dollars in thousands)	2020 Actual	2021 Actual	2022 Budget	2023 Budget
SOURCES OF FUNDS				
Operating Revenues				
Sewer Service Charges	$ 263,650	$ 277,484	$ 282,330	$ 280,185
Metered Water Sales	228,350	220,580	239,483	225,776
Water Supply Fee	246,486	226,539	253,993	264,927
EAA Fee	23,165	22,027	22,773	21,698
Chilled Water Sales	9,894	10,826	11,467	12,477
Conservation	12,232	11,218	11,001	12,431
Industrial Waste Surcharge	5,626	5,559	5,886	4,989
Recycled Water System	6,518	6,168	6,694	7,937
Stormwater	3,554	3,727	5,728	5,451
Recovery of TCEQ Fees	2,377	2,446	2,610	2,642
Affordability Charge	-	-	-	16,981
Reduction for Affordability Program	(6,935)	(7,241)	(8,193)	(717)
Total Operating Revenues	**794,917**	**779,333**	**833,772**	**854,777**
Nonoperating Revenues	14,298	6,114	4,800	22,007
Build America Bonds Subsidy	1,917	1,911	2,023	1,908
Total Revenues	**811,132**	**787,358**	**840,595**	**878,692**
Capital Recovery Fees	119,571	136,962	100,074	100,074
Contributions in Aid of Construction	3,205	1,440	-	-
Total Sources of Funds	**$ 933,908**	**$ 925,760**	**$ 940,669**	**$ 978,766**
USES OF FUNDS				
Operations and Maintenance	$ 401,961	$ 436,076	$ 471,321	$ 503,032
Revenue Bond Debt Requirement	205,432	204,911	223,910	226,892
Other Debt Service Requirement	3,379	1,786	3,385	11,161
Transfer to the City of San Antonio	31,043	30,161	32,245	33,552
Balance Available for:				
Renewal and Replacement Fund (Restricted)	138,280	141,848	101,468	108,137
Renewal and Replacement Fund (Unrestricted)	153,813	110,978	108,340	95,992
Total Uses of Funds	**$ 933,908**	**$ 925,760**	**$ 940,669**	**$ 978,766**





FINANCIAL PLAN SUMMARY BY CORE BUSINESS

The San Antonio Water System consists of four core businesses. 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 2023 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	$ -	$ -	$ 280,185	$ -	$ 280,185
Metered Water Sales	-	225,776	-	-	225,776
Water Supply Fee	264,927	-	-	-	264,927
EAA Fee	21,698	-	-	-	21,698
Chilled Water Sales	-	-	-	12,477	12,477
Conservation	12,431	-	-	-	12,431
Industrial Waste Surcharge	-	-	4,989	-	4,989
Recycled Water System	7,937	-	-	-	7,937
Stormwater	5,451	-	-	-	5,451
Recovery of TCEQ Fees	-	2,011	631	-	2,642
Affordability Charge	4,666	5,096	7,219	-	16,981
Reduction for Affordability Program	(228)	(139)	(350)	-	(717)
Intercompany Reallocations	5,630	(5,630)	-	-	-
Total Operating Revenues	**322,512**	**227,114**	**292,674**	**12,477**	**854,777**
Nonoperating Revenues	6,563	6,562	8,750	132	22,007
Build America Bonds Subsidy	599	546	763	-	1,908
Total Revenues	**329,674**	**234,222**	**302,187**	**12,609**	**878,692**
Capital Recovery Fees	38,363	30,100	31,611	-	100,074
Total Sources of Funds	**$ 368,037**	**$ 264,322**	**$ 333,798**	**$ 12,609**	**$ 978,766**
USES OF FUNDS					
Operations and Maintenance	$ 247,690	$ 101,083	$ 145,656	$ 8,603	$ 503,032
Revenue Bond Debt Requirement	35,679	78,255	107,024	5,934	226,892
Other Debt Service Requirement	1,594	4,490	4,960	117	11,161
Transfer to the City of San Antonio	11,845	9,263	11,945	499	33,552
Balance Available for:					
Renewal and Replacement Fund (Restricted)	40,858	32,778	34,501	-	108,137
Renewal and Replacement Fund (Unrestricted)	30,371	38,453	29,712	(2,544)	95,992
Total Uses of Funds	**$ 368,037**	**$ 264,322**	**$ 333,798**	**$ 12,609**	**$ 978,766**

WATER SUPPLY CORE BUSINESS

The Water Supply core business is responsible for all functions related to the development and provision of additional Water Supply, 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)	2020 Actual	2021 Actual	2022 Budget	2023 Budget
SOURCES OF FUNDS				
Operating Revenues				
Water Supply Fee	246,486	226,539	253,993	264,927
EAA Fee	23,165	22,027	22,773	21,698
Conservation	12,232	11,218	11,001	12,431
Recycled Water System	6,518	6,168	6,694	7,937
Stormwater	3,554	3,727	5,728	5,451
Affordability Charge	-	-	-	4,666
Reduction for Affordability Program	(1,903)	(2,300)	(2,602)	(228)
Intercompany Reallocations	5,630	5,630	5,630	5,630
Total Operating Revenues	**295,682**	**273,009**	**303,217**	**322,512**
Nonoperating Revenues	4,179	2,053	1,440	6,563
Build America Bonds Subsidy	598	602	635	599
Total Revenues	**300,459**	**275,664**	**305,292**	**329,674**
Capital Recovery Fees	48,064	55,154	38,363	38,363
Total Sources of Funds	**$ 348,523**	**$ 330,818**	**$ 343,655**	**$ 368,037**
USES OF FUNDS				
Operations and Maintenance	$ 183,032	$ 221,428	$ 239,807	$ 247,690
Revenue Bond Debt Requirement	40,746	36,537	44,966	35,679
Other Debt Service Requirement	800	503	463	1,594
Transfer to the City of San Antonio	10,777	9,824	10,895	11,845
Balance Available for:				
Renewal and Replacement Fund (Restricted)	60,893	59,790	39,100	40,858
Renewal and Replacement Fund (Unrestricted)	52,275	2,736	8,424	30,371
Total Uses of Funds	**$ 348,523**	**$ 330,818**	**$ 343,655**	**$ 368,037**

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)	2020 Actual	2021 Actual	2022 Budget	2023 Budget
SOURCES OF FUNDS				
Operating Revenues				
Metered Water Sales	$ 228,350	$ 220,580	$ 239,483	$ 225,776
Recovery of TCEQ Fees	1,882	1,937	1,987	2,011
Affordability Charge	-	-	-	5,096
Reduction for Affordability Program	(1,526)	(1,403)	(1,588)	(139)
Intercompany Reallocations	(5,630)	(5,630)	(5,630)	(5,630)
Total Operating Revenues	**223,076**	**215,484**	**234,252**	**227,114**
Nonoperating Revenues	5,078	2,326	1,440	6,562
Build America Bonds Subsidy	550	546	579	546
Total Revenues	**228,704**	**218,356**	**236,271**	**234,222**
Capital Recovery Fees	33,458	40,074	30,100	30,100
Contributions in Aid of Construction	672	988	-	-
Total Sources of Funds	**$ 262,834**	**$ 259,418**	**$ 266,371**	**$ 264,322**
USES OF FUNDS				
Operations and Maintenance	$ 95,644	$ 92,404	$ 99,578	$ 101,083
Revenue Bond Debt Requirement	74,297	75,049	79,769	78,255
Other Debt Service Requirement	2,078	963	1,348	4,490
Transfer to the City of San Antonio	9,055	8,649	9,425	9,263
Balance Available for:				
Renewal and Replacement Fund (Restricted)	34,341	41,218	30,573	32,778
Renewal and Replacement Fund (Unrestricted)	47,419	41,135	45,678	38,453
Total Uses of Funds	**$ 262,834**	**$ 259,418**	**$ 266,371**	**$ 264,322**

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)	2020 Actual	2021 Actual	2022 Budget	2023 Budget
SOURCES OF FUNDS				
Operating Revenues				
Sewer Service Charges	$ 263,650	$ 277,484	$ 282,330	$ 280,185
Industrial Waste Surcharge	5,626	5,559	5,886	4,989
Recovery of TCEQ Fees	495	509	623	631
Affordability Charge	-	-	-	7,219
Reduction for Affordability Program	(3,506)	(3,538)	(4,003)	(350)
Total Operating Revenues	**266,265**	**280,014**	**284,836**	**292,674**
Nonoperating Revenues	4,884	1,599	1,920	8,750
Build America Bonds Subsidy	769	763	809	763
Total Revenues	**271,918**	**282,376**	**287,565**	**302,187**
Capital Recovery Fees	38,049	41,734	31,611	31,611
Contributions in Aid of Construction	2,533	452	-	-
Total Sources of Funds	**$ 312,500**	**$ 324,562**	**$ 319,176**	**$ 333,798**
USES OF FUNDS				
Operations and Maintenance	$ 115,817	$ 114,310	$ 124,464	$ 145,656
Revenue Bond Debt Requirement	87,347	90,246	95,707	107,024
Other Debt Service Requirement	389	241	1,511	4,960
Transfer to the City of San Antonio	10,810	11,250	11,466	11,945
Balance Available for:				
Renewal and Replacement Fund (Restricted)	43,016	40,908	31,795	34,501
Renewal and Replacement Fund (Unrestricted)	55,121	67,607	54,233	29,712
Total Uses of Funds	**$ 312,500**	**$ 324,562**	**$ 319,176**	**$ 333,798**

CHILLED WATER CORE BUSINESS

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

(dollars in thousands)	2020 Actual	2021 Actual	2022 Budget	2023 Budget
SOURCES OF FUNDS				
Operating Revenues				
Chilled Water Sales	$ 9,894	$ 10,826	$ 11,467	$ 12,477
Total Operating Revenues	**9,894**	**10,826**	**11,467**	**12,477**
Nonoperating Revenues	157	136	-	132
Total Revenues	**10,051**	**10,962**	**11,467**	**12,609**
Total Sources of Funds	**$ 10,051**	**$ 10,962**	**$ 11,467**	**$ 12,609**
USES OF FUNDS				
Operations and Maintenance	$ 7,468	$ 7,934	$ 7,472	$ 8,603
Revenue Bond Debt Requirement	3,041	3,079	3,468	5,934
Other Debt Service Requirement	112	79	63	117
Transfer to the City of San Antonio	402	438	459	499
Balance Available for:				
Renewal and Replacement Fund (Restricted)	30	(68)	-	-
Renewal and Replacement Fund (Unrestricted)	(1,002)	(500)	5	(2,544)
Total Uses of Funds	**$ 10,051**	**$ 10,962**	**$ 11,467**	**$ 12,609**

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.

The largest portion of SAWS' net position reflects its net investment in capital assets. SAWS' net investment in capital assets represents the carrying value of capital assets and capital related deferred outflows of resources, less capital related borrowings. The primary reasons for an increase in the net investment in capital assets are capital assets acquired with non-debt resources, including assets contributed by developers, and repayments of debt. Depreciation expense serves to decrease the net investment in capital assets.

Funds that have been restricted for a specific purpose by legally enforceable legislation and bond covenants are classified as restricted net position. In accordance with City of San Antonio Ordinance 75686, SAWS must maintain an operating reserve equal to two months of the annual maintenance and operations budget. SAWS is also required to make monthly transfers to a Debt Service Fund sufficient to make the semi-annual debt service payments on outstanding bonds. Cash and investments restricted for construction purposes, net of any related liabilities, are also reflected in these totals. Finally, SAWS must accumulate and maintain a Debt Service Reserve equal to 100% of the maximum annual debt service requirements for senior lien debt obligations plus the average annual debt service on all junior lien debt obligations secured by the Debt Service Reserve. SAWS may provide surety policies equal to all or part of the required debt service reserve.

The remaining balance of SAWS' net position is unrestricted and may be used for any allowable purpose as outlined in Ordinance 75686.

SAWS is an enterprise fund and has no governmental funds. The following schedule reflects the components of projected Net Position at December 31, 2022 and 2023, for the entity as a whole.

(dollars in thousands)	Net Investment in Capital Assets	Restricted Operating Reserve	Restricted Debt Service[1]	Restricted Debt Service Reserve	Restricted Construction[2]	Restricted for Pension & OPEB Benefits	Unrestricted	Projected Net Position
Projected Net Position, beginning of year	**$ 3,448,251**	**$ 78,554**	**$ 66,123**	**$ 12,173**	**$ 207,498**	**$ 61,317**	**$ 565,385**	**$ 4,439,301**
Operating income							351,745	351,745
Depreciation & Amortization	(225,014)						(881)	(225,895)
Net non-operating income/(expense)			2,900	287	7,000		(135,232)	(125,045)
Capital Recovery Fees collected					100,075			100,075
Plant contributions	103,726							103,726
Transfer to Operating Reserve		5,285					(5,285)	-
Required debt service transfers	-		216,617				(216,617)	-
Projected debt service payments	94,672		(207,643)				112,971	-
Projected change in Pension & OPEB asset								-
Non-debt funding of capital improvements	169,492				(50,000)		(119,492)	-
Projected Net Position, end of year	**$ 3,591,127**	**$ 83,839**	**$ 77,997**	**$ 12,460**	**$ 264,573**	**$ 61,317**	**$ 552,595**	**$ 4,643,908**
% Change in Net Position	**4.1%**	**6.7%**	**18.0%**	**2.4%**	**27.5%**	**0.0%**	**-2.3%**	**4.6%**

[1]The projected increase in Restricted Debt Service reflects an increase in the required debt service transfers.
[2]The projected increase in Restricted Construction reflects strong growth and the timing of expenditures of growth-related projects.

SOURCES OF FUNDS

The following table summarizes the 2022 budgeted Sources of Funds for all core businesses.

(dollars in thousands)	2020 Actual	2021 Actual	2022 Budget	2023 Budget
SOURCES OF FUNDS				
Operating Revenues				
Sewer Service Charges	$ 263,650	$ 277,484	$ 282,330	$ 280,185
Metered Water Sales	228,350	220,580	239,483	225,776
Water Supply Fee	246,486	226,539	253,993	264,927
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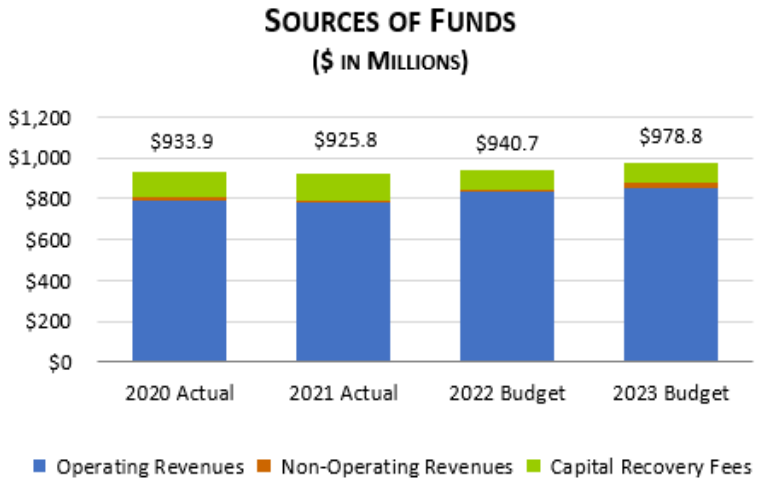
Reduction for Affordability Program	(6,935)	(7,241)	(8,193)	(717)
Total Operating Revenues	**794,917**	**779,333**	**833,772**	**854,777**
Nonoperating Revenues	14,298	6,114	4,800	22,007
Build America Bonds Subsidy	1,917	1,911	2,023	1,908
Total Revenues	**811,132**	**787,358**	**840,595**	**878,692**
Capital Recovery Fees	119,571	136,962	100,074	100,074
Contributions in Aid of Construction	3,205	1,440	-	-
Total Sources of Funds	**$ 933,908**	**$ 925,760**	**$ 940,669**	**$ 978,766**



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, Sewer Service Charges, and the EAA fee, 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 connection

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:

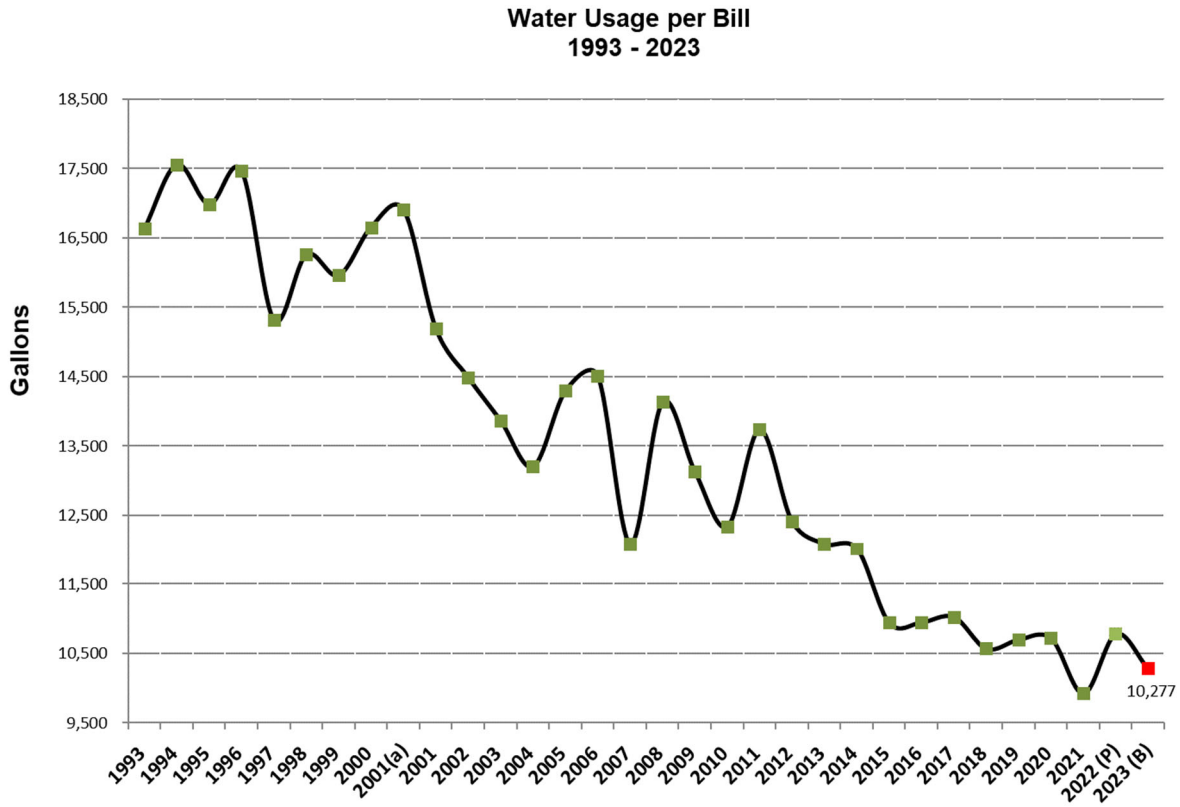
- each rate class of SAWS (residential, general, wholesale and irrigation)
- each rate block
- inside and outside city limit customers

Through 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.

Average usage per customer is typically affected by weather (temperature and precipitation), seasonality, price elasticity, conservation, and drought restriction variables. Therefore, the modeling of the average usage per customer incorporates statistical forecasting to incorporate these variables. During the height of the COVID-19 pandemic, SAWS experienced slight increases in single and multi-family residential usage and more significant declines in commercial usage, especially in commercial customers tied to the restaurant and hospitality sectors. These trends have stabilized since the widespread availability of vaccines, and our models assume customer behavior since June of 2021 as the revised post-COVID-19 baseline.

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 District Special Project (formerly Bexar Metropolitan Water District) service area. The average usage for these customers was substantially less than the historical average usage for SAWS customers. 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 weather variations
- Impacts of ongoing drought restrictions from 2013 through 2015



(P) Projected; (B) Budgeted; Gallons shown prior to 2016 do not include sale of water to the District Special Project.

Weather fluctuations, from very rainy periods to drought conditions and related drought restrictions, factor into future water usage forecasts.

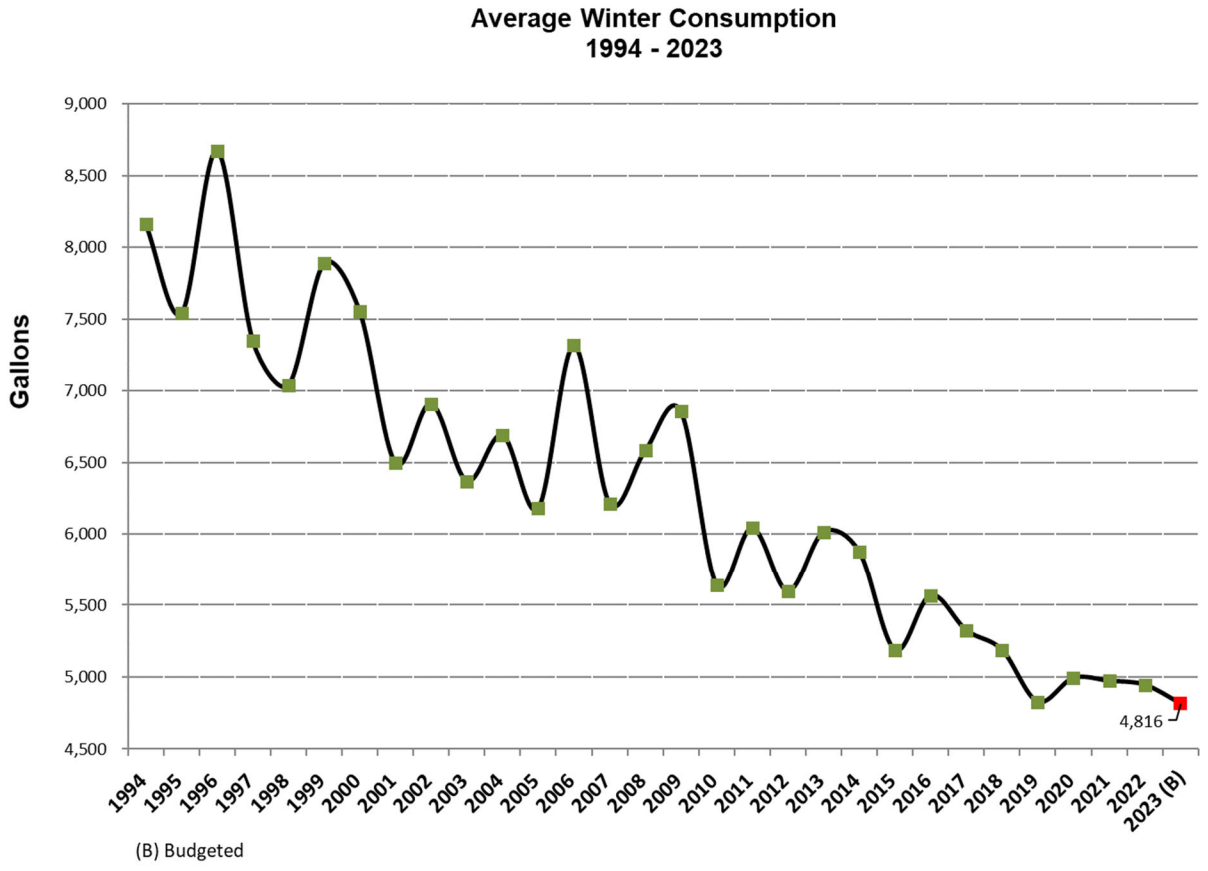
- The drought that began in 2011 lasted into 2015. The resulting drought restrictions during that period, brought customer usage levels in 2013 and 2014 to what was up until then historically low usage levels.
- Extremely wet weather conditions during 2015 served to end the drought but also dampened average customer demand to a new low level of 10,940 gallons.
- 2016 through 2019 show a downward but flattened decline in usage per bill. 2019 usage of 10,699 gallons was well below 2016 usage of 10,948 gallons, despite 2016 receiving over twice the amount of rainfall.
- 2020 residential and irrigation usage was well above average due to a dry summer (less than 2" total rainfall in June through August), but usage per bill ended near 2019 levels due to the impact of the COVID-19 pandemic on commercial and industrial customers.
- 2021 usage was SAWS lowest historical usage per bill ever, at 9,922 gallons. While total rainfall was only slightly above normal, spring and summer were quite wet, including over 8" of rain in the June-August period, resulting in significant decreases in residential and irrigation class usage.

Based on actual usage through July, the usage per bill for 2022 is projected to be significantly higher than 2021, roughly 10,781 gallons as dry conditions have led to significant increases in residential and irrigation use. In addition, the San Antonio economy continues its strong recovery from COVID-19, which is driving increased commercial and industrial use.

In order to minimize the financial risk of overestimating revenues, 2023 budgeted revenues assume average customer use per bill of 10,277 gallons. This forecast allows for the possibility of either recurring wet conditions or drought restrictions, accounts for impacts of continuing conservation efforts and assumes that the negative economic impacts of COVID-19 do not significantly affect growth in 2023. Consequently, the total budgeted water usage for 2023 is 69.5 billion gallons – 3.4% above the 67.2 billion gallons budgeted in 2022 and 6.8% above the 65.1 billion gallons budgeted in 2021.

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 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. Due to higher than normal precipitation experienced during the end of 2018 and the first quarter of 2019, the 2019 AWC fell to 4,828 gallons, the lowest level since AWC had been tracked. The 2020 AWC returned to trend at 4,992 gallons, and has decreased gradually, to 4,973 gallons in 2021 and 4,945 gallons in 2022. The decline in usage is not as rapid as seen prior to 2020, which our projections attribute to increased domestic winter demand associated with teleworking and remote school over the AWC calculation period. As in-person school has resumed, but teleworking remains high relative to pre-2020 levels, we anticipate this trend to moderate, with AWC trending slightly lower than recent years at 4,816 gallons.

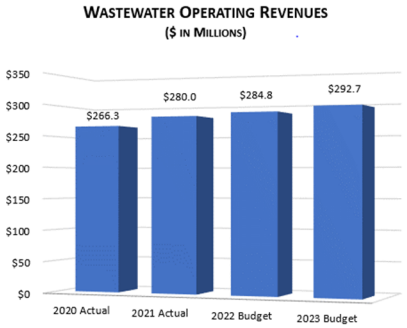


Operating Revenues

The 2023 revenue budget includes extensive adjustments to water and wastewater rates based on the recommendations of the 2022 Rate Advisory Committee. These changes were revenue-neutral, with the exception of the 15% Recycled Water System rate increase and the 12% rate increase for the Chilled Water demand rates (for both Downtown and Port San Antonio), which combined are estimated to generate approximately $1.2 million in additional revenue.

Wastewater Operating Revenues

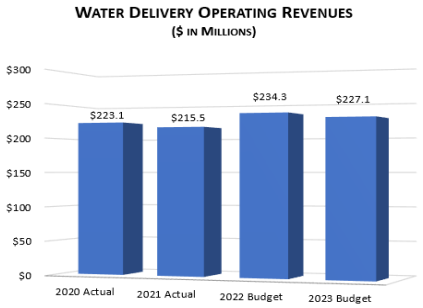
Wastewater operating revenues recover the costs associated with the collection and treatment of wastewater. Sewer service charges consist of a fixed monthly service availability fee and volumetric charges based on each customer's contributed wastewater flow. Residential contributed wastewater flow is 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.



Wastewater operating revenues for 2023 are projected to consist of $287.7 million in sewer service charges, including pass-through charges and $5.0 million in sewer surcharge revenues. Total metered wastewater revenues are forecasted to increase by 2.8% over the 2022 budget, which reflects continued growth in the number of residential customers, and continued recovery in commercial and industrial class usage from the declines caused by the COVID-19 pandemic.

Water Delivery Operating Revenues

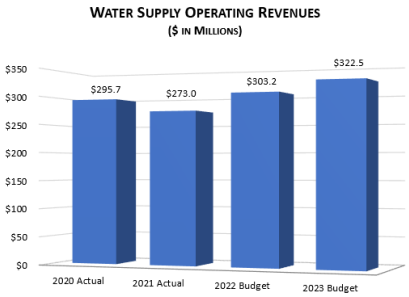
Water delivery operating revenues recover the costs associated with the production, transmission and distribution of potable water to the customer primarily through monthly fixed and volumetric charges on each customer's metered water usage. Total metered water operating revenues are forecasted at $227.1 million in 2023, a 3.1% decrease from the 2022 budget. Based on the RAC recommendations, 75% of the service availability fees were allocated to Water Delivery. Prior to the change, all service availability fees except those associated with the lifeline discount were allocated to Water Delivery (approximately 84%).



The 2023 revenue forecast assumes 2023 billed water usage of 69.5 billion gallons, which is 3.4% more than 2022 budgeted water usage. This increase reflects strong growth in the number of residential customers, and continued recovery in commercial and industrial class usage from the declines caused by the COVID-19 pandemic.

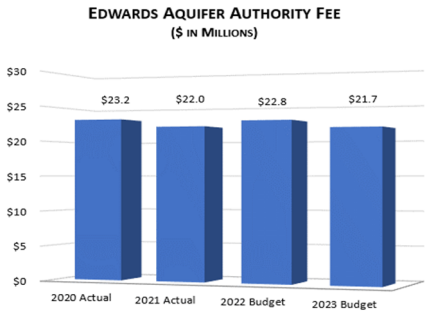
Water Supply Operating Revenues

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. Water Supply operating revenues are forecasted at $322.5 million in 2023, 6.4% over the 2022 budget. The increase is primarily due to the RAC's recommendation to allocate 25% of the service availability fees to Water Supply, as explained above.

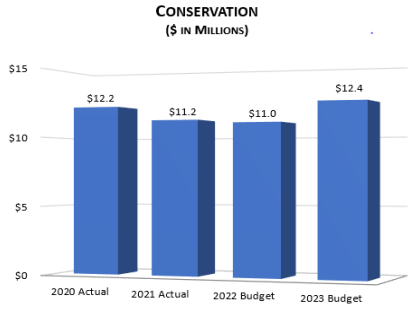


The Water Supply Fee was implemented in 2001 to support one of SAWS fundamental responsibilities: developing and procuring additional water supplies. The Water Supply Fee consists of volumetric charges assessed on customers' metered water usage.

Included within Water Supply Operating Revenues are the following four charges. 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 2023 EAA Fee budgeted revenue is $21.7 million.



Recycled water revenues are budgeted to be $7.9 million in 2023. This $1.2 million increase is the result of a 15% rate increase and a $0.9 million contract with the City of San Antonio for flows to the San Antonio River. The forecasted receipt of $3.7 million from the CPS Energy contract, which is not affected by the rate increase, is projected to contribute 46.8% of recycled water revenues.

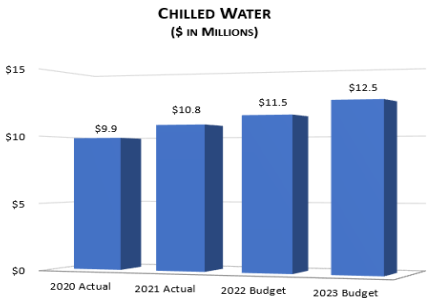


Conservation revenues are used to fund residential and commercial conservation programs. Conservation revenues for 2023 will be recovered from a portion of the residential water charges for monthly usage in excess of 7,000 gallons and a portion of non-residential monthly meter charges. For 2023, conservation revenues are budgeted at $12.4 million or 3.8% 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 an estimated reimbursement to SAWS of $5.5 million in 2023 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. The 12% increase in the Chilled Water demand rates is the first year of a five-year rate plan that seeks to improve the operational effectiveness and financial condition of this system. Including this rate adjustment, 2023 revenues are projected at $12.5 million. Chilled water services comprise approximately 1.5% of total operating revenues.



NON-OPERATING REVENUE

2023 non-operating revenues, budgeted at $23.9 million, are comprised of $22.0 million in interest earnings on investments and a $1.9 million federal subsidy to be received on previously issued Build America Bonds. Non-operating revenues account for 2.4% of the total sources of funds for 2023.

The average investment base is assumed to be $1.25 billion and the yield on those investments is estimated to be 1.75% in 2023.

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 most recent impact fee study was completed in May 2019. The $100.1 million budgeted for capital recovery fees in 2023 is based on the average projected over the 10-year period covered by the 2019 study.

On December 13, 2018, through Ordinance 2018-12-13-0996, the City Council adopted the City of San Antonio Fee Waiver Program, thereby replacing the Inner-City Reinvestment/Infill Policy (ICRIP) as the primary mechanism for awarding SAWS impact fee waivers for economic development purposes. In November 2020 by ordinance, the City Council allocated a total amount of $15 million over a five-year period from FY 2021 through FY 2025 at $3 million per year. In the ordinance, the Council acknowledged the intention of SAWS to allow unclaimed fee waivers to carry forward allowing no more than a maximum of $5 million in unclaimed impact fee waivers to carry forward into future fiscal years, as calculated annually based on the SAWS fiscal year. Adjustments to the carry forward amount and schedule require mutual agreement between the City and SAWS.

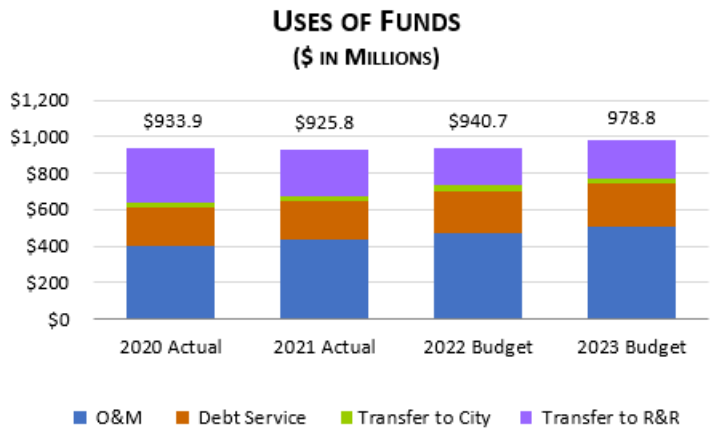
USES OF FUNDS

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:

1. **Operations & Maintenance**
2. **Debt Service & Reserve Fund Requirements**
3. **Transfer to the City**
4. **Any Surplus Transferred to R&R (provides cash for current year debt coverage as well as funding for capital programs)**

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

(dollars in thousands)	2020 Actual	2021 Actual	2022 Budget	2023 Budget
USES OF FUNDS				
Operations and Maintenance	$ 401,961	$ 436,076	$ 471,321	$ 503,032
Revenue Bond Debt Requirement	205,432	204,911	223,910	226,892
Other Debt Service Requirement	3,379	1,786	3,385	11,161
Transfer to the City of San Antonio	31,043	30,161	32,245	33,552
Balance Available for:				
Renewal and Replacement Fund (Restricted)	138,280	141,848	101,468	108,137
Renewal and Replacement Fund (Unrestricted)	153,813	110,978	108,340	95,992
Total Uses of Funds	**$ 933,908**	**$ 925,760**	**$ 940,669**	**$ 978,766**



Operations and Maintenance Expense

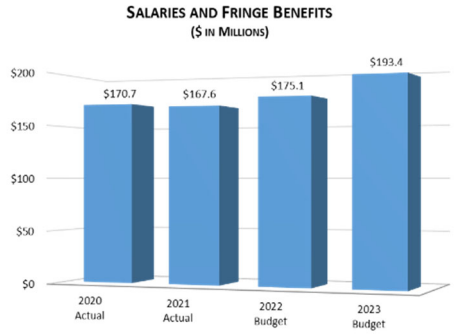
The cost to operate and maintain the system on a daily basis comprises the largest single use of SAWS' revenues. Approximately 59% of SAWS operating revenues are dedicated to supporting ongoing operations and maintenance. The 2023 budget for Operations and Maintenance (O&M) after capitalized costs is $503.0 million, which is an increase of 6.7% from the 2022 budget.

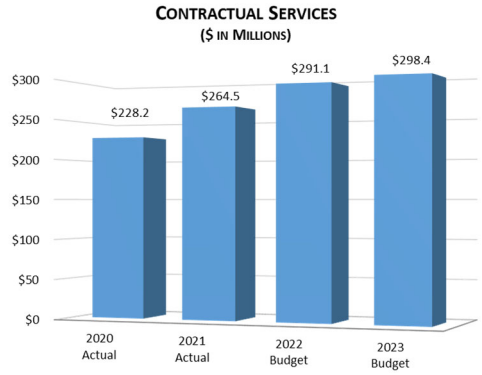
SAWS operations and maintenance expenses are categorized into four major expenditure types: Salaries and Fringe Benefits, Contractual Services, Materials and Supplies, and Other Charges. Additionally, a portion of these costs are capitalized in direct support of SAWS Capital Improvement Program.

($ in thousands)	2020 Actual	2021 Actual	2022 Budget	2023 Budget
O&M Before Capitalized Cost				
Salaries and Fringe Benefits	$ 170,743	$ 167,649	$ 175,093	$ 193,420
Contractual Services	228,200	264,472	291,140	298,444
Materials and Supplies	25,836	27,707	27,274	34,105
Other Charges	7,103	7,493	9,914	9,163
Total O&M Before Capitalized Cost	**$ 431,882**	**$ 467,321**	**$ 503,421**	**$ 535,132**
Capitalized Cost	(29,921)	(31,244)	(32,100)	(32,100)
Total O&M	**$ 401,961**	**$ 436,077**	**$ 471,321**	**$ 503,032**
Capital Outlay	**$ 14,143**	**$ 9,838**	**$ 11,846**	**$ 12,020**

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' medical and retirement benefits, and contributions to a trust established to provide other post-employment benefits (OPEB). Total salary and fringe benefit costs for 2023 are estimated at $193.4 million, or 36.1% of gross operation and maintenance expenditures (before capitalization) and reflect a 10.5% increase from prior year budget. The $18.3 million in increased employee salaries and benefits are intended to improve employee retention in a highly competitive job market.



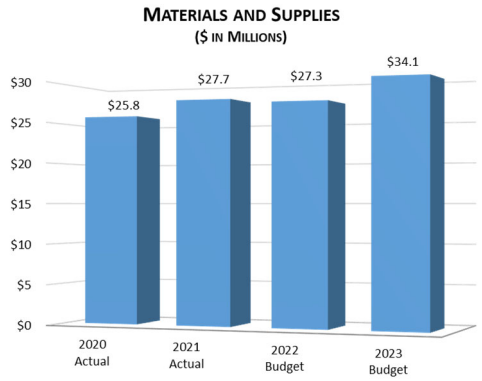


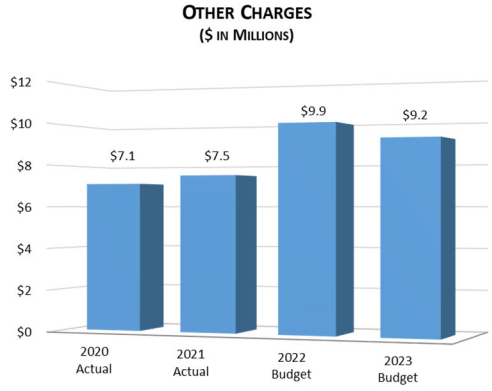
Contractual Services

Contractual Services expenditures represent operating services that are obtained through express or implied contracts. Total Contractual Services for 2023 are budgeted at $298.4 million, which is 55.8%% of the gross operation and maintenance expenditures (before capitalization) and reflect a net increase of $7.3 million (2.5%) over the 2022 budget. The primary drivers of this projected increase are forecasted increases in water supply contract costs and added costs associated with implementation of the federal Lead and Copper Rule.

Materials and Supplies

The Materials and Supplies budget of $34.1 million is 6.4% of gross operation and maintenance expenditures and reflects an increase of 24.9% compared to the 2022 budget. The projected change is due in large part to increased costs of chemicals used in water and wastewater treatment processes, increases in materials costs associated with required maintenance work at the S.M. Clouse WRC and increases in fuel prices since the development of the 2022 budget.



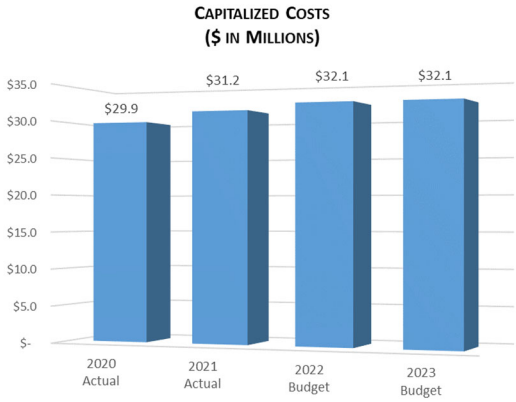


Other Charges

The Other Charges category includes property, casualty and workers' compensation insurance costs, retirees' healthcare costs, and bank charges. The 2023 costs are estimated at $9.2 million, or 1.7% of gross operation and maintenance expenditures, which is 7.1% less than the 2022 budget due primarily to reduced retiree medical costs.

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 2023, Capitalized Costs are estimated at $32.1 million, or 6.0% of gross operation and maintenance expenditures, which is in line with the prior year.



OPERATION AND MAINTENANCE SUMMARY BY EXPENSE CLASSIFICATION

($ in thousands)	2020 Actual	2021 Actual	2022 Budget	2023 Budget
Salaries and Fringe Benefits				
511100 Salaries	109,596	109,049	115,437	129,791
511140 Overtime Pay	6,513	7,503	6,525	6,844
511150 On-Call Pay	817	842	765	800
511160 Employee Insurance	19,082	19,450	21,183	22,612
511162 Retirement	23,102	22,966	22,913	24,953
511164 Unused Sick Leave Buyback	25	22	70	70
511166 Personal Leave Buyback	1,194	1,249	950	1,100
511168 Accrued Vacation leave	2,914	1,368	2,000	2,000
511170 Incentive Pay	-	100	150	150
511175 Other Post Employment Benefits	7,500	5,100	5,100	5,100
Salaries and Fringe Benefits Total	**170,743**	**167,649**	**175,093**	**193,420**
Contractual Services				
511210 Operating Expense	1,451	1,747	1,436	1,588
511211 Rental of Facilities	263	232	246	243
511212 Alarm and Security	1,758	1,781	2,189	2,189
511214 Uniforms and Shoe Allowance	339	230	451	480
511215 Box Lunch Program	415	-	-	-
511216 Catering Svcs and Luncheons	60	68	119	120
511218 Project Agua Assistance	390	388	400	400
511219 Conservation Programs	3,073	2,140	3,625	3,625
511220 Maintenance Expense	20,647	17,437	26,042	27,163
511221 Street Cut Permit Admin Fee	535	528	841	841
511222 St Pave/Repair Fee	797	1,281	1,801	1,801
511224 Auto and Equip. Maintenance Parts	2,026	2,149	1,563	2,063
511225 Damage Repair	170	232	125	175
511230 Equipment Rental Charges	1,160	399	433	417
511240 Travel	25	26	207	205
511245 Training	253	438	518	868
511247 Conferences	20	9	108	107
511250 Memberships and Subscriptions	405	437	509	538
511260 Utilities	32,975	39,133	43,260	42,005
511261 Water Options	34,847	38,490	43,666	46,674
511262 Water Options-Vista Ridge	61,770	91,360	91,830	93,533
511265 Ground Water District Pay	23,120	23,008	23,297	22,222
511270 Mail and Parcel Post	2,033	2,211	2,513	2,829
511280 Telemetering Charges	2	2	2	2
511310 Educational Assistance	77	69	77	77
511312 Contractual Prof Svcs	25,888	26,817	28,432	30,054
511313 Inspect and Assessment Fees	2,295	2,319	2,525	2,555
511315 Temporary Employees	1,092	796	593	290
511316 Medical Services	107	66	136	110
511317 Medical Testing	201	42	-	-
511320 Legal Services	1,389	1,583	1,971	2,571
511370 Communications	1,382	1,156	1,549	1,550
511381 Software and Hardware Maintenance	7,235	7,898	10,676	11,149
Contractual Services Total	**228,200**	**264,472**	**291,140**	**298,444**

OPERATION AND MAINTENANCE SUMMARY BY EXPENSE CLASSIFICATION *(continued)*

($ in thousands)	2020 Actual	2021 Actual	2022 Budget	2023 Budget
Materials and Supplies				
511410 Small Tools	747	688	764	774
511417 Copy and Printing Expense	9	3	242	242
511420 Operating Materials	2,016	2,123	2,476	2,509
511421 Heating Fuel	18	20	15	25
511422 Chemicals	9,343	9,832	9,387	14,039
511425 Education of School Children	6	5	30	30
511426 Public Awareness-WQEE	-	-	1	1
511427 Enforcement	-	-	5	5
511430 Maintenance Materials	9,736	10,476	9,940	10,637
511435 Safety Materials and Supplies-COVID	156	66	-	-
511440 Safety Materials and Supplies	1,356	1,417	1,542	1,549
511441 Inventory Variances	(87)	(76)	-	-
511450 Tires and Tubes	662	593	550	625
511451 Motor Fuel and Lubricants	1,874	2,560	2,322	3,669
Materials and Supplies Total	**25,836**	**27,707**	**27,274**	**34,105**
Other Charges				
511510 Judgements and Claims	(325)	(601)	650	453
511511 AL/GL Claims - Cont. Liab.	(577)	284	330	330
511520 Bank Charges	91	93	448	448
511525 Cash Short/(Over)	-	1	-	-
511530 Employee Relations	119	113	188	188
511540 Retiree Insurance	6,004	5,326	5,578	4,724
511570 Casualty Insurance	1,189	1,331	1,640	1,940
511580 Unemployment Compensation	73	17	80	80
511590 Workers Comp Medical	529	929	1,000	1,000
Other Charges Total	**7,103**	**7,493**	**9,914**	**9,163**
O&M Before Capitalized Costs	**431,882**	**467,321**	**503,421**	**535,132**
Capitalized Costs	(29,921)	(31,244)	(32,100)	(32,100)
Grand Total	**$ 401,961**	**$ 436,077**	**$ 471,321**	**$ 503,032**

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 2023 debt service schedules assume the issuance of an additional $295.2 million of bonds in 2023 to provide funds for the 2023 CIP. This debt is assumed to be issued as a Senior Lien Water System Revenue Bond. The amount necessary to fulfill total bonded debt service requirements in 2023 on existing and new bonded debt is projected to be $226.9 million, which is 1.3% more than the 2022 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 $11.2 million in debt related expenses in 2023. These expenses include interest on commercial paper and 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 had been set at 2.7% of non-exempt gross revenues. After consultation with SAWS, the City increased this percentage to 4.0% in late 2019. $33.6 million has been budgeted for this transfer, which is $1.4 million higher than the $32.2million budgeted in 2022.

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, $204.9 million is estimated to be available for transfer to the Renewal and Replacement Fund (R&R) of which $108.1 million is restricted primarily for use associated with SAWS Capital Improvement Program. Unrestricted R&R 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. Exceptions have been granted for the following assets that individually cost less than $5,000 but are recorded as capitalized expenditures, computers/laptops, water meters and fire hydrant meters. The Capital Outlay program is based on priorities established by executive management. The capital outlay program for 2023 consists of $12.0 million in planned capital expenditures meeting the above criteria.

The following table includes actual expenditures for 2020 and 2021, budgeted expenditures for 2022, and planned expenditures in 2023 for the capital outlay program:

($ in thousands)	2020 Actual	2021 Actual	2022 Budget	2023 Budget
Automobiles and Trucks	$ 4,536	$ 1,517	$ 4,946	$ 4,967
Computer Equipment	1,993	1,481	2,102	2,106
Heavy Equipment	1,276	2,010	2,347	2,347
Lab Equipment	199	253	200	200
Land, Land Rights & Water Permits	9	-	-	-
Light Equipment	-	43	-	79
Machinery and Equipment	-	-	250	464
Miscellaneous Equipment	5,195	3,600	1,753	1,823
Pumping Equipment	258	461	200	-
Software Systems	652	78	48	35
Structures and Improvements	25	394	-	-
Grand Total	**$ 14,143**	**$ 9,838**	**$ 11,846**	**$ 12,020**

After funding $12.0 million for 2023 capital outlay expenditures, $84.8 million in unrestricted funds is expected to be added to the R&R Fund in 2023. These unrestricted funds are expected to be utilized to provide pay-as-you-go funding to support the SAWS Capital Improvement Program in 2023 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 SAWS' investment portfolio.

Revenue Bonds

As of December 31, 2022, SAWS will have Senior and Junior Lien Water System Revenue Bonds outstanding, as follows:

- **Senior Lien Water System Fixed-Rate Revenue Bonds -** comprised of Series 2009B and Series 2010B outstanding in the amount of $101,835,000 as of December 31, 2022 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 Fixed-Rate Revenue Bonds** - comprised of 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 2016A (NO RESERVE FUND), Taxable Series 2016B (NO RESERVE FUND), Series 2016C (NO RESERVE FUND), Series 2016D, Series 2016E, Series 2017A (NO RESERVE FUND), Series 2018A (NO RESERVE FUND), Series 2018B, Series 2019B, Series 2019C (NO RESEVE FUND), Series 2020A (NO RESERVE FUND), Series 2020B, Series 2020C (NO RESERVE FUND), Series 2020D, Series 2021A (NO RESERVE FUND), Series 2022A (NO RESERVE FUND), and Series 2022B (NO

RESERVE FUND) outstanding in the amount of $2,525,200,000 as of December 31, 2022 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 Series 2013F (NO RESERVE FUND) Bonds (the "Series 2013F Bonds"), the Series 2014B (NO RESERVE FUND) Bonds (the "Series 2014B Bonds"), and the Series 2019A (NO RESERVE FUND) Bonds (the "Series 2019A Bonds") (together the "Bonds"). The Bonds were issued as multi-modal variable rate bonds. As of December 31, 2022, the Series 2013F Bonds are in a Term Mode with a fixed interest rate of 1.00%, yielding 0.82% for a five-year period ending October 31, 2026. On November 1, 2022, the Series 2014B Bonds were remarketed into Securities Industry and Financial Markets Association (SIFMA) Index Mode for a three-year period through October 31, 2025. The interest rate for the Series 2014B Bonds will reset weekly based on the SIMFA Swap Index plus a spread of 0.65%. The Series 2019A Bonds were issued in a Term Mode at a fixed interest rate of 2.65%, yielding 2.45% through April 30, 2024. Junior Lien Variable Rate Revenue Bonds outstanding as of December 31, 2022 total $364,490,000. 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.

INTEREST RATE HEDGE AGREEMENT (SWAP)

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. On December 31, 2022, $64,385,000 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 2023 budgeted debt service requirements of SAWS at the original principal amortization of the Subordinate Lien Obligations. Principal amortization calls for $4,640,000 of the commercial paper notes associated with the Subordinate Lien Obligations to be redeemed on May 1, 2023, bringing the outstanding balance to $59,745,000.

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 2023 assumes any required increase in the reserve fund will be funded with proceeds from bonds issued.

COMMERCIAL PAPER

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. The San Antonio City Council has authorized a commercial paper (CP) program of up to $500 million (CP Program). The CP Program provides for the issuance of subseries of notes, currently designated as Subseries A-1, Subseries A-2, Series B and Series C. The CP Program is supported by two revolving credit agreements, one with JPMorgan Chase Bank, N.A. (the "Series A Agreement"), and the other with Wells Fargo Bank, N.A (the "Series B Agreement") (together the "Agreements"). JPMorgan Chase Bank, N.A. currently supports $400 million of Series A CP notes which extends through October 4, 2023. The second revolving credit agreement with Wells Fargo Bank, N.A, supports $100 million in Series B and Series C CP notes, and expires in accordance with its term on January 5, 2024. The Subseries A-1 and Series B CP notes are publicly marketed with the Subseries A-2 CP notes placed directly with JPMorgan Chase Bank, N.A. and the Series C CP notes placed directly with Wells Fargo Bank, N.A., under separate note purchase agreements.

The 2023 Budget assumes approximately $435.6 million of commercial paper is outstanding relating to the funding of capital improvement projects by the end of 2023. As stated in the "Interest Rate Hedge Agreement (Swap)" section herein, by the end of 2023, an additional $59.7 million of the commercial paper program will be attributable to the redemption of the Subordinate Lien Obligations. The 2023 Budget assumes that the interest to be paid on the commercial paper 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 Agreements to ensure the outstanding balance does not exceed the revolving line of credit amounts.

BOND AND COMMERCIAL PAPER RATINGS

In September 2022, the three major rating agencies reviewed SAWS' credit ratings, with S&P Global upgrading the Junior Lien rating to AA+ from AA, and Fitch Ratings revising its Rating Outlook to Positive from Stable. SAWS' credit ratings are as follows:

			Commercial Paper	
	Senior Lien	Junior Lien	Series A-1	Series B
Fitch Ratings	AA+	AA	F1+	F1+
Moody's Investors Service, Inc.	Aa1	Aa2	P-1	P-1
S&P Global Ratings	AA+	AA+	A-1	A-1

The high-quality ratings reflect 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

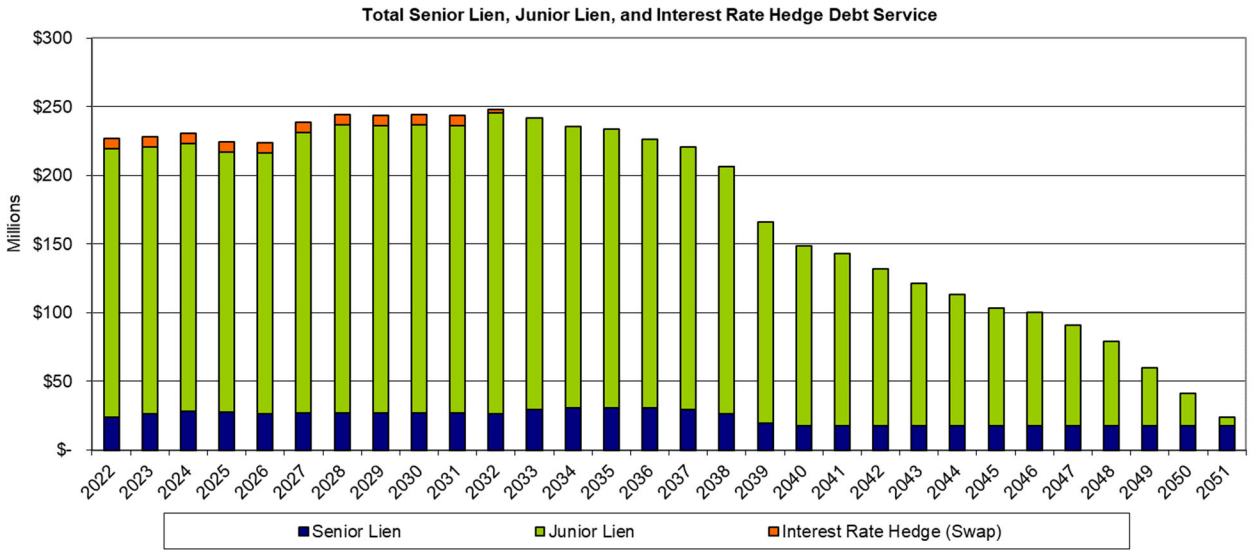
SAWS is required by ordinance to maintain a debt coverage ratio of 1.25 times the annual debt service on outstanding senior lien debt. The 2023 Operating Budget projects an estimated 2023 Senior Lien Debt Coverage ratio of 15.39 times and 2023 Total Bonded Debt Coverage ratio of 1.61 times.

DEBT COVERAGE CALCULATION *($ in thousands)*		
Total Sources of Funds	**$**	**978,766**
Less Revenues from:		
CPS Energy Contract		3,709
Capital Recovery Fees		100,074
Transfer from Renewal & Replacement Fund		-
Interest on Project Funds		7,000
Gross Revenues as defined by Ordinance No. 75686	**$**	**867,983**
Less: Operations & Maintenance		503,032
Pledged Revenues as defined by Ordinance No. 75686	**$**	**364,951**
2023 Senior Lien Debt Service Requirement	$	23,706
2023 Senior Lien Debt Coverage Ratio		**15.39** x
Maximum Senior Lien Debt Service Requirement (Year 2035)	$	30,932
Maximum Senior Lien Debt Coverage Ratio		**11.80** x
2023 Total Bonded Debt Service Requirement	$	226,891
2023 Total Bonded Debt Coverage Ratio		**1.61** x
Maximum Total Debt Service Requirement (Year 2033)	$	247,835
Maximum Total Debt Coverage Ratio		**1.47** x

BUDGETED REVENUE AND REFUNDING BONDS DEBT SERVICE SCHEDULES

Fiscal Year December 31,	Senior Lien	Junior Lien	Combined	Interest Rate Hedge (Swap)	Total Bonded Debt Service
2023	$ 23,706,162	$ 195,843,118	$ 219,549,280	$ 7,341,992	$ 226,891,271
2024	26,140,795	194,670,536	220,811,331	7,358,854	228,170,186
2025	28,134,676	195,298,408	223,433,085	7,379,994	230,813,078
2026	27,649,644	189,144,856	216,794,500	7,396,519	224,191,019
2027	26,622,922	189,778,525	216,401,446	7,416,555	223,818,001
2028	26,823,843	204,235,368	231,059,211	7,439,543	238,498,755
2029	27,024,468	209,779,247	236,803,715	7,461,594	244,265,309
2030	26,938,679	209,524,573	236,463,252	7,485,623	243,948,875
2031	26,852,554	209,752,986	236,605,540	7,509,405	244,114,946
2032	26,765,015	209,643,334	236,408,350	7,534,120	243,942,470
2033	26,683,258	218,637,314	245,320,572	2,514,211	247,834,783
2034	29,581,160	212,296,397	241,877,557	-	241,877,557
2035	30,931,633	204,495,934	235,427,567	-	235,427,567
2036	30,740,257	203,251,272	233,991,528	-	233,991,528
2037	30,537,998	196,044,768	226,582,766	-	226,582,766
2038	29,740,285	190,920,723	220,661,008	-	220,661,008
2039	26,488,935	179,940,192	206,429,128	-	206,429,128
2040	19,864,217	145,939,403	165,803,620	-	165,803,620
2041	17,932,975	130,912,565	148,845,540	-	148,845,540
2042	17,930,900	124,990,284	142,921,184	-	142,921,184
2043	17,931,213	113,897,975	131,829,188	-	131,829,188
2044	17,932,788	103,374,579	121,307,367	-	121,307,367
2045	17,934,500	95,146,490	113,080,990	-	113,080,990
2046	17,930,338	85,665,155	103,595,493	-	103,595,493
2047	17,934,063	82,214,594	100,148,656	-	100,148,656
2048	17,934,325	73,335,927	91,270,252	-	91,270,252
2049	17,934,888	61,159,394	79,094,281	-	79,094,281
2050	17,934,400	41,931,605	59,866,005	-	59,866,005
2051	17,931,513	23,226,640	41,158,152	-	41,158,152
2052	17,934,650	5,928,985	23,863,635	-	23,863,635
	$ 706,423,050	$ 4,500,981,149	$ 5,207,404,199	$ 76,838,410	$ 5,284,242,609

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



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Organization and Staffing

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ORGANIZATION AND STAFFING

OPERATIONS AND MAINTENANCE SUMMARY BY DEPARTMENT

($ in thousands)	2020 Actual	2021 Actual	2022 Budget	2023 Budget
Board of Trustees and Pres/CEO				
Office of the President-CEO	$ 1,140	$ 1,312	$ 1,263	$ 1,268
Board of Trustees	52	51	64	64
Board of Trustees Support	280	276	343	354
Continuous Improvement and Innovation	449	473	436	465
Internal Audit	609	664	716	733
Board of Trustees and Pres/CEO Total	**2,530**	**2,776**	**2,822**	**2,884**
Communications and External Affairs				
Communications Administration	541	599	579	604
Communications	1,481	1,514	1,701	1,761
Conservation Department	5,306	4,437	5,934	6,024
External Relations	2,201	2,156	2,343	2,487
Communications and External Affairs Total	**9,529**	**8,706**	**10,557**	**10,876**
Customer Experience and Strategic Initiatives				
Customer Service Administration	500	525	517	430
Billing and Customer Care	7,192	7,592	8,227	9,030
Emergency Operations Center	1,493	1,426	1,509	1,535
Field Operations	10,827	10,654	13,476	12,992
Performance Analysis and Training	796	889	857	1,358
Customer Experience and Strategic Initiatives Total	**20,808**	**21,086**	**24,586**	**25,345**
Distribution and Collection				
Office of the VP - Distribution and Collection	1,160	1,193	1,455	1,555
Construction and Maintenance	18,351	18,860	19,303	20,782
Distribution and Collection Support Services	6,598	6,415	8,572	7,953
Eastern Service Centers	11,517	10,752	11,234	11,852
Western Service Centers	10,301	10,122	10,027	10,602
Sewer System Improvements	9,778	8,734	10,081	10,601
Distribution and Collection Total	**57,705**	**56,076**	**60,672**	**63,345**
Engineering and Construction				
Office of the VP - Engineering and Construction	1,086	1,124	501	523
Asset Management	1,631	1,256	1,977	1,965
Central Water Integration Pipeline Project	257	-	-	-
Construction	6,862	6,929	7,634	7,771
Development	3,837	4,937	4,008	4,415
Pipelines	4,430	4,278	4,343	4,629
Plants and Major Projects	1,983	2,159	2,288	2,344
Tank Maintenance	4,751	3,895	4,286	6,536
Engineering and Construction Total	**24,837**	**24,578**	**25,037**	**28,183**
Financial Services				
Office of the CFO	494	481	457	465
Accounting and Business Planning	3,159	3,140	3,269	3,322
Purchasing and Supply	1,901	1,780	2,070	2,258
Treasury	987	881	1,188	1,229
Financial Services Total	**6,541**	**6,282**	**6,984**	**7,274**

OPERATIONS AND MAINTENANCE SUMMARY BY DEPARTMENT *(CONTINUED)*

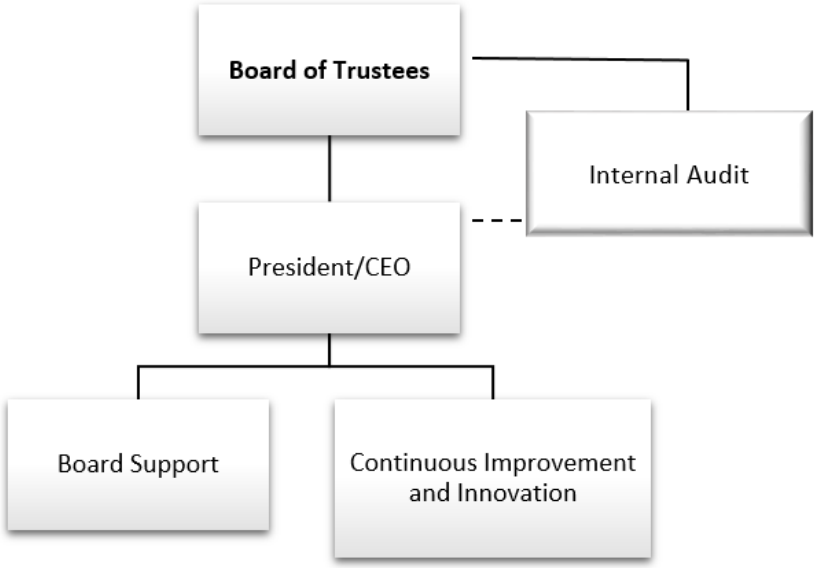
($ in thousands)	2020 Actual	2021 Actual	2022 Budget	2023 Budget
Human Resources				
Human Resources	4,445	4,640	4,832	5,843
Risk Management	2,510	2,604	2,893	3,243
Safety and Environmental Health	860	858	925	961
Human Resources Total	**7,815**	**8,102**	**8,650**	**10,047**
Information Systems				
Office of the CIO	1,472	1,778	2,126	2,081
Enterprise Solutions	8,095	8,625	9,790	10,946
IT Infrastructure & Operations	7,823	7,890	9,674	10,151
Shared Services	6,466	7,811	7,263	7,229
Information Systems Total	**23,856**	**26,104**	**28,853**	**30,407**
Legal				
Contracting	1,571	1,502	1,571	1,623
Corporate Real Estate	583	583	689	710
Legal Department	4,013	4,282	4,506	5,285
Legal Total	**6,167**	**6,367**	**6,766**	**7,618**
Operations				
Ofc of Chief Operating Officer	1,460	819	762	738
Sr. VP Engineering and Construction	96	-	-	-
Operations Total	**1,556**	**819**	**762**	**738**
Operations Support				
Fleet and Facilities	23,331	25,825	23,521	26,552
Security	4,245	3,017	3,815	3,917
Operations Support Total	**27,576**	**28,842**	**27,336**	**30,469**
Production and Treatment				
Office of the VP - Production and Treatment	599	504	601	873
Ofc of Director - Production and Treatment Operati	76	69	83	67
Production Department	35,462	36,079	41,156	39,848
Treatment Maintenance Management	17,842	15,716	22,662	22,672
Treatment Operations Management	23,827	25,788	25,213	29,572
Production and Treatment Total	**77,806**	**78,156**	**89,715**	**93,032**
Water Resources and Governmental Relations				
Environmental Laboratory Services	2,563	2,536	2,618	2,876
Governmental Relations	1,699	1,146	1,200	1,233
Resource Protection & Compliance	8,256	8,506	8,660	10,706
Water Resources	125,856	162,309	168,540	173,147
Water Resources and Governmental Relations Total	**138,374**	**174,497**	**181,018**	**187,962**
Other Requirements	**26,782**	**24,930**	**29,663**	**36,952**
O&M Before Capitalized Cost Total	**431,882**	**467,321**	**503,421**	**535,132**
Capitalized Cost	**(29,921)**	**(31,244)**	**(32,100)**	**(32,100)**
Grand Total	**$ 401,961**	**$ 436,077**	**$ 471,321**	**$ 503,032**

OPERATIONS AND MAINTENANCE SUMMARIES BY GROUP

BOARD OF TRUSTEES AND PRESIDENT/CEO

The Board of Trustees and President /CEO Group provide the overall leadership, management, direction and policy implementation for the San Antonio Water System. It consists of the Board of Trustees, Office of the President/CEO, Board support functions, the Internal Audit function and the Continuous Improvement and Innovation 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 setting the overall policy direction of the system.
- **President/CEO** – The President/CEO is responsible and accountable for leading and managing the San Antonio Water System, including the implementation of the policy goals set by the Board of Trustees and City Council. The President/CEO sets the vision and works alongside employees to achieve SAWS' mission and goals.
- **Internal Audit** – The Internal Audit Office provides independent and objective assurance and consulting services designed to add value and improve SAWS' operations. Internal Audit administratively reports to the President/CEO and functionally reports to the Board of Trustees.
- **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.



BOARD OF TRUSTEES AND PRESIDENT/CEO

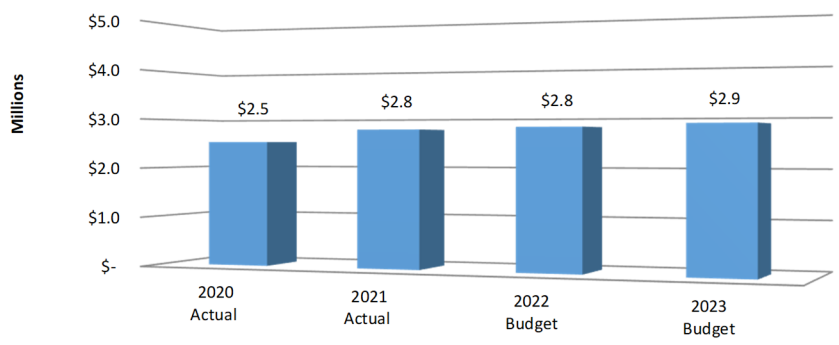
($ in thousands)

Expenditures by Type	2020 Actual	2021 Actual	2022 Budget	2023 Budget
O&M Before Capitalized Cost				
Salaries and Fringe Benefits	$ 2,393	$ 2,599	$ 2,572	$ 2,634
Contractual Services	132	174	241	241
Materials and Supplies	5	3	9	9
Other Charges	-	-	-	-
O&M Before Capitalized Cost Total	**$ 2,530**	**$ 2,776**	**$ 2,822**	**$ 2,884**
Capitalized Cost	-	-	-	-
Total O&M	**$ 2,530**	**$ 2,776**	**$ 2,822**	**$ 2,884**
Capital Outlay	**$ -**	**$ -**	**$ -**	**$ -**

Expenditures by Department	2020 Actual	2021 Actual	2022 Budget	2023 Budget
Office of the President-CEO	$ 1,140	$ 1,312	$ 1,263	$ 1,268
Board of Trustees	52	51	64	64
Board of Trustees Support	280	276	343	354
Continuous Improvement and Innovation	449	473	436	465
Internal Audit	609	664	716	733
O&M Before Capitalized Cost Total	**$ 2,530**	**$ 2,776**	**$ 2,822**	**$ 2,884**
Capitalized Cost	-	-	-	-
Grand Total	**$ 2,530**	**$ 2,776**	**$ 2,822**	**$ 2,884**

Full-Time Equivalent Positions	2020 Actual	2021 Actual	2022 Budget	2023 Budget
Office of the President-CEO	3.0	3.0	3.0	3.0
Board of Trustees Support	2.0	2.0	2.0	2.0
Continuous Improvement and Innovation	4.5	4.0	4.0	4.0
Internal Audit	5.0	5.0	5.0	5.0
Total Full-Time Equivalent Positions	**14.5**	**14.0**	**14.0**	**14.0**

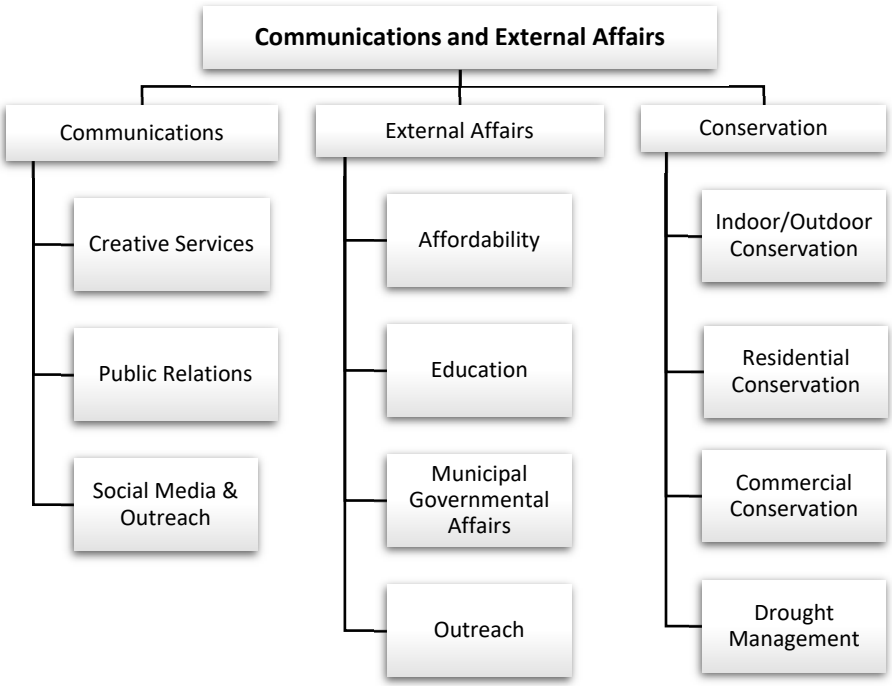
BOARD OF TRUSTEES AND PRESIDENT/CEO



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.
    - *Social Media & Outreach* – Manages and coordinates messaging on nationally recognized SAWS social media channels. Plans and executes general community outreach events as well as internal SAWS events.
- **External Affairs** – Manages outreach efforts with customers, neighborhood and civic leaders, and San Antonio City Council members. Implements the SAWS Affordability Program (Uplift) that aids economically disadvantaged customers so that they have access to water and sewer services. Develops and conducts adult and youth educational programs to inform and promote water awareness in our community.
- **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 not used. To help keep rates affordable, SAWS aggressively promotes efficient commercial and residential water use through education, outreach, incentives and drought ordinance rules.



COMMUNICATIONS AND EXTERNAL AFFAIRS

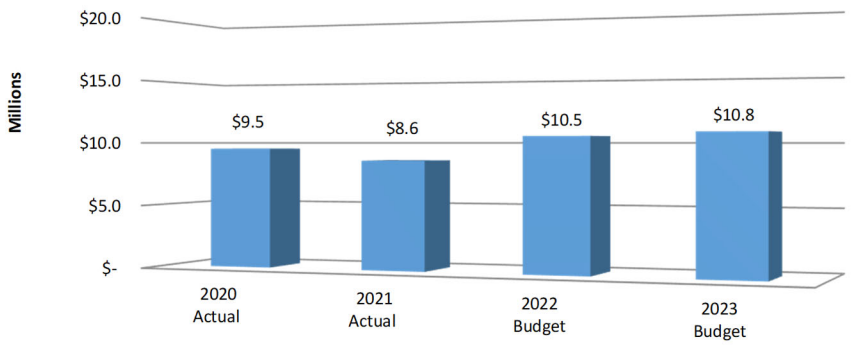
($ in thousands)

Expenditures by Type	2020 Actual	2021 Actual	2022 Budget	2023 Budget
O&M Before Capitalized Cost				
Salaries and Fringe Benefits	$ 4,628	$ 4,715	$ 4,859	$ 5,103
Contractual Services	4,893	3,981	5,630	5,705
Materials and Supplies	8	10	53	53
Other Charges	-	-	15	15
O&M Before Capitalized Cost Total	**$ 9,529**	**$ 8,706**	**$ 10,557**	**$ 10,876**
Capitalized Cost	-	(107)	(28)	(28)
Total O&M	**$ 9,529**	**$ 8,599**	**$ 10,529**	**$ 10,848**
Capital Outlay	**$ -**	**$ -**	**$ -**	**$ -**

Expenditures by Department	2020 Actual	2021 Actual	2022 Budget	2023 Budget
Communications Administration	$ 541	$ 599	$ 579	$ 604
Communications	1,481	1,514	1,701	1,761
Conservation Department	5,306	4,437	5,934	6,024
External Relations	2,201	2,156	2,343	2,487
O&M Before Capitalized Cost Total	**$ 9,529**	**$ 8,706**	**$ 10,557**	**$ 10,876**
Capitalized Cost	-	(107)	(28)	(28)
Grand Total	**$ 9,529**	**$ 8,599**	**$ 10,529**	**$ 10,848**

Full-Time Equivalent Positions	2020 Actual	2021 Actual	2022 Budget	2023 Budget
Communications Administration	4.0	4.0	4.0	4.0
Communications	9.5	9.5	9.5	9.5
Conservation Department	24.0	24.0	24.0	24.0
External Relations	14.0	14.5	14.5	15.5
Total Full-Time Equivalent Positions	**51.5**	**52.0**	**52.0**	**53.0**

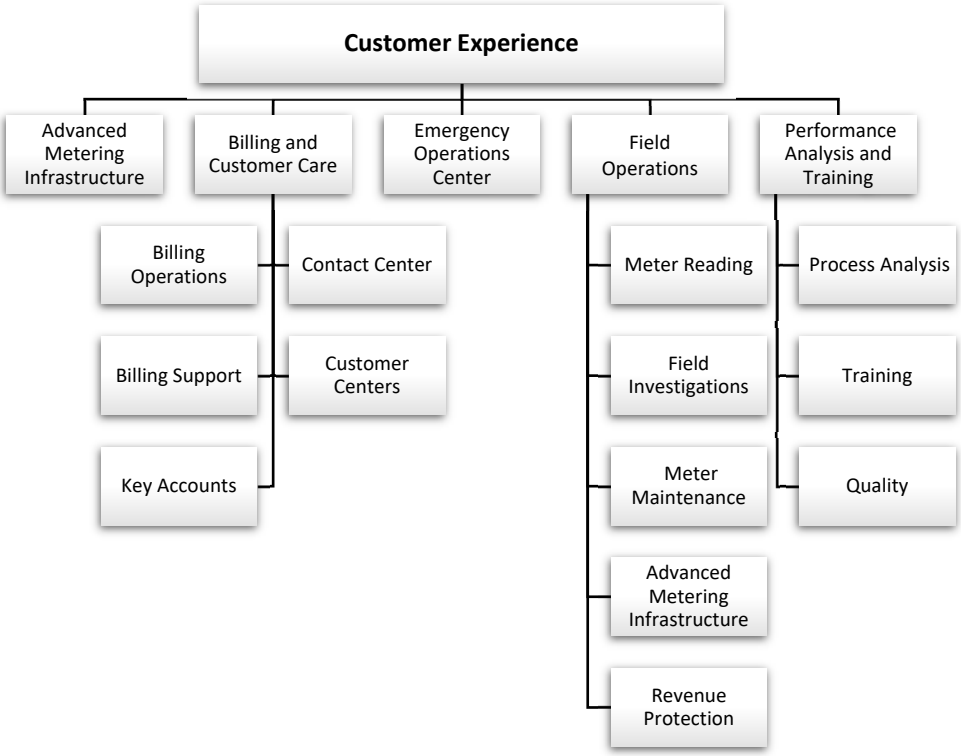
COMMUNICATIONS AND EXTERNAL RELATIONS



CUSTOMER EXPERIENCE

The Customer Experience 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 and Customer Care** – Reviews the billing process for accuracy of all SAWS bills printed daily and resolves customer billing issues. Also handles all inbound telephone, electronic and in-person customer inquiries regarding billing, account information, service problems and payments.
- **Emergency Operations Center** – Manages the 24-hour emergency call center and reports/dispatches crews for water leaks, main breaks, and overall tactical responses to problems within the system.
- **Field Operations** – Responsible for all meter related services including setting new meters, replacing existing meters, meter reading, service turn-on/turn-off requests, and service investigations. Manages the Advanced Meter Infrastructure (AMI) operations department which is responsible for executing the program to install electronic meters across SAWS service area, managing system performance and responding to meter related alarms and events. Reduces revenue loss through theft detection efforts.
- **Performance Analysis and Training** – Responsible for data analytics, training and process improvements throughout Customer Service. Ensures quality of customer interactions.



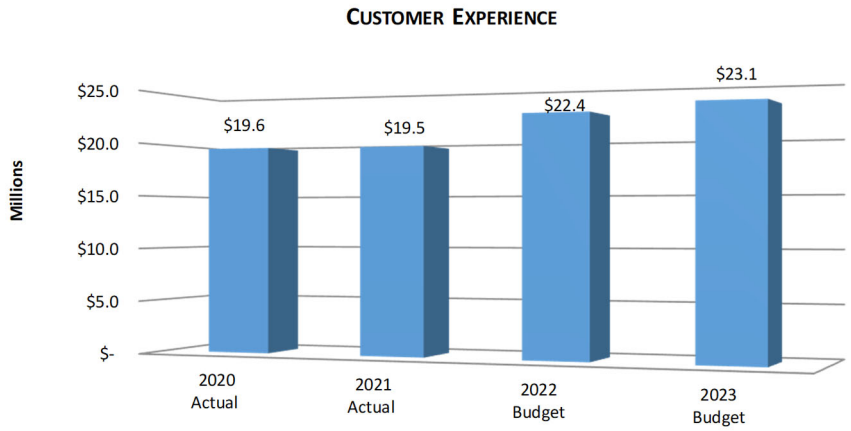
CUSTOMER EXPERIENCE

($ in thousands)

Expenditures by Type	2020 Actual	2021 Actual	2022 Budget	2023 Budget
O&M Before Capitalized Cost				
Salaries and Fringe Benefits	$ 17,810	$ 18,493	$ 19,979	$ 21,239
Contractual Services	2,269	1,827	3,581	3,084
Materials and Supplies	725	762	1,023	1,019
Other Charges	4	4	3	3
O&M Before Capitalized Cost Total	**$ 20,808**	**$ 21,086**	**$ 24,586**	**$ 25,345**
Capitalized Cost	(1,246)	(1,567)	(2,233)	(2,233)
Total O&M	**$ 19,562**	**$ 19,519**	**$ 22,353**	**$ 23,112**
Capital Outlay	**$ 255**	**$ -**	**$ 240**	**$ -**

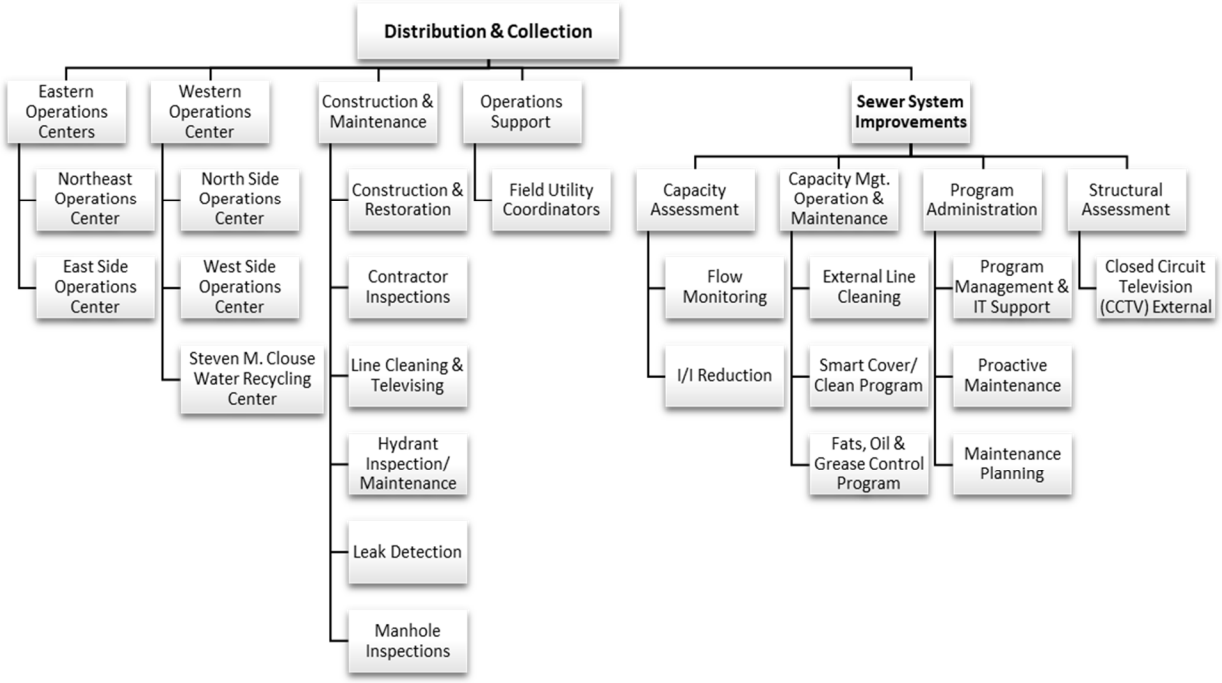
Expenditures by Department	2020 Actual	2021 Actual	2022 Budget	2023 Budget
Customer Service Administration	$ 500	$ 525	$ 517	$ 430
Billing and Customer Care	7,192	7,592	8,227	9,030
Emergency Operations Center	1,493	1,426	1,509	1,535
Field Operations	10,827	10,654	13,476	12,992
Performance Analysis and Training	796	889	857	1,358
O&M Before Capitalized Cost Total	**$ 20,808**	**$ 21,086**	**$ 24,586**	**$ 25,345**
Capitalized Cost	(1,246)	(1,567)	(2,233)	(2,233)
Grand Total	**$ 19,562**	**$ 19,519**	**$ 22,353**	**$ 23,112**

Full-Time Equivalent Positions	2020 Actual	2021 Actual	2022 Budget	2023 Budget
Customer Service Administration	3.0	3.0	3.0	2.0
Billing and Customer Care	142.0	150.5	162.0	162.0
Emergency Operations Center	22.0	22.0	22.0	22.0
Field Operations	142.0	139.0	154.0	151.0
Performance Analysis and Training	12.0	15.0	12.0	16.0
Total Full-Time Equivalent Positions	**321.0**	**329.5**	**353.0**	**353.0**



DISTRIBUTION AND COLLECTION

The Distribution and Collection Group operates, maintains and repairs 13,444 miles of water and sewer mains, approximately 126 miles of recycled water distribution lines, and 9 miles of chilled water lines ensuring our customers receive uninterrupted, quality water and associated services. This is accomplished by the following departments:



- **Operations Centers –** SAWS utility crews are mobilized from five strategically located operations centers throughout the city: Northeast, East Side, North Side, West Side and Steven M. Clouse Water Recycling Center (South Side). 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, including surface restoration.

- **Construction & Maintenance** – Repairs and proactively maintains the wastewater collection system, including line cleaning and televising to verify sewer infrastructure condition and pinpoint defects. Hydrant Maintenance and Leak Detection oversees proactive leak detection, valve assessment, fire hydrant maintenance programs and oversees proactive manhole inspections. Contractor Inspections direct external support of water and sewer repairs as well as concrete and asphalt restoration.

- **Operations Support** - Provides administrative support to departments within the group, including invoice processing, data management, service contract management, materials acquisition and notification services for maintenance crews. Field Utility Coordinators also perform emergency and routine field investigations including utility locate services.

- **Sewer Systems Improvements** - Sewer System Improvements is responsible for developing, implementing, and administering various programs designed to reduce sanitary sewer overflows (SSO) 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 hydraulic modeling. Directs the Inflow/Infiltration (I/I) Reduction Program implemented to decrease excess flow from entering the WCTS during significant rain events.

    - **Capacity Management Operation & Maintenance (CMOM)** – Executes a comprehensive program encompassing activities to optimize the performance of the WCTS, including a system-wide external cleaning program, Smart Cover/Clean 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 to include reporting requirements pertaining to SSOs as well as the operations and maintenance of the WCTS.

    - **Structural Sewer Assessment** – Coordinates and executes activities associated with inspecting, assessing and performing remedial measures associated with condition and capacity constraints in the WCTS.

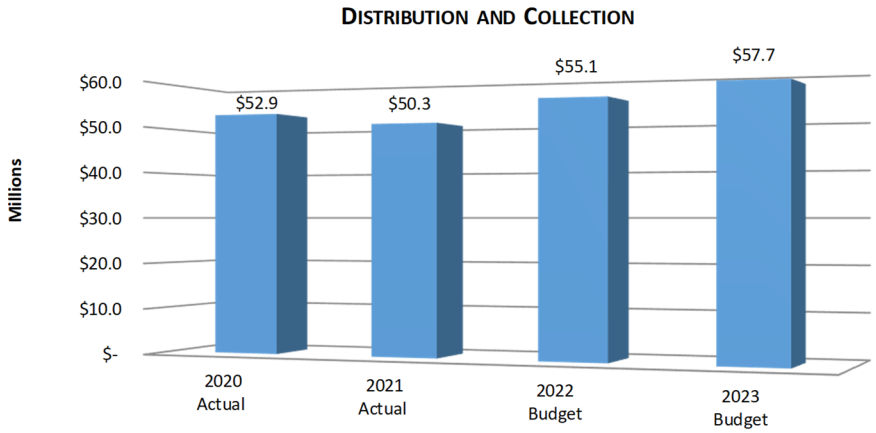
DISTRIBUTION AND COLLECTION

($ in thousands)

Expenditures by Type	2020 Actual	2021 Actual	2022 Budget	2023 Budget
O&M Before Capitalized Cost				
Salaries and Fringe Benefits	$ 35,328	$ 34,650	$ 34,767	$ 37,036
Contractual Services	15,857	15,234	19,229	19,635
Materials and Supplies	6,520	6,192	6,676	6,674
Other Charges	-	-	-	-
O&M Before Capitalized Cost Total	**$ 57,705**	**$ 56,076**	**$ 60,672**	**$ 63,345**
Capitalized Cost	(4,776)	(5,766)	(5,610)	(5,610)
Total O&M	**$ 52,929**	**$ 50,310**	**$ 55,062**	**$ 57,735**
Capital Outlay	**$ 1,108**	**$ -**	**$ 125**	**$ 315**

Expenditures by Department	2020 Actual	2021 Actual	2022 Budget	2023 Budget
Office of the VP - Distribution and Collection	$ 1,160	$ 1,193	$ 1,455	$ 1,555
Construction and Maintenance	18,351	18,860	19,303	20,782
Distribution and Collection Support Services	6,598	6,415	8,572	7,953
Eastern Service Centers	11,517	10,752	11,234	11,852
Western Service Centers	10,301	10,122	10,027	10,602
Sewer System Improvements	9,778	8,734	10,081	10,601
O&M Before Capitalized Cost Total	**$ 57,705**	**$ 56,076**	**$ 60,672**	**$ 63,345**
Capitalized Cost	(4,776)	(5,766)	(5,610)	(5,610)
Grand Total	**$ 52,929**	**$ 50,310**	**$ 55,062**	**$ 57,735**

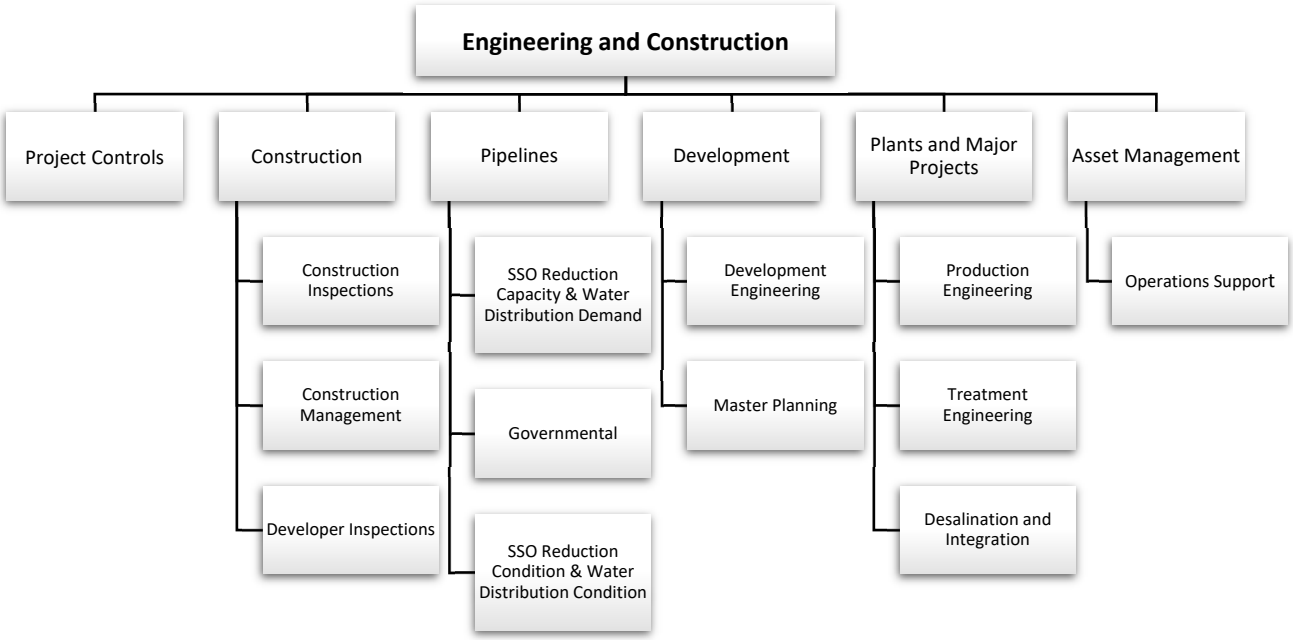
Full-Time Equivalent Positions	2020 Actual	2021 Actual	2022 Budget	2023 Budget
Office of the VP - Distribution and Collection	8.5	8.5	9.5	9.5
Construction and Maintenance	168.0	176.0	169.0	178.0
Distribution and Collection Support	49.0	41.0	49.0	41.0
Eastern Service Centers	130.0	132.0	130.0	128.0
Western Service Centers	128.0	127.0	128.0	128.0
Sewer System Improvements	31.00	29.00	29.00	28.00
Total Full-Time Equivalent Positions	**514.5**	**513.5**	**514.5**	**512.5**



ENGINEERING AND CONSTRUCTION

The Engineering and Construction Group 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 manages the design and construction of new and replacement water and wastewater infrastructure. The Engineering and Construction group is comprised of the following departments:

- **Project Controls** – Oversees the CIP and supports Sanitary Sewer Overflow Reduction Program (SSORP) compliance through project execution. Project Controls focuses on cost, schedule, document and data management, quality control and compliance audits.
- **Construction** – Inspects water delivery, sewer, and water supply infrastructure construction projects.
- **Pipelines** – Plans and coordinates design activities, for wastewater collection system projects including replacement and rehabilitation of existing mains as well as the design of new mains. Coordinates the adjustments of SAWS facilities within public right of way (state, county and city) in accordance with the Governmental program.
- **Development** – Manages impact fee program, develops water and wastewater master plans, coordinates infrastructure necessary for new development.
- **Plants and Major Projects** – Plans and coordinates design activities for water distribution projects, potable and recycled water production facilities, and wastewater treatment plants.
- **Asset Management -** Oversees efforts of condition assessment activities in order to maximize usage of SAWS assets and infrastructure. Support to operations is also provided by this unit.



ENGINEERING AND CONSTRUCTION

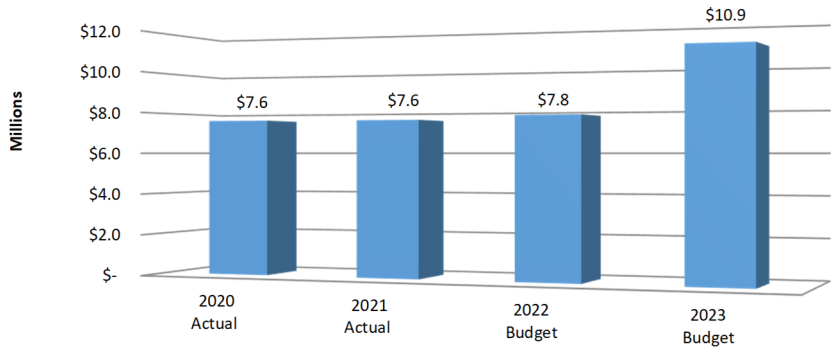
($ in thousands)

Expenditures by Type	2020 Actual	2021 Actual	2022 Budget	2023 Budget
O&M Before Capitalized Cost				
Salaries and Fringe Benefits	$ 18,093	$ 18,083	$ 18,765	$ 19,477
Contractual Services	6,695	6,417	6,178	8,609
Materials and Supplies	49	78	94	97
Other Charges	-	-	-	-
O&M Before Capitalized Cost Total	**$ 24,837**	**$ 24,578**	**$ 25,037**	**$ 28,183**
Capitalized Cost	(17,235)	(16,989)	(17,251)	(17,251)
Total O&M	**$ 7,602**	**$ 7,589**	**$ 7,786**	**$ 10,932**
Capital Outlay	**$ -**	**$ -**	**$ 105**	**$ -**

Expenditures by Department	2020 Actual	2021 Actual	2022 Budget	2023 Budget
Office of the VP - Engineering and Construction	$ 1,086	$ 1,124	$ 501	$ 523
Asset Management	1,631	1,256	1,977	1,965
Central Water Integration Pipeline Project	257	-	-	-
Construction	6,862	6,929	7,634	7,771
Development	3,837	4,937	4,008	4,415
Pipelines	4,430	4,278	4,343	4,629
Plants and Major Projects	1,983	2,159	2,288	2,344
Tank Maintenance	4,751	3,895	4,286	6,536
O&M Before Capitalized Cost Total	**$ 24,837**	**$ 24,578**	**$ 25,037**	**$ 28,183**
Capitalized Cost	(17,235)	(16,989)	(17,251)	(17,251)
Grand Total	**$ 7,602**	**$ 7,589**	**$ 7,786**	**$ 10,932**

Full-Time Equivalent Positions	2020 Actual	2021 Actual	2022 Budget	2023 Budget
Office of the VP - Engineering and Construction	12.0	3.0	3.0	3.0
Asset Management	7.5	10.0	11.5	11.0
Construction	77.0	76.0	76.0	76.0
Development	35.0	35.0	35.5	36.0
Pipelines	45.0	44.0	44.0	45.0
Plants and Major Projects	21.5	21.0	21.0	21.0
Project Controls		7.0	7.0	6.0
Total Full-Time Equivalent Positions	**198.0**	**196.0**	**198.0**	**198.0**

ENGINEERING AND CONSTRUCTION

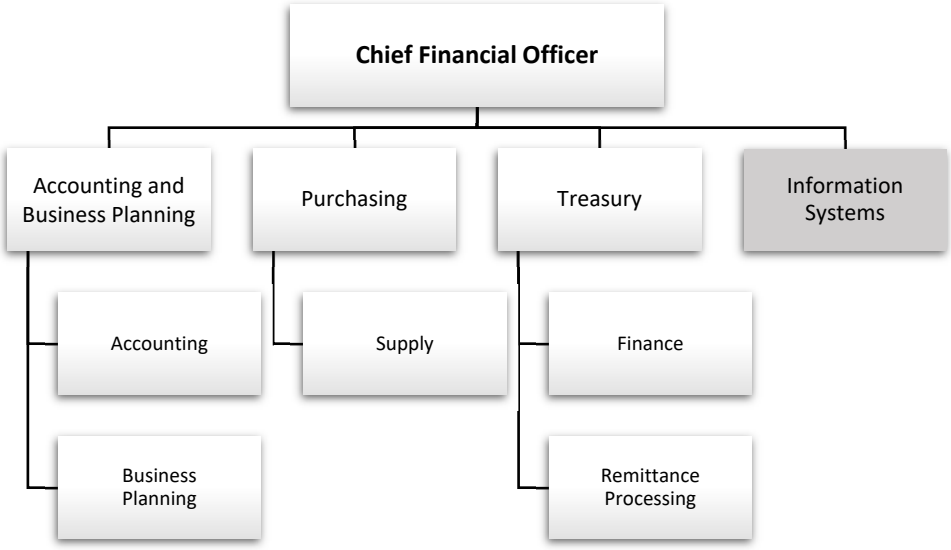


FINANCIAL SERVICES

The Financial Services Group is headed by the Sr. Vice President/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:

- **Accounting and Business Planning:**
  - *Accounting* – Responsible for accurate and timely accounting and financial reporting through the General Accounting, Property Accounting, Payroll and Accounts Payable units.
  - *Business Planning* – Ensures that SAWS' strategic objectives are financially supported through short- and long-range financial planning; annual budget planning and preparation; and rates analysis and development to provide revenues sufficient to support operating activities and capital improvement project implementation.
- **Purchasing:**
  - *Purchasing* – Manages the processing and contracting of all procurement requests for materials, supplies and services.
  - *Supply* – Oversees the inventory control process by organizing and managing the flow of materials inventory from their initial purchase to destination.
- **Treasury:**
  - *Finance* – Responsible for banking relationships, investment and debt management.
  - *Remittance Processing* – Customer payment processing.

The CFO also oversees the Information Systems group.



FINANCIAL SERVICES

($ in thousands)

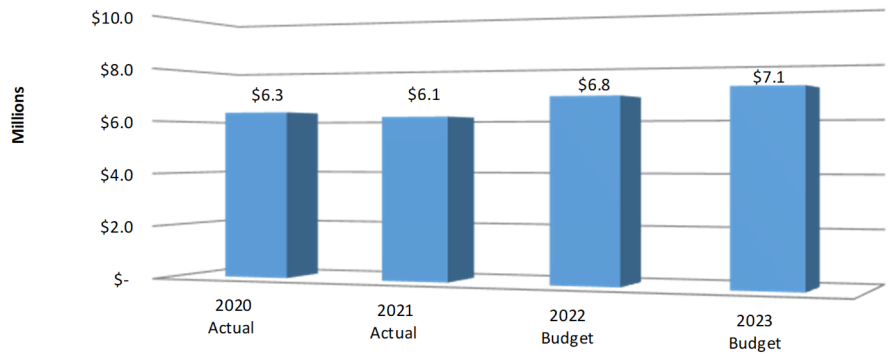
Expenditures by Type	2020 Actual	2021 Actual	2022 Budget	2023 Budget
O&M Before Capitalized Cost				
Salaries and Fringe Benefits	$ 5,730	$ 5,754	$ 5,757	$ 6,239
Contractual Services	781	597	737	545
*Newspaper Published Notices**	*38*	*36*	*15*	*23*
Materials and Supplies	(61)	(163)	42	42
Other Charges	91	94	448	448
O&M Before Capitalized Cost Total	**$ 6,541**	**$ 6,282**	**$ 6,984**	**$ 7,274**
Capitalized Cost	(208)	(149)	(137)	(137)
Total O&M	**$ 6,333**	**$ 6,133**	**$ 6,847**	**$ 7,137**
Capital Outlay	**$ 1,065**	**$ 37**	**$ 120**	**$ -**

Expenditures by Department	2020 Actual	2021 Actual	2022 Budget	2023 Budget
Office of the CFO	$ 494	$ 481	$ 457	$ 465
Accounting and Business Planning	3,159	3,140	3,269	3,322
Purchasing and Supply	1,901	1,780	2,070	2,258
Treasury	987	881	1,188	1,229
O&M Before Capitalized Cost Total	**$ 6,541**	**$ 6,282**	**$ 6,984**	**$ 7,274**
Capitalized Cost	(208)	(149)	(137)	(137)
Grand Total	**$ 6,333**	**$ 6,133**	**$ 6,847**	**$ 7,137**

Full-Time Equivalent Positions	2020 Actual	2021 Actual	2022 Budget	2023 Budget
Office of the CFO	2.0	2.0	2.0	2.0
Accounting and Business Planning	30.0	30.0	30.0	30.0
Purchasing and Supply	24.0	24.0	24.0	25.0
Treasury	9.0	8.0	8.0	8.0
Total Full-Time Equivalent Positions	**65.0**	**64.0**	**64.0**	**65.0**

*In accordance with 86R House Bill 1495

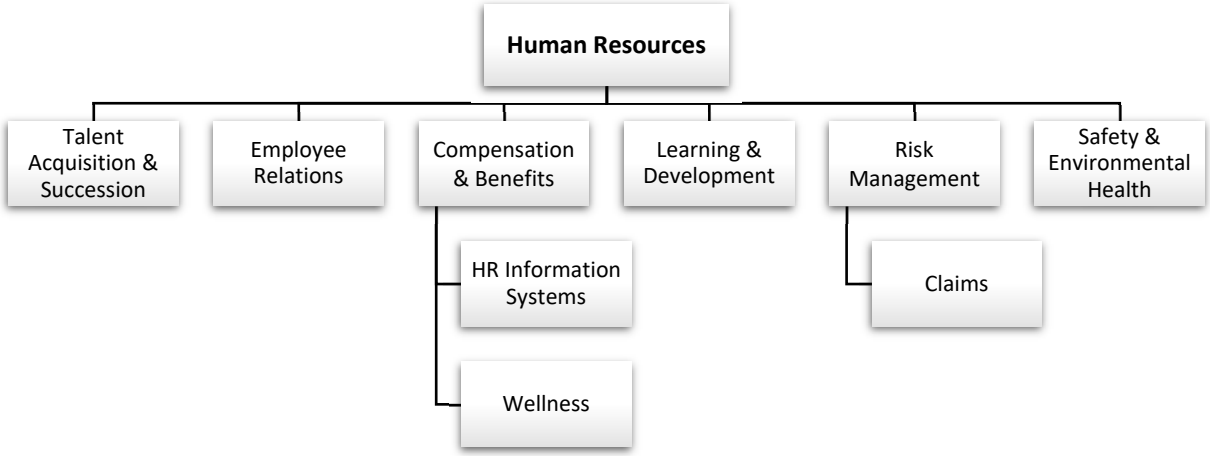
FINANCIAL SERVICES



HUMAN RESOURCES

The Human Resources 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:

- **Talent Acquisition & Succession** – Proactively implements recruitment strategies to attract, secure and retain top talent for SAWS. Recruits employee resources required by all administrative and operational areas. Forecasts and assists organizational areas with succession management.
- **Employee Relations** – 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.
- **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.
- **Learning & Development** – Develops strategies and designs for organizational development, talent and performance management, employee engagement, and change management functions. Manages learning initiatives around a continuous cycle of needs analysis, design, project management, delivery, and evaluation. Helps lead culture change through processes that support organizational learning, including the continual enhancement of the performance evaluation process.
- **Risk Management** – Manages all facets of the comprehensive commercial insurance program including administration of premises risk assessments. Administers all workers' compensation, casualty and subrogation claims.
- **Safety & Environmental Health** – Coordinates all workplace safety activities to ensure a safe environment for employees. Partners with organizational management in anticipating safety challenges and exploring opportunities for improvement.



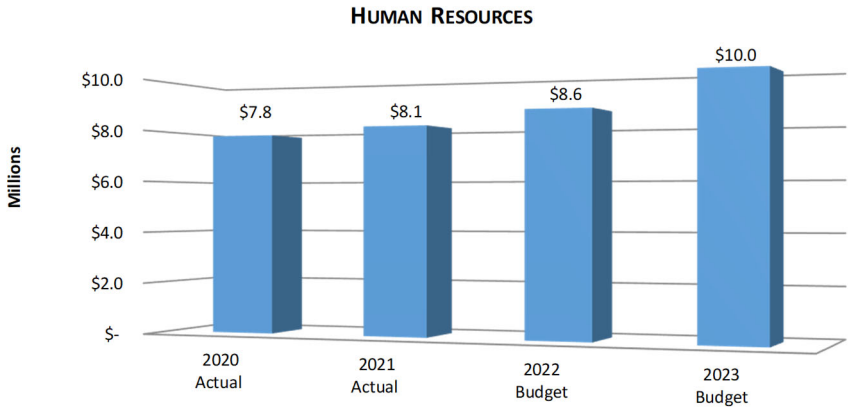
HUMAN RESOURCES

($ in thousands)

Expenditures by Type	2020 Actual	2021 Actual	2022 Budget	2023 Budget
O&M Before Capitalized Cost				
Salaries and Fringe Benefits	$ 5,265	$ 5,307	$ 5,280	$ 6,045
Contractual Services	1,217	1,327	1,494	1,826
Materials and Supplies	28	29	67	67
Other Charges	1,305	1,439	1,809	2,109
O&M Before Capitalized Cost Total	**$ 7,815**	**$ 8,102**	**$ 8,650**	**$ 10,047**
Capitalized Cost	-	-	-	-
Total O&M	**$ 7,815**	**$ 8,102**	**$ 8,650**	**$ 10,047**
Capital Outlay	**$ -**	**$ -**	**$ -**	**$ -**

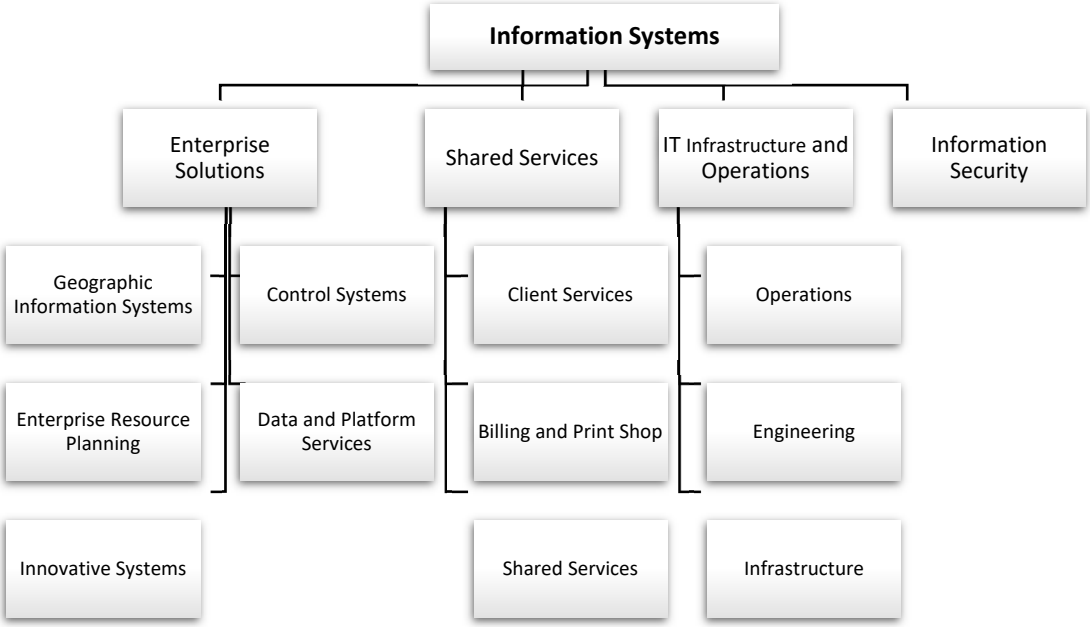
Expenditures by Department	2020 Actual	2021 Actual	2022 Budget	2023 Budget
Human Resources	$ 4,445	$ 4,640	$ 4,832	$ 5,843
Risk Management	2,510	2,604	2,893	3,243
Safety and Environmental Health	860	858	925	961
O&M Before Capitalized Cost Total	**$ 7,815**	**$ 8,102**	**$ 8,650**	**$ 10,047**
Capitalized Cost	-	-	-	-
Grand Total	**$ 7,815**	**$ 8,102**	**$ 8,650**	**$ 10,047**

Full-Time Equivalent Positions	2020 Actual	2021 Actual	2022 Budget	2023 Budget
Human Resources	33.0	33.0	33.0	38.0
Risk Management	9.0	9.0	9.0	9.0
Safety and Environmental Health	9.0	9.0	9.0	9.0
Total Full-Time Equivalent Positions	**51.0**	**51.0**	**51.0**	**56.0**



INFORMATION SYSTEMS

SAWS Information Systems Group delivers quality, secure, cost-effective applications and information technology services, which promote innovation to sustain growth while enabling SAWS to better serve our valued customers. Information Systems teams include:



- **Enterprise Solutions:**
    - *Geographic Information Systems (GIS)* – Develops, analyzes and delivers geographic data and solutions related to SAWS infrastructure and activities.
    - *Control Systems* – Implements, monitors, and maintains supervisory control and data acquisition (SCADA) systems.
    - *Enterprise Resource Planning* – Responsible for the programming, configuration, implementation, support and sustainability for all major business support applications.
    - *Data and Platform Services* - Manages the enterprise data warehouse, business intelligence and GIS platforms to provide SAWS timely information for decision making.
    - *Innovative Systems* – Delivers rapid and effective development of innovative solutions for SAWS with a specific focus on improving customer experience through technology.
- **Shared Services**:
    - *Shared Services* - Supports SAWS' technology initiatives through project life-cycle management, metrics-based tracking, business process re-engineering, quality control/assurance, and organizational change management.
    - *Client Services* – Supports workstation and related peripheral devices across SAWS, including desktop support services as well as technology, software orders and requisitions.
    - *Billing and Print Shop* – Provides computer operations and bill printing services as well as copy services.

- **IT Infrastructure and Operations:**
    - *Operations* – Manages telecommunication services including internet protocol (IP) telephony, teleconferencing, call center systems, interactive voice response systems, recording systems, digital radio systems and 911 systems.
    - *Engineering* – Provides network and internet services, including all aspects of network architecture and engineering, and wired and wireless network infrastructure for SAWS facilities.
    - *Infrastructure* – Responsible for all aspects of systems administration, database administration, systems software and hardware, the storage area network, backup and disaster recovery.
- **Information Security** – Responsible for developing, monitoring, and maintaining cybersecurity controls to protect the confidentiality, integrity, and availability of enterprise data and information systems assets.

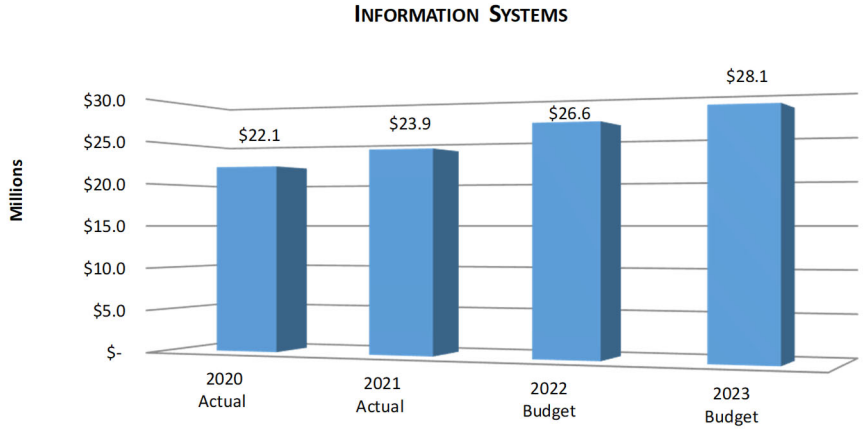
INFORMATION SYSTEMS

($ in thousands)

Expenditures by Type	2020 Actual	2021 Actual	2022 Budget	2023 Budget
O&M Before Capitalized Cost				
Salaries and Fringe Benefits	$ 10,653	$ 10,726	$ 12,055	$ 12,480
Contractual Services	12,836	14,956	16,288	17,417
Materials and Supplies	367	422	510	510
Other Charges	-	-	-	-
O&M Before Capitalized Cost Total	**$ 23,856**	**$ 26,104**	**$ 28,853**	**$ 30,407**
Capitalized Cost	(1,787)	(2,215)	(2,258)	(2,258)
Total O&M	**$ 22,069**	**$ 23,889**	**$ 26,595**	**$ 28,149**
Capital Outlay	**$ 1,670**	**$ 1,523**	**$ 2,385**	**$ 2,385**

Expenditures by Department	2020 Actual	2021 Actual	2022 Budget	2023 Budget
Office of the CIO	$ 1,472	$ 1,778	$ 2,126	$ 2,081
Enterprise Solutions	8,095	8,625	9,790	10,946
IT Infrastructure & Operations	7,823	7,890	9,674	10,151
Shared Services	6,466	7,811	7,263	7,229
O&M Before Capitalized Cost Total	**$ 23,856**	**$ 26,104**	**$ 28,853**	**$ 30,407**
Capitalized Cost	(1,787)	(2,215)	(2,258)	(2,258)
Grand Total	**$ 22,069**	**$ 23,889**	**$ 26,595**	**$ 28,149**

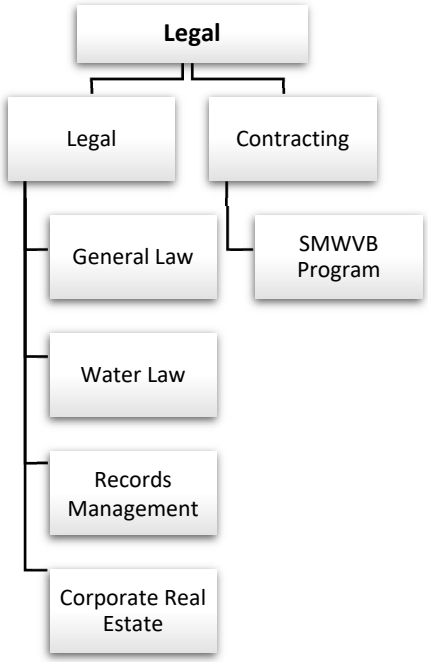
Full-Time Equivalent Positions	2020 Actual	2021 Actual	2022 Budget	2023 Budget
Office of the CIO	11.0	10.0	11.0	10.0
Enterprise Solutions	36.0	36.0	37.0	37.0
IT Infrastructure & Operations	30.5	31.5	31.5	33.5
Shared Services	28.0	27.0	29.0	29.0
Total Full-Time Equivalent Positions	**105.5**	**104.5**	**108.5**	**109.5**



LEGAL

The Legal 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 supply, employment, litigation management, real estate, general transactional, environmental and public law. The Legal team also oversees the Corporate Real Estate and Records Management activities.
    - **Corporate Real Estate** – Responsible for property acquisitions, dispositions, and lease management activities. 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.
- **Contracting** – Manages the administration of all construction and professional services contracts and oversees administration of the SAWS Small, Minority and Women and Veteran Owned Business Program (SMWVB).



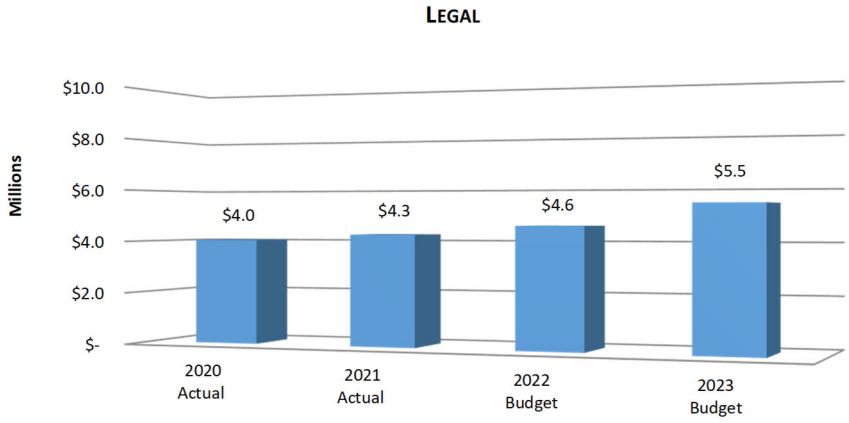
LEGAL

($ in thousands)

Expenditures by Type	2020 Actual	2021 Actual	2022 Budget	2023 Budget
O&M Before Capitalized Cost				
Salaries and Fringe Benefits	$ 4,415	$ 4,498	$ 4,589	$ 4,834
Contractual Services	1,743	1,855	2,155	2,762
Materials and Supplies	9	14	22	22
Other Charges	-	-	-	-
O&M Before Capitalized Cost Total	**$ 6,167**	**$ 6,367**	**$ 6,766**	**$ 7,618**
Capitalized Cost	(2,129)	(2,098)	(2,147)	(2,147)
Total O&M	**$ 4,038**	**$ 4,269**	**$ 4,619**	**$ 5,471**
Capital Outlay	**$ -**	**$ -**	**$ -**	**$ -**

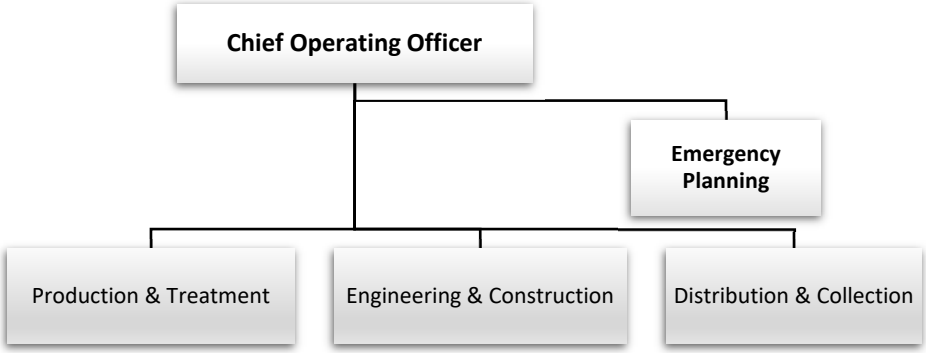
Expenditures by Department	2020 Actual	2021 Actual	2022 Budget	2023 Budget
Contracting	$ 1,571	$ 1,502	$ 1,571	$ 1,623
Corporate Real Estate	583	583	689	710
Legal Department	4,013	4,282	4,506	5,285
O&M Before Capitalized Cost Total	**$ 6,167**	**$ 6,367**	**$ 6,766**	**$ 7,618**
Capitalized Cost	(2,129)	(2,098)	(2,147)	(2,147)
Grand Total	**$ 4,038**	**$ 4,269**	**$ 4,619**	**$ 5,471**

Full-Time Equivalent Positions	2020 Actual	2021 Actual	2022 Budget	2023 Budget
Contracting	16.0	16.0	16.0	16.0
Corporate Real Estate	7.0	7.0	7.0	7.0
Legal Department	15.5	15.0	15.0	15.0
Total Full-Time Equivalent Positions	**38.5**	**38.0**	**38.0**	**38.0**



OPERATIONS

The Operations Group is managed by the Sr. Vice President and Chief Operating Officer (COO). The COO oversees the Engineering & Construction, Distribution & Collection and Production & Treatment groups. The COO also directs the Emergency Planning function for SAWS.



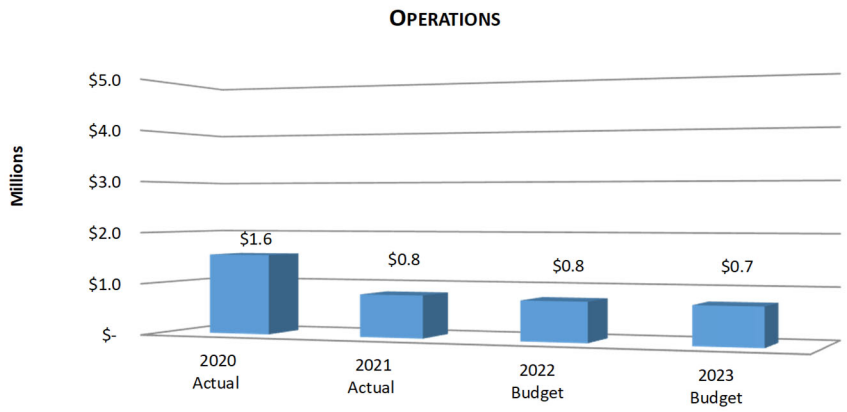
OPERATIONS

($ in thousands)

Expenditures by Type	2020 Actual	2021 Actual	2022 Budget	2023 Budget
O&M Before Capitalized Cost				
Salaries and Fringe Benefits	$ 1,087	$ 767	$ 701	$ 727
Contractual Services	467	52	60	10
Materials and Supplies	2	-	1	1
Other Charges	-	-	-	-
O&M Before Capitalized Cost Total	**$ 1,556**	**$ 819**	**$ 762**	**$ 738**
Capitalized Cost	-	-	-	-
Total O&M	**$ 1,556**	**$ 819**	**$ 762**	**$ 738**
Capital Outlay	**$ -**	**$ -**	**$ -**	**$ -**

Expenditures by Department	2020 Actual	2021 Actual	2022 Budget	2023 Budget
Ofc of Chief Operating Officer	$ 1,460	$ 819	$ 762	$ 738
Sr. VP Engineering and Construction	96	-	-	-
O&M Before Capitalized Cost Total	**$ 1,556**	**$ 819**	**$ 762**	**$ 738**
Capitalized Cost	-	-	-	-
Grand Total	**$ 1,556**	**$ 819**	**$ 762**	**$ 738**

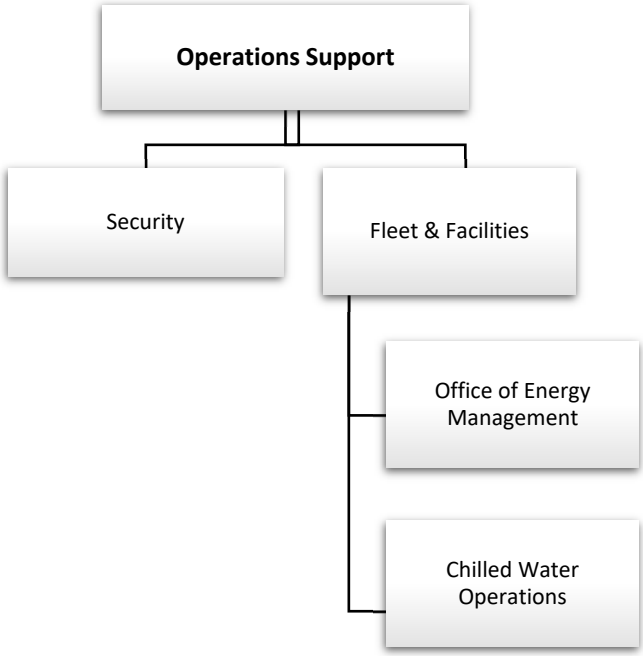
Full-Time Equivalent Positions	2020 Actual	2021 Actual	2022 Budget	2023 Budget
Ofc of Chief Operating Officer	6.0	4.0	4.0	4.0
Total Full-Time Equivalent Positions	**6.0**	**4.0**	**4.0**	**4.0**



OPERATIONS SUPPORT

The Operations Support Group oversees the operation of Fleet and Facilities, Chilled Water plants, and Security.

- **Security** – Manages a proactive security program and associated support contracts for all SAWS facilities.
- **Fleet & Facilities** – Provides comprehensive maintenance services for all SAWS vehicles and equipment. Fleet also manages vehicle replacement and disposal. Facilities Maintenance provides building maintenance and management services at SAWS facilities. This department also includes the following functions:
    - Office of Energy Management manages the process for energy demand management and efficiency rebates, electric/gas services metering, bill review and payment for all SAWS activities.
    - Chilled Water Operations provide District Cooling service to customers in downtown San Antonio and at Port San Antonio.



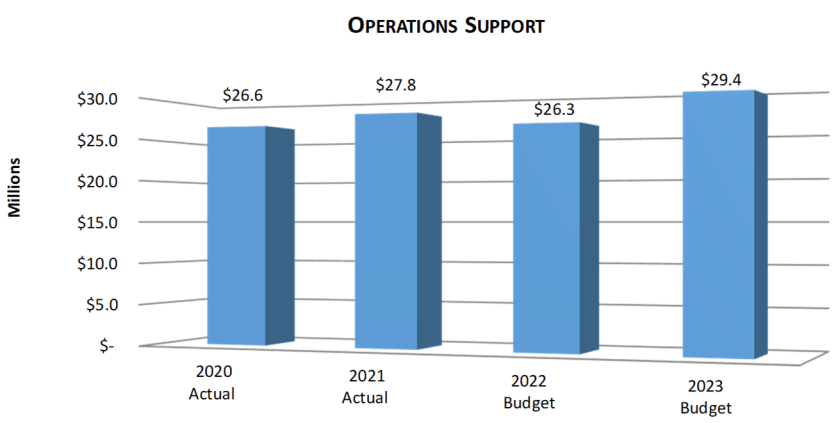
Operations Support

($ in thousands)

Expenditures by Type	2020 Actual	2021 Actual	2022 Budget	2023 Budget
O&M Before Capitalized Cost				
Salaries and Fringe Benefits	$ 9,302	$ 9,297	$ 9,225	$ 10,121
Contractual Services	14,627	15,185	13,994	14,696
Materials and Supplies	3,647	4,360	4,117	5,652
Other Charges	-	-	-	-
O&M Before Capitalized Cost Total	**$ 27,576**	**$ 28,842**	**$ 27,336**	**$ 30,469**
Capitalized Cost	(931)	(1,013)	(1,037)	(1,038)
Total O&M	**$ 26,645**	**$ 27,829**	**$ 26,299**	**$ 29,431**
Capital Outlay	**$ 7,976**	**$ 7,071**	**$ 7,001**	**$ 7,254**

Expenditures by Department	2020 Actual	2021 Actual	2022 Budget	2023 Budget
Fleet and Facilities	$ 23,331	$ 25,825	$ 23,521	26,552
Security	4,245	3,017	3,815	3,917
O&M Before Capitalized Cost Total	**$ 27,576**	**$ 28,842**	**$ 27,336**	**$ 30,469**
Capitalized Cost	(931)	(1,013)	(1,037)	(1,038)
Grand Total	**$ 26,645**	**$ 27,829**	**$ 26,299**	**$ 29,431**

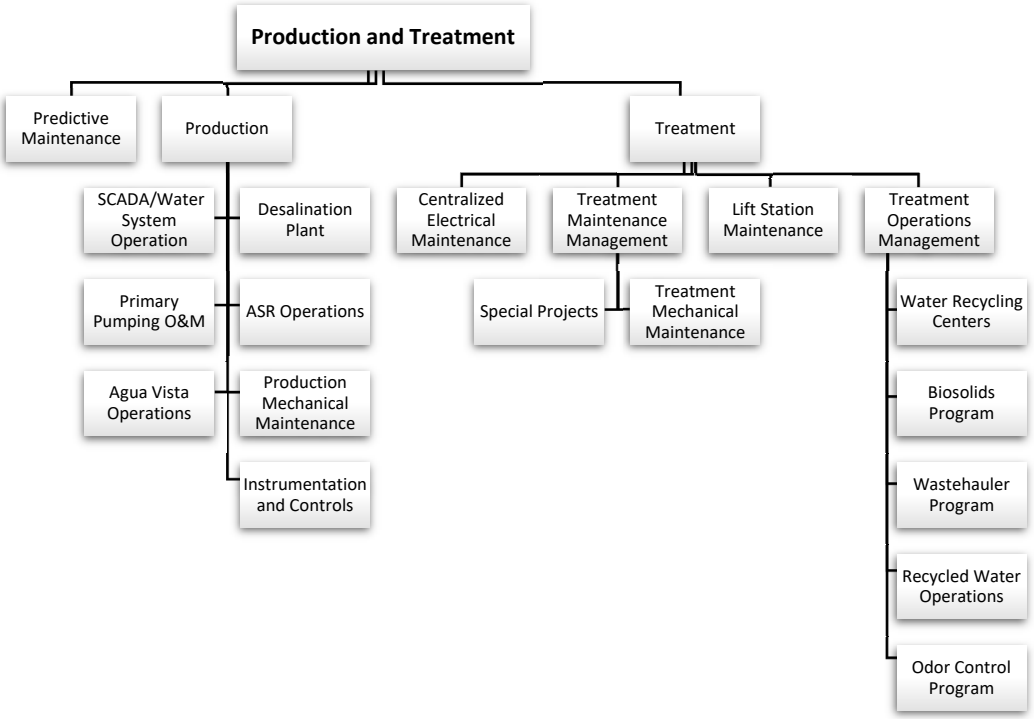
Full-Time Equivalent Positions	2020 Actual	2021 Actual	2022 Budget	2023 Budget
Fleet and Facilities	97.0	98.0	106.0	109.0
Security	11.0	12.0	11.0	12.0
Total Full-Time Equivalent Positions	**108.0**	**110.0**	**117.0**	**121.0**



PRODUCTION AND TREATMENT

The Production and Treatment 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 of potable water; treatment of wastewater for distribution in the recycle system or discharge; processing of wastewater biosolids for ultimate disposal; distribution of recycled water for reuse purposes; management of system-wide odor control program; wastewater lift station maintenance, instrumentation and controls maintenance for treatment, production, lift station and chilled water; electrical maintenance for treatment, lift stations, production, chilled water and all facilities. This group consists of the following departments:

- **Predictive Maintenance** – Performs analysis to reduce critical infrastructure failures and ultimately improve systems for production, treatment, cooling and lift stations.
- **Production** – Manages the production of potable water across SAWS service area. Operates SAWS potable water facilities, recycled water distribution, Aqua Vista Facility, and H_2Oaks Facility operation, including the Aquifer Storage and Recovery operations. Also manages the Production Mechanical Maintenance unit and Instrumentation and Controls.
- **Treatment**
    - **Centralized Electrical Maintenance** – Manages maintenance of electrical systems for all SAWS production, treatment, lift station, facilities and chilled water.
    - **Lift Station Maintenance** – Manages the maintenance of all wastewater lift station facilities.
    - **Treatment Maintenance Management** – The department is responsible for maintenance of the wastewater treatment plants (water recycling centers), recycled water outfalls, and special construction and repair projects across the system.
    - **Treatment Operations Management –** Oversees all operations of the three water recycling centers, which includes biosolids processing to ensure proper recycling or disposal in compliance with state and federal regulations. Also manages the Waste Hauler program and the Odor Control program. Additionally, operates recycled water outfalls and environmental flows into rivers.



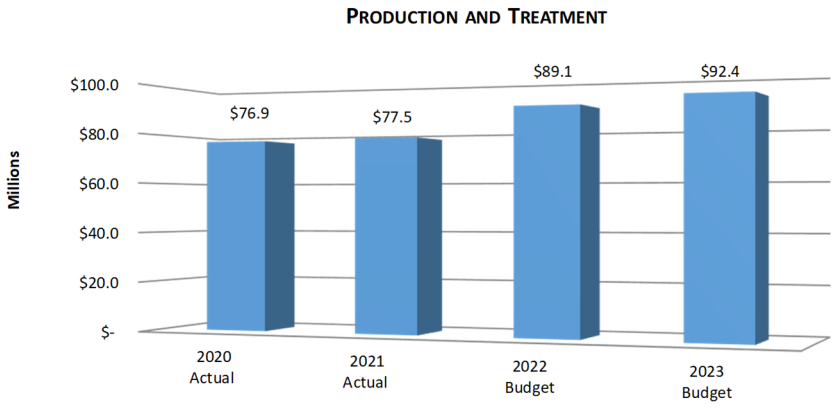
PRODUCTION AND TREATMENT

($ in thousands)

Expenditures by Type	2020 Actual	2021 Actual	2022 Budget	2023 Budget
O&M Before Capitalized Cost				
Salaries and Fringe Benefits	$ 24,213	$ 24,361	$ 24,712	$ 26,156
Contractual Services	39,551	38,393	50,938	47,590
Materials and Supplies	14,042	15,402	14,065	19,286
Other Charges	-	-	-	-
O&M Before Capitalized Cost Total	**$ 77,806**	**$ 78,156**	**$ 89,715**	**$ 93,032**
Capitalized Cost	(859)	(614)	(646)	(646)
Total O&M	**$ 76,947**	**$ 77,542**	**$ 89,069**	**$ 92,386**
Capital Outlay	**$ 1,861**	**$ 954**	**$ 1,670**	**$ 1,693**

Expenditures by Department	2020 Actual	2021 Actual	2022 Budget	2023 Budget
Office of the VP - Production and Treatment	$ 599	$ 504	$ 601	873
Ofc of Director - Production and Treatment Operati	76	69	83	67
Production Department	35,462	36,079	41,156	39,848
Treatment Maintenance Management	17,842	15,716	22,662	22,672
Treatment Operations Management	23,827	25,788	25,213	29,572
O&M Before Capitalized Cost Total	**$ 77,806**	**$ 78,156**	**$ 89,715**	**$ 93,032**
Capitalized Cost	(859)	(614)	(646)	(646)
Grand Total	**$ 76,947**	**$ 77,542**	**$ 89,069**	**$ 92,386**

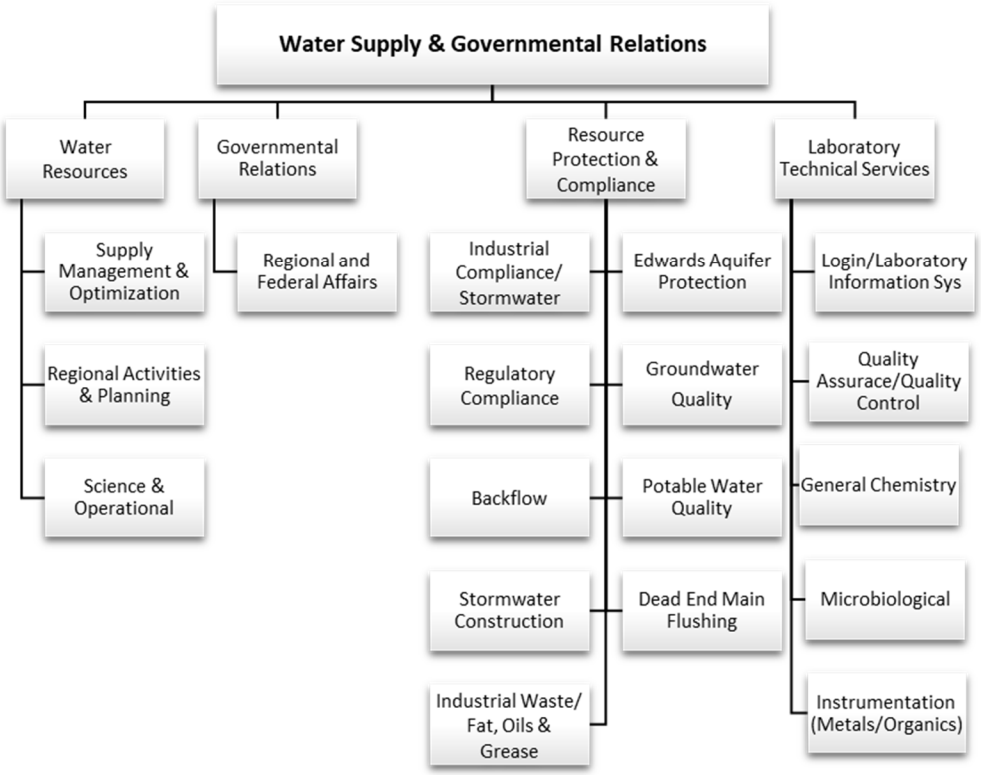
Full-Time Equivalent Positions	2020 Actual	2021 Actual	2022 Budget	2023 Budget
Office of the VP - Production and Treatment	3.0	3.0	3.0	5.0
Ofc of Director - Production and Treatment Operati	1.0	1.0	1.0	1.0
Production	99.0	98.0	99.0	105.0
Treatment Maintenance Management	111.0	113.0	114.0	113.0
Treatment Operations Management	75.0	77.0	77.0	78.0
Total Full-Time Equivalent Positions	**289.0**	**292.0**	**294.0**	**302.0**



WATER RESOURCES AND GOVERNMENTAL RELATIONS

The Water Resources and Governmental Relations Group is primarily responsible for development and management of water supplies, drought management and water rights acquisitions, as well as management of the Mitchell Lake Expanded Wetlands. The group consists of the following 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 population growth. The Department has added the daily activities associated with overseeing the contract with Vista Ridge LLC, SAWS newest and largest water supply project. Water Resources is also responsible for the marketing of the direct recycled water program as well as directing efforts to minimize non-revenue water and ensuring efficient use of water supplies.
- **Governmental Relations** – Identifies and manages critical issues that have public impact and require the attention of Executive Management. Manages key strategic policy issues and relationships with elected officials and agencies at the regional, state and federal levels.
- **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 and backflow testing activities.
- **Laboratory Technical Services** – Supports the environmental protection function of SAWS by providing chemical and bacteriological analyses of environmental samples including wastewater and drinking water activities. The Lab is accredited by the Texas Commission on Environmental Quality (TCEQ) under the National Environmental Laboratory Accreditation Program.



WATER RESOURCES AND GOVERNMENTAL RELATIONS

($ in thousands)

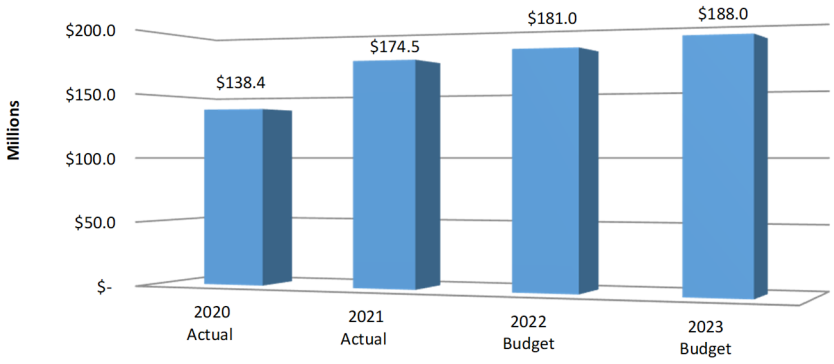
Expenditures by Type	2020 Actual	2021 Actual	2022 Budget	2023 Budget
O&M Before Capitalized Cost				
Salaries and Fringe Benefits	$ 11,051	$ 10,927	$ 10,772	$ 11,682
Contractual Services	126,827	163,058	169,651	175,606
*State Lobbying Contracts**	*116*	*189*	*245*	*254*
Materials and Supplies	496	512	595	674
Other Charges	-	-	-	-
O&M Before Capitalized Cost Total	**$ 138,374**	**$ 174,497**	**$ 181,018**	**$ 187,962**
Capitalized Cost	-	-	-	-
Total O&M	**$ 138,374**	**$ 174,497**	**$ 181,018**	**$ 187,962**
Capital Outlay	**$ 208**	**$ 253**	**$ 200**	**$ 373**

Expenditures by Department	2020 Actual	2021 Actual	2022 Budget	2023 Budget
Environmental Laboratory Services	$ 2,563	$ 2,536	$ 2,618	$ 2,876
Governmental Relations	1,699	1,146	1,200	1,233
Resource Protection & Compliance	8,256	8,506	8,660	10,706
Water Resources	125,856	162,309	168,540	173,147
O&M Before Capitalized Cost Total	**$ 138,374**	**$ 174,497**	**$ 181,018**	**$ 187,962**
Capitalized Cost	-	-	-	-
Grand Total	**$ 138,374**	**$ 174,497**	**$ 181,018**	**$ 187,962**

Full-Time Equivalent Positions	2020 Actual	2021 Actual	2022 Budget	2023 Budget
Environmental Laboratory Services	23.0	23.0	23.0	25.0
Governmental Relations	5.0	5.0	4.0	4.0
Resource Protection & Compliance	90.0	93.0	93.0	96.0
Water Resources	9.0	9.0	9.0	9.0
Total Full-Time Equivalent Positions	**127.0**	**130.0**	**129.0**	**134.0**

*In accordance with 86R House Bill 1495

WATER RESOURCES AND GOVERNMENTAL RELATIONS



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. Specifically, they include funds for performance pay adjustments, dependent medical insurance, workers' compensation, unemployment compensation, accrued vacation leave, leave buyback and post-retirement medical benefits.

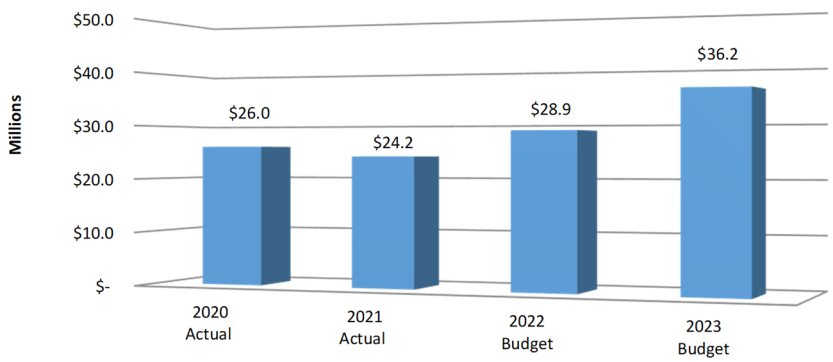
($ in thousands)

Expenditures by Type	2020 Actual	2021 Actual	2022 Budget	2023 Budget
O&M Before Capitalized Cost				
Salaries and Fringe Benefits	$ 20,775	$ 17,472	$ 21,060	$ 29,649
Contractual Services	305	1,418	965	715
Materials and Supplies	-	85	-	-
Other Charges	5,702	5,955	7,638	6,588
O&M Before Capitalized Cost Total	**$ 26,782**	**$ 24,930**	**$ 29,663**	**$ 36,952**
Capitalized Cost	(752)	(727)	(752)	(752)
Total O&M	**$ 26,030**	**$ 24,203**	**$ 28,911**	**$ 36,200**
Capital Outlay	**$ -**	**$ -**	**$ -**	**$ -**

Expenditures by Department	2020 Actual	2021 Actual	2022 Budget	2023 Budget
Other Requirements	$ 26,782	$ 24,930	$ 29,663	36,952
O&M Before Capitalized Cost Total	**$ 26,782**	**$ 24,930**	**$ 29,663**	**$ 36,952**
Capitalized Cost	(752)	(727)	(752)	(752)
Grand Total	**$ 26,030**	**$ 24,203**	**$ 28,911**	**$ 36,200**

Full-Time Equivalent Positions	2020 Actual	2021 Actual	2022 Budget	2023 Budget
Other Requirements	2.0	2.0	3.0	1.0
Total Full-Time Equivalent Positions	**2.0**	**2.0**	**3.0**	**1.0**

OTHER REQUIREMENTS



FULL TIME EQUIVALENT POSITIONS

The 2023 Budget includes funding for 1,961 full-time equivalent (FTE) positions. This reflects a net increase of 21 authorized FTE positions from the 1,940 FTE positions budgeted in 2022.

A total of 24 FTE positions were added to the 2023 Budget:

- 2 Affordability Specialists to support the Uplift program in processing applications, responding to program inquiries and participating in community outreach events.
- 1 Contracting & Purchasing Specialist to support the bidding, negotiating and awarding of all new formal and informal contracts.
- 1 Compensation Analyst to support the administration of all SAWS compensation items, to include the implementation of living wage/performance pay adjustments, job regrades, reclassifications and development of progression plans. The Compensation Analyst would also support audits, job description creation and maintenance, and research of compensation strategies.
- 1 Benefits Analyst to support the daily administration of all benefits programs and ensure an appropriate focus on the legal requirements for plan administration.
- 2 Learning Development Business Partners to support safety training, which includes the assessment of training needs and training development, implementation, facilitation, tracking and reporting.
- 2 Telecommunications Technicians to support the timely servicing of communications sites and the effective management and monitoring of the systems that support SAWS.
- 1 Desktop Support Specialist dedicated to A/V support who will receive and process requests for A/V equipment, serve as the IS liaison to projects that involve A/V and facilitate, assist or operate high-profile meetings that include A/V equipment.
- 1 Irrigation Specialist dedicated to the maintenance, installation and repair of all irrigation systems throughout SAWS' high-profile facilities.
- 1 Maintenance Inspector to support the in-house grounds maintenance staff by performing additional mowing, landscaping and tree trimming at SAWS facilities, to include emergency grounds response due to weather events.
- 1 Director of Chilled Water dedicated to the management, strategic direction and day-to-day oversight of the Chilled Water program.
- 1 Water Operations & Maintenance Technician to support facility operations at the H2Oaks facility, which operate on a 24/7 basis, with responsibilities which include monitoring/operating essential equipment, recording/reviewing Supervisory Control Data Acquisition data, collecting/analyzing samples for process control and ensuring compliance with the TCEQ regulations.
- 2 Chlorination Technicians responsible for maintaining water quality by performing proper flushing and sample testing of water mains installed via General Construction Permits, Counter Permits Capital Improvement Projects and Trilateral Contracts.
- 1 Supervisor for the SCADA Control Center to support 24/7 supervision coverage by providing enhanced support, "on-call" coverage and effective management of the increasing workload of the control center.
- 2 Control Systems Technicians to support the Instrumentation & Controls department responsible for all automation control devices and instrumentation affiliated with the wastewater collection stations, treatment plants, potable water production stations and chilled water facilities.
- 2 Backflow Prevention Inspectors to inspect and verify existing backflow assemblies installed throughout the water system.

- 1 Environmental Protection Specialist III to support the Storm Water permit requirements.
- 2 Environmental Lab Analysts to support the increased number of analyses being requested for various projects and the EPA Lead and Rule Revisions.

Please note: The 2 Affordability Specialist positions will be funded by converting a frozen Manager of Intergovernmental & External Relations position. Of the 2 Telecommunications Technicians, 1 will be funded by the conversion of an existing, vacant GIS Technician position. The Environmental Protection Specialist III and the 2 Environmental Lab Analyst positions will be funded by converting a frozen Senior Water Resources Counsel position.

The following table shows the distribution of funded FTE positions within each SAWS organizational unit authorized in each budget year from 2020 through 2023. 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 table shown below, to be consistent with the current year organizational structure.

FTEs by Organizational Unit	2020 Actual	2021 Actual	2022 Budget	2023 Budget
Board of Trustees and Pres/CEO Group	14.5	14.0	14.0	14.0
Communications and External Affairs	51.5	52.0	52.0	53.0
Customer Experience	321.0	329.5	353.0	353.0
Distribution and Collection	514.5	513.5	514.5	512.5
Engineering and Construction	198.0	196.0	198.0	198.0
Financial Services	65.0	64.0	64.0	65.0
Human Resources	51.0	51.0	51.0	56.0
Information Systems	105.5	104.5	108.5	109.5
Legal	38.5	38.0	38.0	38.0
Operations	6.0	4.0	4.0	4.0
Operations Support	108.0	110.0	117.0	121.0
Production and Treatment	289.0	292.0	294.0	302.0
Water Resources and Governmental Relations	127.0	130.0	129.0	134.0
Other Requirements	2.0	2.0	3.0	1.0
Grand Total	**1,891.5**	**1,900.5**	**1,940.0**	**1,961.0**

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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 2023 CIP program totals $524.7 million and is summarized in the table below.

($ in millions)	Water Supply	Water Delivery	Wastewater	Chilled Water	Total
Sources of Funds					
System Revenues	$ 14.5	$ 54.2	$ 50.7	$ 0.1	$ 119.4
Capital Recovery Fees	-	25.0	25.0	-	50.0
Debt Proceeds	10.7	136.0	190.8	17.7	355.2
Total Sources of Funds	**$ 25.2**	**$ 215.2**	**$ 266.5**	**$ 17.8**	**$ 524.7**
Uses of Funds					
Corporate	1.1	4.2	9.8	-	15.1
Governmental	-	31.5	21.0	-	52.5
Mains - New	-	35.6	22.4	-	58.0
Mains - Replacements	-	28.0	115.7	-	143.7
Water Resources	14.8	-	-	-	14.8
Production	-	104.6	-	-	104.6
Collection Facilities	-	-	15.9	-	15.9
Treatment	-	-	70.5	-	70.5
Chilled Water	-	-	-	17.8	17.8
Recycled Water	5.5	-	-	-	5.5
Overhead	3.8	11.3	11.3	-	26.4
Total Uses of Funds	**$ 25.2**	**$ 215.2**	**$ 266.5**	**$ 17.8**	**$ 524.7**

The 2023 Water Supply program totals $25.2 million and includes $10 million to install new pumps, motors and piping and to perform electrical work at the Artesia Pump Station, $2.4 million for improvements at the Seale Pump Station, and $3.8 million for recycled water-related improvements to the Brooks Pump Station.

The 2023 Water Delivery program totals $215.2 million for production facilities upgrades, infrastructure replacements and new water main extensions. Overall, the total level of CIP investment in Water Delivery infrastructure for 2023 is 52.2% higher than SAWS average annual investment in Water Delivery infrastructure over the last five years, reflecting the need to begin investing more in Water Delivery as the Wastewater Consent Decree capital requirements begin to lessen.

The 2023 Wastewater program totals $266.6 million. The Wastewater CIP amount includes $115.7 million (43.4% of the total), to support the rehabilitation and replacement of wastewater mains identified through the SAWS Sanitary Sewer Overflow Reduction Program (SSORP). These projects have been prioritized and scheduled to meet the requirements of SAWS Consent Decree with the federal government.

The overall funding split for the 2023 water production and delivery and the wastewater collection and treatment program is 82.9% repairs and replacements and 17.1% additional capacity to support new growth and development.

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 development of a new water supply, the construction of new water production or wastewater treatment facilities or the acquisition of new technology that enhances service delivery could be considered significant non-routine capital expenditures.

The following two projects fit the above criteria and are not considered routine expenditures:

(1) Rilling Road Flow Management Facility ($64.1 million). This is the single largest 2023 CIP project. The completed facility will divert peak wet weather sewer flows within the City's Central Basin to new detention basins to reduce subsequent downstream surcharge. Specifically, the project consists of constructing one 5 million-gallon (MG) concrete basin and one 10 million-gallon (MG) concrete basin at the Rilling Road facility for a total of 15 MG capacity, located near the intersection of Rilling Road and Espada Road.

(2) Pump Station Generators & Resiliency Measures ($54.6 million). As required by state law, this project would implement improvements to harden water pump stations and provide for on-site generators to ensure continuity of water services during an extreme weather emergency such as Winter Storm Uri experienced in February 2021.

2023 Capital Improvement Plan Summary

Core Business	CIP Category / Project Title	Phase	Programmed Amount[1]
Water Delivery			
	Corporate		
	General Legal Services	Acquisition	91,875
	Owner Controlled Construction Changes (OCCC)	Construction	4,200,000
	Water Delivery Overhead	Overhead	11,250,000
	Corporate Total		**15,541,875**
	Mains - New		
	Blanco Rd. to Orsinger Ln. Pressure Zone 1111 24-inch Water Main	Construction	10,605,000
	Galm Rd. 24-inch Water Line	Design	754,677
	IH-10: Boerne Stage Rd. to Heuermann Rd. 36-inch Water Main (Phase A)	Construction	18,537,706
	Talley Road and Sable Run Pressure Zone Interconnections	Construction	1,992,165
	Water Main Oversizing	Construction	3,675,000
	Mains - New Total		**35,564,548**
	Mains - Replacement		
	Dead End Main Elimination via Looping	Design	1,050,000
	Governmental Water	Construction	31,500,000
	N. San Felipe Water Main Replacement	Construction	2,625,000
	Valves, Services and Meter Replacements	Construction	17,850,000
	Water Main Replacement Work Order Engineering Contract	Design	6,510,000
	Mains - Replacement Total		**59,535,000**
	Production		
	Bitters Ground Storage Tank Replacement	Construction	15,724,800
	Broadband Access Points & Prog. Logic Controllers Replacement – Phase 4	Construction	6,300,000
	Geronimo Loop Interconnect	Design	224,297
	Lorimor 3.0 MG Elevated Storage Tank and Water Main	Design	2,776,812
	Marbach Pump Station Improvements Project - Phase 9	Construction	20,208,816
	Production Facilities Engineering Work Order Contract	Design	1,575,000
	Pump Station Generators and Resiliency Measures	Construction	54,600,000
	Silver Mountain Pump Station Upsize	Design	945,000
	Water Production Facilities Disinfection System Upgrades Phase 4	Design	2,205,000
	Production Total		**104,559,725**
Water Delivery Total			**$ 215,201,148**
Wastewater			
	Corporate		
	General Legal Services	Acquisition	406,875
	Owner Controlled Construction Changes (OCCC)	Construction	9,450,000
	Wastewater Overhead	Overhead	11,250,000
	Corporate Total		**21,106,875**
	Collection Facilities		
	E-54 Regional Lift Station	Construction	14,280,000
	Lift Station Upgrades Phase 1	Design	1,575,000
	Collection Facilities Total		**15,855,000**
	Mains - New		
	C5/C28 Future Extension through Our Lady of the Lake	Design	567,000
	Palo Alto Villas Sanitary Sewer Extension	Construction	10,500,000
	Sewer Main Oversizing	Construction	11,340,000
	Mains - New Total		**22,407,000**
	Mains - Replacement		
	Acequia Lift Station 30-inch Force Main	Construction	2,100,000
	Capacity, Management, Operation and Maintenance (CMOM)	Construction	21,420,000
	Governmental Sewer	Construction	21,000,000
	Inflow and Infiltration Reduction	Design	3,150,000
	JBSA – Lackland Sewer Main Project	Construction	2,100,000
	Main Replacements - Sewer - SAWS Crews	Construction	3,675,000
	Rilling Road Flow Management Facility	Construction	64,050,000
	Sewer Laterals	Construction	5,565,000
	Wastewater Main Replacement Work Order Engineering Contract	Design	13,650,000
	Mains - Replacement Total		**136,710,000**

[1] Includes 5.0% projected inflation

2023 Capital Improvement Plan Summary

Core Business	*CIP Category / Project Title*	*Phase*	*Programmed Amount*[1]
Wastewater, continued			
Treatment			
	Leon Creek WRC Electrical System Improvements – Phase 2	Design	2,100,000
	Leon Creek WRC Flow Equalization Basin Improvements	Design	3,412,500
	Leon Creek WRC Secondary and Tertiary Hydraulic & Process Capacity Impr. (Pkg. A)	Design	4,881,450
	Leon Creek WRC Strain Presses and Hydraulic Upgrades	Design	1,170,750
	Medio Creek WRC Rehabilitation Improvements Phase 1	Design	2,770,950
	SM Clouse WRC Biosolids System Upgrades	Design	13,797,000
	SM Clouse WRC Boiler Facility Improvements	Design	472,500
	SM Clouse WRC Digester Mixing and System Enhancements Phase 3	Construction	17,850,000
	SM Clouse WRC Electrical System Improvements – Phase 2B	Construction	6,300,000
	SM Clouse WRC Secondary Treatment Expansion and Blower Improvements (Pkg. A)	Design	14,839,650
	SM Clouse WRC Skimmings Handling and Aeration Tunnel Ventilation	Construction	1,365,000
	Treatment Facilities Engineering Work Order Contract	Design	1,575,000
Treatment Total			**70,534,800**
Wastewater Total			**$ 266,613,675**
Water Supply			
Water Resources			
	Artesia Pump Station Pumps & Motors	Construction	10,080,000
	ASR Pipeline Cathodic Protection	Construction	2,100,000
	Color Spot Station SCADA Upgrades Project	Construction	262,500
	General Legal Services	Acquisition	26,250
	H2Oaks Center (Twin Oaks Pressure Reducing Station)	Design	252,000
	Seale Pump Station Improvements - Phase 12	Design	2,362,500
	Owner Controlled Construction Changes (OCCC)	Construction	787,500
	Water Resources Overhead	Overhead	3,775,000
Water Resources Total			**19,645,750**
Recycled Water			
	Brooks Recycled Water Pump Station Upgrade	Construction	3,780,000
	Recycled Water Customer Lines	Construction	210,000
	Recycled Water Governmental Adjustments	Construction	525,000
	Riverside Golf Course Pump Station Rehabilitation	Design	409,500
	Owner Controlled Construction Changes (OCCC)	Construction	262,500
	Recycled Water Overhead	Overhead	325,000
Recycled Water Total			**5,512,000**
Water Supply Total			**$ 25,157,750**
Chilled Water			
Chilled Water			
	JBSA Bldg. 356 Chiller Replacement	Construction	1,582,350
	Chilled Water Downtown and JBSA Plant Improvements	Construction	8,004,150
	Chilled Water Electrical Upgrades	Construction	7,276,500
	Chilled Water SCADA Controls & Metering	Design	519,750
	General Legal Services	Acquisition	52,500
	Owner Controlled Construction Changes (OCCC)	Construction	134,400
	Chilled Water Overhead	Overhead	200,000
Chilled Water Total			**$ 17,769,650**
Grand Total			**$ 524,742,223**

[1] Includes 5.0% projected inflation

CIP Project Data

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Water Delivery

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SAN ANTONIO WATER SYSTEM
2023 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID: Pro-11846

Project: General Legal Services - WD

Programmed Amount: $91,875

Core Business: Water Delivery

Category: WD - Corporate WD

Phase: Acquisition

Council District: System Wide

Description and Scope:

Specialized legal support is required for critical projects.

Justification:

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

Funding Information

Acquisition	$87,500	(2023)
Design		
Construction		

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

San Antonio Water System
2023 Capital Improvement Program
Project Data Sheet

PROJECT OVERVIEW

Project ID: Pro-11864

Project: Water Delivery OCCC

Programmed Amount: $4,200,000

Core Business: Water Delivery

Category: WD - Corporate WD

Phase: Construction

Council District: System Wide

Description and Scope:

The Owner Controlled Construction Changes (OCCC) fund was established to improve monitoring and efficiency of construction requested by SAWS. Funding amounts are determined by reviewing historical data and project schedules to determine the estimated amount needed for present and future years.

Justification:

Changes that occur on construction projects must be approved by SAWS Board of Trustees if over $100,000.

Funding Information

Acquisition

Design

Construction $4,000,000 (2023)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

San Antonio Water System
2023 Capital Improvement Program
Project Data Sheet

PROJECT OVERVIEW

Project ID:	Pro-11865
Project:	Water Delivery Overhead
Programmed Amount:	$11,250,000
Core Business:	Water Delivery
Category:	WD - Corporate WD
Phase:	Construction
Council District:	System Wide

Description and Scope:

SAWS overhead costs cover the direct costs associated with SAWS personnel that manage and support CIP projects during the capitalizable phases of the project. The overhead costs were calculated primarily using the capitalized costs from staff time charged using the CIP Time Tracker on an annualized basis and analyzing the remaining 2022 and prior year CIP projects and the future 2023 CIP projects.

Justification:

Overhead costs are applied to SAWS personnel costs in order to capture direct incremental costs associated with SAWS personnel that support the development and construction of CIP projects.

Funding Information

Acquisition		
Design		
Construction	$11,250,000	(2023)

SAN ANTONIO WATER SYSTEM
2023 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-11346
Project:	Blanco Rd. to Orsinger Ln. Pressure Zone 1111 24-inch Water Main
Programmed Amount:	$10,605,000
Core Business:	Water Delivery
Category:	WD - Mains New - Water
Phase:	Construction
Council District:	District 08, District 09

Description and Scope:

This project will construct approximately 1.8 miles of 24-inch water main along Wurzbach Pkwy between Blanco and Lockhill-Selma and approximately 1.4 miles of 24-inch water main along Lockhill-Selma between Wurzbach Pkwy and Huebner. This project will replace the existing 12-inch water line along Lockhill-Selma Road from Huebner Road to Post Oak Way. The pressure zone change from PZ 7 to PZ8 8 requires constructing approximately 1000 feet of 8-inch distribution main within Park Forest Subdivision and 700 feet of 12-inch distribution main along Lockhill-Selma from just north of Huebner to Queens Forest.

Justification:

This project is required to improve transmission efficiency between the Bitters booster pump station and the proposed DeZavala elevated tank, as well as within PZ 1111. Without this transmission main the tank will not be able to fill and customers in the PZ 1111 (former PZ 7) area will continue to fall below 35 psi during high demand seasons.

Funding Information

Acquisition		
Design	$1,338,088	(2021)
Construction	$10,100,000	(2023)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

SAN ANTONIO WATER SYSTEM
2023 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-11917
Project:	Galm Rd. 24-inch Water Line
Programmed Amount:	$754,677 (2023)
Core Business:	Water Delivery
Category:	WD - Mains New - Water
Phase:	Design
Council District:	District 06

Description and Scope:

This project will design a 24-inch water main to connect the Anderson Pump Station to both sides of Pressure Zone 1170.

Justification:

The current configuration limits the utility of the Anderson Pump Station to pump to only one side of PZ 1170. Therefore, a 24-inch main is recommended that will connect the two sides of the pressure zone, allowing for more operational flexibility and the ability to fully utilize the Anderson PS to PZ 1170. This project will connect the west and east sides of PZ 1170 and allow communication between production facilities. This is a critical project that is needed as soon as possible.

Funding Information

Acquisition		
Design	$718,740	(2023)
Construction	$4,791,600	(2025)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

SAN ANTONIO WATER SYSTEM
2023 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID: Pro-11449

Project: IH-10: Boerne Stage Rd. to Heuermann Rd. 36-inch Water Main (Phase A)

Programmed Amount: $18,537,706

Core Business: Water Delivery

Category: WD - Mains New - Water

Phase: Construction

Council District: District 08

Description and Scope:

This project will provide a water main along Interstate Highway 10 (IH-10) to improve system connectivity from the IH-10 Pump Station to the northernmost parts of the Pressure Zone 1400W to meet Texas Commission on Environmental Quality minimum pressure requirements. This project will install approximately 2.7 miles of 36-inch water main from an area north of Boerne Stage Road to Heuermann Road along the IH-10 corridor.

Justification:

This project is required to meet TCEQ regulations of a minimum of 35 psi during peak demands in a region experiencing significant growth. This project is impact fee eligible.

Funding Information

Acquisition		
Design	$1,841,200	(2021)
Construction	$17,654,958	(2023)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

SAN ANTONIO WATER SYSTEM
2023 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-10746
Project:	Talley Rd. and Sable Run Pressure Zone Interconnections
Programmed Amount:	$1,992,165
Core Business:	Water Delivery
Category:	WD - Mains New - Water
Phase:	Construction
Council District:	OCL

Description and Scope:

This master planning project installs a new 12-inch pressure reducing valve (PRV) serving Pressure Zone 1044 from Pressure Zone 1111. The project will include a site investigation, survey, environmental studies, possible easement acquisition, electrical and SCADA work, and design and construction services. This project is impact fee eligible.

Justification:

A related project is installing a water main along Talley Rd. and will place a temporary division valve until the PRV can be installed.

Funding Information

Acquisition		
Design	$358,055	(2021)
Construction	$1,897,300	(2023)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

San Antonio Water System
2023 Capital Improvement Program
Project Data Sheet

PROJECT OVERVIEW

Project ID: Pro-11866

Project: Water Main Oversizing

Programmed Amount: $3,675,000

Core Business: Water Delivery

Category: WD - Mains New - Water

Phase: Construction

Council District: System Wide

Description and Scope:

Funds are required 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.

Funding Information

Acquisition		
Design		
Construction	$3,500,000	(2023)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

SAN ANTONIO WATER SYSTEM
2023 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID: Pro-11850

Project: Dead End Main (DEM) Elimination via Looping

Programmed Amount: $1,050,000

Core Business: Water Delivery

Category: WD - Main Replacement - Water

Phase: Design

Council District: System Wide

Description and Scope:

The Dead-End Main (DEM) Flushing Program is a required program to meet TCEQ regulations, 30 TAC Chapter 290.46. There are more than 8,000 dead end mains in the SAWS distribution system. Approximately 195 of these dead-end mains will be reviewed for abandonment or elimination due to potential quality issues resulting from the mains not holding chlorine residual, which cannot be solved with auto-flushers. The design consultant for this project is preparing design plans to eliminate 26 of the dead-end water mains that were reviewed and determined to be most practical. This funding will be to continue the design and construction work of eliminating these DEMs. The duration is recurring depending on changes to TCEQ requirements. This is year 4 of at least a 5-year effort.

Justification:

TCEQ highly encourages DEM's to be eliminated where practical. Implementation of the DEM Looping Project will reduce the overall number of DEM's required to be flushed. Failure to implement eliminating DEM's where practical may negatively impact future negotiations and put the current negotiated agreement at risk.

Eliminating the DEM's where practical will reduce staff time in flushing these sites. Some of the sites identified for looping have a higher frequency flushing requirement.

Funding Information

Acquisition		
Design	$1,000,000	(2023)
Construction		

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

SAN ANTONIO WATER SYSTEM
2023 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID: Pro-10926

Project: Governmental Water

Programmed Amount: $31,500,000

Core Business: Water Delivery

Category: WD - 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.

Funding Information

Acquisition		
Design		
Construction	$30,000,000	(2023)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

San Antonio Water System
2023 Capital Improvement Program
Project Data Sheet

PROJECT OVERVIEW

Project ID: Pro-11627

Project: N. San Felipe Water Main Replacement

Programmed Amount: $2,625,000

Core Business: Water Delivery

Category: WD - Main Replacement - Water

Phase: Construction

Council District: District 05

Description and Scope:

Construct the replacement of approximately one mile of 8-inch diameter pipe of water mains installed by open cut. Some of the mains serve Holy Cross High School and Gus Garcia Middle School located on San Felipe, near Culebra Rd. and N. General McMullen. By completing this project, the area will have a significant improvement in the level of service regarding main failures and major service interruptions will be avoided for the schools.

Justification:

The purpose of this project is to replace deteriorating water mains that have a high probability of failure and are near the end of their useful life. The mains are made of Asbestos Cement and Cast-Iron pipe, and have an average age of 60 years old, and have a history of approximately 32 work orders and 6 service line work orders over the past 10 years. A desktop condition and risk assessment were performed for this area and indicated the water mains along N. San Felipe from Dartmouth Street to Rivas Street as the highest priority for replacement in the next 5 years as they serve schools.

Funding Information

Acquisition		
Design	$203,814	(2022)
Construction	$2,500,000	(2023)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

SAN ANTONIO WATER SYSTEM
2023 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID: Pro-11860

Project: Valves Services and Meter Replacements - SAWS

Programmed Amount: $17,850,000

Core Business: Water Delivery

Category: WD - 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 may be necessary to restore service and may be more efficient than repair.

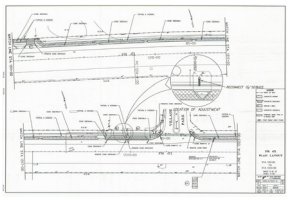
Funding Information

Acquisition		
Design		
Construction	$17,000,000	(2023)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

SAN ANTONIO WATER SYSTEM
2023 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW



Project ID: Pro-11867

Project: Water Main Replacement Work Order Engineering Contract - SAWS

Programmed Amount: $6,510,000

Core Business: Water Delivery

Category: WD - 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 main 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. The water mains will be constructed in 2025.

Justification:

Design of mains to be replaced is necessary to restore and maintain water service. This line item includes funding for design of projects identified as part of the Water Risk and Condition Assessment performed by Arcadis.

Funding Information

Acquisition		
Design	$6,200,000	(2023)
Construction		

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

San Antonio Water System
2023 Capital Improvement Program
Project Data Sheet

PROJECT OVERVIEW

Project ID: Pro-11374

Project: Bitters Ground Storage Tank Replacement

Programmed Amount: $15,724,800

Core Business: Water Delivery

Category: WD - Production

Phase: Construction

Council District: District 09

Description and Scope:

The Bitters Pump Station is located on West Ave. in the City of San Antonio's north-central side. The project consists of the demolition of a 5 million-gallon welded steel ground storage tank and vault structure, and the construction of a new 5 million-gallon pre-stressed concrete ground storage tank, overflow structure, tank inlet and outlet piping, valves, and grading. The project also includes site security, miscellaneous electrical and instrumentation and controls system work.

Justification:

SAWS has determined the existing 5 million-gallon welded steel tank has reached the end of its useful life, and must be replaced in order to comply with Texas Commission on Environmental Quality (TCEQ) requirements, and American Water Works Association (AWWA) and Occupational Safety & Health Administration (OSHA) standards. The replacement of the tank is considered a proactive approach, which will allow SAWS to save cost on repair and rehabilitation in the future.

Funding Information

Acquisition		
Design	$681,869	(2020)
Construction	$14,976,000	(2023)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

SAN ANTONIO WATER SYSTEM
2023 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-11043
Project:	Broadband Access Points and Programmable Logic Controllers Replacement – Phase 4
Programmed Amount:	$6,300,000
Core Business:	Water Delivery
Category:	WD - Production
Phase:	Construction
Council District:	System Wide

Description and Scope:

This project (Phase 4) will replace the aging radio communication system used to receive data from the water production, pumping stations, and water production pressure point sites with new wireless communication infrastructure to upgrade communication capability and replace obsolete control and monitoring equipment. More than 100 water production facilities are controlled, operated and monitored from a central control point. Phase 4 will consist of more than 45 facilities. The existing equipment is old and some components are no longer supported by the manufacturer. The radio systems have an expected lifespan of 7 years. The existing controllers have an expected lifespan of 10 years.

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 at headquarters 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.

Justification:

The master plan for upgrade of the Supervisory Control and Data Acquisition (SCADA) system recommends this upgrade. Phase 4 will address the facilities that were unable to be completed by in-house staff, as well as water production pressure point sites. Phase 1 construction began in 2017 and addressed the high criticality facilities. Phase 2 is complete, and Phase 3 is currently in construction. Phase 4 is the last phase of the program.

Funding Information

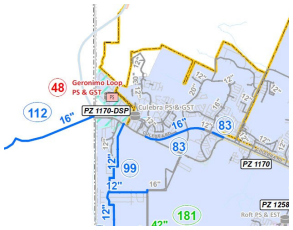
Acquisition

Design	$909,357	(2021)
Construction	$6,000,000	(2023)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

SAN ANTONIO WATER SYSTEM
2023 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW



Project ID: Pro-11899

Project: Geronimo Loop Interconnect

Programmed Amount: $224,298 (2023)

Core Business: Water Delivery

Category: WD - Production

Phase: Design

Council District: OCL

Description and Scope:

This project will design the installation of a new Pressure Reducing Valve (PRV) and 12-inch water line from the discharge side of the new Waterwheel Pump Station. The project will decommission the existing Geronimo Loop, Geronimo Village, and Tamaron pump stations and ground storage tanks. A PRV will then be installed at the future Waterwheel Booster Station (PZ 1302) which will then feed PZ 1233.

Justification:

This project simplifies operations and provides PZ 1233 with a reliable source of water. .

Funding Information

Acquisition		
Design	$213,617	(2023)
Construction	$1,424,111	(2025)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

San Antonio Water System
2023 Capital Improvement Program
Project Data Sheet

PROJECT OVERVIEW

Project ID:	Pro-11469
Project:	Lorimor 3.0 MG Elevated Storage Tank and Water Main
Programmed Amount:	$2,776,812 (2023)
Core Business:	Water Delivery
Category:	WD - Production
Phase:	Design
Council District:	District 09

Description and Scope:

This project will design the construction of a 3.0 million gallon floating ground water storage tank for Pressure Zone 1295 and design the installation of approximately 1.3 miles of 24-inch water main. The project will install piping, fencing, pavement, SCADA controls, electrical and security features.

Justification:

The existing water storage tank in Pressure Zone 1295, the Knights Cross Tank, is in poor condition and must be rehabilitated or replaced due to structural concerns. The existing tank has received notices of violation from TCEQ since it cannot be taken out of service. Given the critical operation of the tank, it can't be taken offline as the pressure zone does not have redundancy. The construction of the Lorimor Tank project will allow SAWS operational flexibility during periods in which the Knights Cross Tank must be taken offline for maintenance or repairs. In addition, the project is recommended by the 2017 SAWS Water Master Plan to accommodate future growth in the pressure zone. The new water main will connect the proposed Lorimor 3.0 MG EST to the existing 24-inch main along Huebner Rd.

Funding Information

Acquisition	$514,000	(2022)
Design	$2,644,583	(2023)
Construction	$17,630,550	(2025)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

San Antonio Water System
2023 Capital Improvement Program
Project Data Sheet

PROJECT OVERVIEW

Project ID:	Pro-00225
Project:	Marbach Pump Station Improvements Project - Phase 9
Programmed Amount:	$20,208,816
Core Business:	Water Delivery
Category:	WD - Production
Phase:	Construction
Council District:	District 04

Description and Scope:

This facility is a primary pump station for SAWS and supplies water to the west side service areas along Loop 410. The pump station has a total well pumping capacity of 36.75 million gallons per day and a firm high service pumping capacity of 42 million gallons per day. This project is Phase 9 of the multi-year pump station improvements program, and it will replace high service pumps, well pumps, and electrical and SCADA equipment at the Marbach pump station. The project will also include necessary site improvements such as grading, fencing, lighting, pavement, security, and yard piping.

Justification:

This primary pump station was built in 1973. In 1991, an additional well and high service pumps were installed. Most of the existing electrical and mechanical equipment of the pump station exceeds the 20-25 year life expectancy. To meet the current codes, and to improve the efficiency of the pump station, mechanical and electrical components of the pump station need to be replaced.

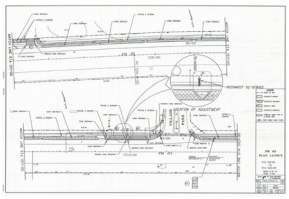
Funding Information

Acquisition		
Design	$1,662,620	(2020)
Construction	$19,246,491	(2023)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

SAN ANTONIO WATER SYSTEM
2023 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW



Project ID: Pro-11855

Project: Production Facilities Engineering Work Order Contract

Programmed Amount: $1,575,000

Core Business: Water Delivery

Category: WD - Production

Phase: Design

Council District: System Wide

Description and Scope:

The San Antonio Water System periodically has a 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.

Funding Information

Acquisition		
Design	$1,500,000	(2023)
Construction		

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

San Antonio Water System
2023 Capital Improvement Program
Project Data Sheet

PROJECT OVERVIEW

Project ID: Pro-11743

Project: Pump Station Generators and Resiliency Measures

Programmed Amount: $54,600,000

Core Business: Water Delivery

Category: WD - Production

Phase: Construction

Council District: System Wide

Description and Scope:

This project will provide funding to design, purchase, and install generators and implementation of other resiliency measures at multiple selected pump stations.

Justification:

Senate Bill 3 required water utilities such as SAWS to submit an emergency preparedness plan to the Texas Commission on Environmental Quality (TCEQ) by March 1, 2022. The Emergency Preparedness Plan is required to demonstrate a utility's ability to provide emergency operation of its water system during an extended power outage at a minimum water pressure of 20 pounds per square inch or at a water pressure level, as approved by TCEQ, as soon as safe and practicable following the occurrence of a natural disaster.

Funding Information

Acquisition		
Design		
Construction	$52,000,000	(2023)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

SAN ANTONIO WATER SYSTEM
2023 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID: Pro-11945

Project: Silver Mountain Pump Station Upsize

Programmed Amount: $945,000 (2023)

Core Business: Water Delivery

Category: WD - Production

Phase: Design

Council District: OCL

Description and Scope:

Silver Mountain Pump Station is a secondary pump station located on the City of San Antonio's southeast side. This project includes a new 500,000 gallon ground storage tank, high service pumps, electrical, instrumentation and controls, a hydro-pneumatic tank, miscellaneous site security, grading and other site/civil work. New water mains that connect PZ 920 to PZ 830 and to the proposed development areas will also be included.

Justification:

The pumps, motors, electrical gear, and instrumentation and controls equipment have exceeded their life expectancy at the existing pump station. In addition, this area is anticipated to experience growth in the near future, and a new tank and pump station is necessary to overcome the deficit created by the growth. Lastly, the project is needed to alleviate areas of low pressure in the northern part of the Pressure Zone (PZ) 920 observed in existing system modeling.

Funding Information

Acquisition		
Design	$900,000	(2023)
Construction	$6,000,000	(2024)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

SAN ANTONIO WATER SYSTEM
2023 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID: Pro-11837

Project: Water Production Facilities Disinfection System Upgrades Phase 4

Programmed Amount: $2,205,000 (2023)

Core Business: Water Delivery

Category: WD - Production

Phase: Design

Council District: District 03, District 06, District 09

Description and Scope:

This project will design the upgrades needed to convert the Anderson, Mission and Oliver Ranch pump stations from chlorine gas to sodium hypochlorite generation as a disinfectant for potable water. The project will also include new on-site sodium hypochlorite generation facilities, associated brine and sodium hypochlorite storage tanks, chemical feed pumps, and associated pipelines and appurtenances, such as water lines, drain lines, sodium hypochlorite lines, and above-ground injection points. The project includes:

- New Building to house the proposed On-Site Hypochlorite Generation Facilities, consisting of a Generation Room, Metering Pump Room, Electrical Room, and Sodium Hypochlorite Tank Containment Area.
- New fluoride feed system and building at each of the three sites.
- Associated electrical and instrumentation and controls improvements.
- Site grading, sidewalks, and site/civil improvements related to the disinfection improvements.
- Access Road from Site entrance to On-Site Hypochlorite Generation Facility, if necessary.
- Demolition and removal of existing gas chlorine equipment and facilities where practical.

Justification:

The project will remove the risk of an accidental release of chlorine gas in populated areas adjacent to these pump stations. Sodium hypochlorite is a non-hazardous chemical. Previous phases have converted six pump stations from chlorine gas to sodium hypochlorite generation.

Funding Information

Acquisition		
Design	$2,100,000	(2023)
Construction	$14,000,000	(2025)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

WASTEWATER

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San Antonio Water System
2023 Capital Improvement Program
Project Data Sheet

PROJECT OVERVIEW

Project ID: Pro-11852

Project: General Legal Services - WW

Programmed Amount: $406,875

Core Business: Wastewater

Category: WW - Corporate WW

Phase: Acquisition

Council District: System Wide

Description and Scope:

Specialized legal support is required for critical projects.

Justification:

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

Funding Information

Acquisition	$387,500	(2023)
Design		
Construction		

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

SAN ANTONIO WATER SYSTEM
2023 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID: Pro-11862

Project: Wastewater OCCC

Programmed Amount: $9,450,000

Core Business: Wastewater

Category: WW - Corporate WW

Phase: Construction

Council District: System Wide

Description and Scope:

The Owner Controlled Construction Changes (OCCC) fund was established to improve monitoring and efficiency of construction requested by SAWS. Funding amounts are determined by reviewing historical data and project schedules to determine the estimated amount needed for present and future years.

Justification:

Changes that occur on construction projects must be approved by SAWS Board of Trustees if over $100,000.

Funding Information

Acquisition		
Design		
Construction	$9,000,000	(2023)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

San Antonio Water System
2023 Capital Improvement Program
Project Data Sheet

PROJECT OVERVIEW

Project ID:	Pro-11863
Project:	Wastewater Overhead
Programmed Amount:	$11,250,000
Core Business:	Wastewater
Category:	WW - Corporate WW
Phase:	Construction
Council District:	System Wide

Description and Scope:

SAWS overhead costs cover the direct costs associated with SAWS personnel that manage and support CIP projects during the capitalizable phases of the project. The overhead costs were calculated primarily using the capitalized costs from staff time charged using the CIP Time Tracker on an annualized basis, and analyzing the remaining 2022 and prior year CIP projects as well as the future 2023 CIP projects.

Justification:

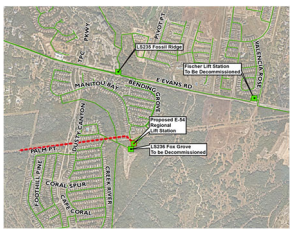
Overhead costs are applied to SAWS personnel costs in order to capture direct incremental costs associated with SAWS personnel that support the development and construction of CIP projects.

Funding Information

Acquisition		
Design		
Construction	$11,250,000	(2023)

SAN ANTONIO WATER SYSTEM
2023 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW



Project ID: Pro-11880

Project: E-54 Regional Lift Station

Programmed Amount: $14,280,000

Core Business: Wastewater

Category: WW - Collection Facilities

Phase: Construction

Council District: OCL

Description and Scope:

The work consists of construction of a new 6.6 million gallon per day (MGD) lift station just north of SAWS' existing Fox Grove Lift Station, along with the decommissioning of three existing lift stations. The project scope includes construction of a wet well, aeration system, SCADA system, electrical building with HVAC, pumps and motors, a 12-inch pump discharge pipe along with a 20-inch header connecting to dual 20-inch force mains. The scope for decommissioning the three lift stations (Fox Grove, Fischer, Fossil Ridge) includes re-routing of mains from the lift stations to connect to new pipelines, installation of new manholes, and utilization of small and large diameter bypass systems.

Justification:

This project is necessary to provide sanitary sewer service for the expanding population of north Bexar County. This is a developer project. The project will address capacity needs due to growth in the area by constructing a regional lift station allowing for the elimination of three existing lift stations. Additionally, three aging lift stations in need of upgrades will be eliminated with a gravity solution that is more cost efficient.

Funding Information

Acquisition		
Design		
Construction	$13,600,000	(2023)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

SAN ANTONIO WATER SYSTEM
2023 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID: Pro-11326

Project: Lift Station Rehabilitation Phase 6

Programmed Amount: $1,575,000 (2023)

Core Business: Wastewater

Category: WW - Collection Facilities

Phase: Design

Council District: System Wide

Description and Scope:

This project is for the assessment and rehabilitation of approximately 20 sewer lift stations.

The lift station infrastructure will be evaluated to determine service life and to ensure compliance with TCEQ regulatory requirements, as well as other applicable local, state, and federal codes. The project includes safety and security upgrades, rehabilitation of wet wells, pump replacements, and electrical panel upgrades and instrumentation and control upgrades. The lift stations are connected to the remote Supervisory Control and Data Acquisition System (SCADA) monitoring system. The Programmable Logic Controllers (PLCs) will be replaced as required to support the most current programming version of the SCADA system.

Justification:

A number of these lift stations were rehabilitated approximately 10 years ago and in need of reassessment to ensure they are operating effectively. Additionally, lift stations that have not been assessed as part of the previous rehabilitation program will be included in this phase.

Funding Information

Acquisition		
Design	$1,500,000	(2023)
Construction	$10,000,000	(2025)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

SAN ANTONIO WATER SYSTEM
2023 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-11046
Project:	C5/C28 Future Extension through Our Lady of the Lake
Programmed Amount:	$567,000 (2023)
Core Business:	Wastewater
Category:	WW - Mains New - Sewer
Phase:	Design
Council District:	District 05

Description and Scope:

This project will connect the 36-inch interceptor on the west side of Apache Creek to the existing 21-inch sewer main on Commerce Street. This will eliminate the existing siphon at West Commerce Street, under Elmendorf Lake at Our Lady of the Lake University and will enable future flows to meet the ultimate scouring velocity.

Justification:

This project is needed to relieve the siphon at West Commerce Street and to provide future flows needed to meet the ultimate scouring velocity required for sizing and as-built condition in Phase 1A and Phase 2. There is a potential that Phase 1A may require routine cleaning until future flows are introduced.

Funding Information

Acquisition		
Design	$540,000	(2023)
Construction	$3,600,000	(2025)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

San Antonio Water System
2023 Capital Improvement Program
Project Data Sheet

PROJECT OVERVIEW

Project ID: Pro-11843

Project: Palo Alto Villas Sanitary Sewer Extension

Programmed Amount: $10,500,000

Core Business: Wastewater

Category: WW - Mains New - Sewer

Phase: Construction

Council District: District 04, OCL

Description and Scope:

SAWS construction on this project will install approximately 2.62 miles of 27-inch gravity sanitary sewer main. This is a trilateral project with Moy Tarin Ramirez Engineers, LLC being the design engineer for the developer. The location will be near Jett Rd. between US HWY 16 and old Applewhite. The new alignment will tie into the existing 72-inch main and be utilized for new development.

Justification:

Provide for future growth south of San Antonio.

Funding Information

Acquisition		
Design		
Construction	$10,000,000	(2023)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

San Antonio Water System
2023 Capital Improvement Program
Project Data Sheet

PROJECT OVERVIEW

Project ID: Pro-11858

Project: Sewer Main Oversizing

Programmed Amount: $11,340,000

Core Business: Wastewater

Category: WW - Mains New - Sewer

Phase: Construction

Council District: System Wide

Description and Scope:

Pay for SAWS proportionate share of the cost of mains which are necessary to serve anticipated growth but are larger than the size main required by a developer customer or single customer. 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.

Funding Information

Acquisition		
Design		
Construction	$10,800,000	(2023)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

SAN ANTONIO WATER SYSTEM
2023 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID: Pro-11889

Project: Acequia Lift Station 30-inch Force Main

Programmed Amount: $2,100,000

Core Business: Wastewater

Category: WW - Main Replacement - Sewer

Phase: Construction

Council District: District 03

Description and Scope:

This project was implemented due to the poor condition of the existing 30-inch force main. It is located approximately one mile south of Military Dr. off Riverfront Parkway, adjacent to the San Antonio River. This project involves the rehabilitation of approximately 800 feet of existing 30-inch force main and the installation of approximately 800 feet of new 30-inch force main parallel to the existing force main. It will also rehabilitate approximately 330 feet of 42-inch sewer main and perform maintenance upgrades to the lift station.

Justification:

The poor condition of the existing 30-inch force main could lead to a sewer spill if not addressed.

Funding Information

Acquisition		
Design	$645,679	(2022)
Construction	$2,000,000	(2023)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

SAN ANTONIO WATER SYSTEM
2023 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID: Pro-11847

Project: Capacity, Management, Operation and Maintenance (CMOM)

Programmed Amount: $21,420,000

Core Business: Wastewater

Category: WW - Main Replacement - Sewer

Phase: Construction

Council District: System Wide

Description and Scope:

Funding is needed for 2023 for wastewater work resulting from urgent/emergency CMOM assets. The mains identified are in Very Poor Condition and fall outside of the specified Remedial Measures work for the Consent Decree.

Justification:

Sewer mains in poor and very poor condition are currently part of the CMOM program under monitoring. The condition of these assets will continue to degrade over time and may reach urgent or emergency status requiring expedited design and construction to ensure the protection of public health and safety.

Funding Information

Acquisition		
Design		
Construction	$20,400,000	(2023)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

San Antonio Water System
2023 Capital Improvement Program
Project Data Sheet

PROJECT OVERVIEW

Project ID: Pro-10932

Project: Governmental Sewer

Programmed Amount: $21,000,000

Core Business: Wastewater

Category: WW - 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.

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.

Funding Information

Acquisition		
Design		
Construction	$20,000,000	(2023)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

SAN ANTONIO WATER SYSTEM
2023 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-11334
Project:	Inflow and Infiltration Reduction
Programmed Amount:	$3,150,000
Core Business:	Wastewater
Category:	WW - Main Replacement - Sewer
Phase:	Design
Council District:	System Wide

Description and Scope:

This project will rehabilitate selected sewer mains, manholes, and sewer laterals in capacity constraint areas.

Justification:

This project is required under the EPA Consent Decree.

Funding Information

Acquisition		
Design	$68,753	(2021)
Construction	$3,000,000	(2023)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

SAN ANTONIO WATER SYSTEM
2023 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID: Pro-11911

Project: JBSA – Lackland Sewer Main Project

Programmed Amount: $2,100,000

Core Business: Wastewater

Category: WW - Main Replacement - Sewer

Phase: Construction

Council District: District 04

Description and Scope:

This project involves sewer main rehabilitation, called "conversion rehabilitation", to the existing 54-inch sewer main located within JBSA-Lackland. The total length is approximately 11.3 miles of main, and there are 191 manholes included in the project.

Following the rehabilitation, the ownership of the wastewater assets located in JBSA-Lackland will be transferred from SAWS to the US Air Force.

Justification:

As described in the Memorandum of Agreement entered into by SAWS and the US Air Force and following the completion of the W-6 Upper Segment project, SAWS has agreed to make necessary rehabilitation to the existing main. The specific rehab methods are to be recommended by the Air Force's Engineer and are necessary for the Air Force to rehabilitate the existing main.

Funding Information

Acquisition		
Design		
Construction	$2,000,000	(2023)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

San Antonio Water System
2023 Capital Improvement Program
Project Data Sheet

PROJECT OVERVIEW

Project ID: Pro-11854

Project: Main Replacements - Sewer - SAWS Crews

Programmed Amount: $3,675,000

Core Business: Wastewater

Category: WW - 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.

Funding Information

Acquisition		
Design		
Construction	$3,500,000	(2023)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

San Antonio Water System
2023 Capital Improvement Program
Project Data Sheet

PROJECT OVERVIEW

Project ID: Pro-10810

Project: Rilling Road Flow Management Facility

Programmed Amount: $64,050,000

Core Business: Wastewater

Category: WW - Main Replacement - Sewer

Phase: Construction

Council District: District 03

Description and Scope:

As part of SAWS commitment to meet Consent Decree requirements to reduce sanitary sewer overflows, this facility will manage peak wet weather flows within the Central Basin. The proposed facility consists of a diversion structure to trim peak flows within the 90-inch sewer main to improve the hydraulic gradeline and reduce surcharge of the sewer main downstream of the facility location. The former Rilling Road WWTP was decommissioned in 1987, wastewater operations no longer occur at the site.

The project consists of constructing one 5 million-gallon (MG) concrete basin and one 10 million-gallon (MG) concrete basin at the Rilling Road facility for a total of 15 MG capacity, located near the intersection of Rilling Road and Espada Road. The project scope includes site civil, yard piping, flow diversion, electrical, instrumentation and controls, site lighting, access, and site security improvements. Provisions for nuisance odor control are included in the design.

Justification:

The storage facility will optimize the management of wet weather flows within the collection system during peak weather events. The storage facility will temporarily store excess water during a storm event before it is returned to the sewer main after peak flows subside. This project will eliminate the need to install approximately 7 miles of large diameter sewer main and was determined to be the most economical choice to allow SAWS to meet the Consent Decree requirements.

Funding Information

Acquisition

Design

Construction $61,000,000 (2023)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

SAN ANTONIO WATER SYSTEM
2023 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID: Pro-11857

Project: Sewer Laterals

Programmed Amount: $5,565,000

Core Business: Wastewater

Category: WW - 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 upper laterals when televising or reported problems indicate the lateral has become unserviceable.

Justification:

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

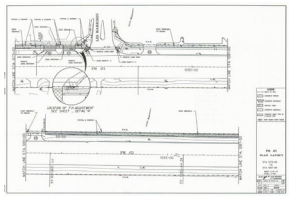
Funding Information

Acquisition		
Design		
Construction	$5,300,000	(2023)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

San Antonio Water System
2023 Capital Improvement Program
Project Data Sheet

PROJECT OVERVIEW



Project ID: Pro-11861

Project: Wastewater Main Replacement Work Order Engineering Contract

Programmed Amount: $13,650,000

Core Business: Wastewater

Category: WW - Main Replacement - Sewer

Phase: Design

Council District: System Wide

Description and Scope:

This annual project will fund design services to replace sewer mains that have experienced or will experience cave-ins and overflows. These projects vary in size and location and may require the solicitation of contractor construction services on an urgent basis. These projects will be constructed 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 as part of the CMOM program.

Justification:

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

Funding Information

Acquisition		
Design	$13,000,000	(2023)
Construction		

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

SAN ANTONIO WATER SYSTEM
2023 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID: Pro-10657

Project: LC WRC Electrical System Improvements - Phase 2

Programmed Amount: $2,100,000 (2023)

Core Business: Wastewater

Category: WW - Treatment

Phase: Design

Council District: District 04

Description and Scope:

This project will design the replacement of the motor control centers, variable frequency drives and buildings at the Leon Creek WRC dissolved air flotation and blowers area. This infrastructure is aging, in poor condition and/or does not meet Federal, State and Local electrical codes. The proposed electrical equipment to be replaced in this project was assessed and evaluated in 2014 and deemed to be at the end of its service life and in need of replacement. Phase 1 focused on the replacement of the main switchgear building and laid the foundation for Phase 2 work. Phase 1 construction is complete. Additionally, with SAWS' decision to transition to a programmable logic controller (PLC) based system from the current distributed control system, the project will also replace the existing controller with a PLC to support this effort.

Justification:

The Leon Creek WRC has been in operation since 1965. The plant electrical equipment to be replaced on this project has been in operation since 2000 and is in poor condition. Failure of this equipment could interrupt the treatment process, require emergency generators, and cause a fire or other safety issue.

Funding Information

Acquisition

Design	$2,000,000	(2023)
Construction	$13,333,333	(2025)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

SAN ANTONIO WATER SYSTEM
2023 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID: Pro-11976

Project: LC WRC Flow Equalization Basin Improvements

Programmed Amount: $3,412,500 (2023)

Core Business: Wastewater

Category: WW - Treatment

Phase: Design

Council District: District 04

Description and Scope:

This goal of this project is to build a new FEB flow diversion structure that gives SAWS the most flexibility when processing flows at the LCWRC. Currently, the existing FEB diversion structure is only capable of diverting 36 MGD to the Leon Creek FEBs due to hydraulic and mechanical constraints. A new 54 MGD diversion structure will allow SAWS to divert enough flow to the FEBs to maintain a plant process flow throughput of 92 MGD. The new diversion structure will also be equipped with a screened connection that will allow up to 50 MGD of flow to be transferred to the SMCWRC.

Justification:

The current FEB diversion structure does not have adequate process/hydraulic capacity to divert the required flow that has been documented as part of the Task 7 wet weather management. Flow projections developed in this Master Plan with the assistance of the SAWS Master Planning Group indicate that flows up to 145 MGD will reach the LCWRC before 2050. The current peak 2-hour flow rating of the LCWRC is set at 92 MGD. A new FEB diversion structure is needed to manage flows over the permitted flow rate.

Funding Information

Acquisition

Design	$3,250,000	(2023)
Construction	$16,250,000	(2025)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

SAN ANTONIO WATER SYSTEM
2023 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-11977
Project:	LC WRC Secondary and Tertiary Hydraulic and Process Capacity Improvements (Package A)
Programmed Amount:	$4,881,450 (2023)
Core Business:	Wastewater
Category:	WW - Treatment
Phase:	Design
Council District:	District 04

Description and Scope:

The proposed upgrades in this package focus on increasing the process/hydraulic capacity in all segments downstream of the aeration basins to the facilities outfall. Hydraulic upgrades in this area include removing Junction Box E, running parallel pipes from Junction Box F to the filter influent channel, installing an additional cloth filter unit, installing an additional chlorine contact basin, repairing the concrete in the existing contact basins, removing the effluent flumes and replacing them with two 5-ft Parshall flumes, and installing parallel 60-in effluent pipes from the effluent structure to the outfall. Final clarifier concrete, weirs, sludge collection, and other ancillary equipment should be rehabilitated during clarifier shutdowns. Additional hydraulic restrictions that should be rectified include identifying the unknown source of headloss in the hydraulic segment between the filter effluent channel and the chlorine contact chamber influent channel. Identifying and rectifying the source of the headloss is necessary to maintain proper weir overflow and channel freeboard requirements. Additionally, the hydraulic modeling of the LCWRC found that the existing Parshall flumes within the effluent structure could be flooded during a prolonged wet weather event.

Justification:

The process/hydraulic capacity of the primary treatment facilities at the LCWRC is inadequate to pass the current permitted rate of 92 MGD. Additional treatment units and hydraulic upgrades are required to pass the permitted flow reliably and safely.

Funding Information

Acquisition

Design	$4,649,000	(2023)
Construction	$23,245,000	(2025)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

SAN ANTONIO WATER SYSTEM
2023 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID: Pro-11362

Project: LC WRC Strain Presses and Hydraulic Upgrades

Programmed Amount: $1,170,750 (2023)

Core Business: Wastewater

Category: WW - Treatment

Phase: Design

Council District: District 04

Description and Scope:

This project is intended to reduce the strain on the LCWRC sludge transfer system and the sludge acceptance infrastructure at the SMCWRC. This project includes the proposed process capacity upgrades for the solids transfer pump station from the LCWRC to the SMCWRC. An evaluation of the solids transfer line has been included as a part of this project to confirm the condition and capacity of the transfer line.

Justification:

The intention of this project is to increase the efficiency of the transfer of solids from the LCWRC to the SMCWRC. The solids that are produced at the LCWRC are stored in an onsite sludge holding tank and then transferred to the SMCWRC by two pumps via an unscreened connection. The installation of strain presses before the transfer pump station will reduce the load on the downstream SMCWRC solids processing units. The current transfer pumps at the LCWRC do not have the required capacity to transfer the projected volume of sludge in 2050.

Funding Information

Acquisition		
Design	$1,115,000	(2023)
Construction	$5,575,000	(2025)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

SAN ANTONIO WATER SYSTEM
2023 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID: Pro-11979

Project: MC WRC Rehabilitation Improvements Phase 1

Programmed Amount: $2,770,950 (2023)

Core Business: Wastewater

Category: WW - Treatment

Phase: Design

Council District: District 04

Description and Scope:

The scope of this project includes improvements at MCWRC that focus on replacing infrastructure and equipment that is in poor visible condition or has reached the end of its useful life. Areas in this project package include the headworks, secondary treatment, disinfection, and solids processing. Headworks area improvements include the replacement of the aluminum gates with stainless steel gates in the bar screen area at the Plant 1 headworks. Additionally, the vortex grit pumps at Plant No. 2 headworks need to be replaced. Minor repairs of the concrete structure of the Plant 2 headworks are also needed. The secondary clarifiers at Plant 1 require various repairs or modifications. Clarifiers No. 3 and 4 should be outfitted with stainless steel components to increase their longevity. Clarifiers No. 3 and 5 should be coated with chemical resistant coating to reduce corrosion. Clarifier No. 5 requires an effluent weir adjustment and repair of the damage caused by corrosion on the stilling well support beams. The pumps at RAS Pump Station No. 1 should be replaced because they are at the end of their useful life. Improvements in the disinfection area include replacement of the gates and adding safety markings in the Plant 1 disinfection area. Improvements in the solids processing area include the replacement of the existing sludge transfer pumps in the sludge transfer pump station. A hydraulics study of the Plant 1 filter area has been added to this project.

Justification:

The items included in this project were identified as critical/high risk items in the treatment master plan condition assessment. All items were assessed based on the infield condition of the item. These items pose a potential safety and maintainability concern and should be considered a high priority project to reduce the potential of failure. Aging equipment may not be supported by the manufacturer, serviceable, or maintainable if left in place. Spare parts will be difficult to find.

Funding Information

Acquisition

Design	$2,639,000	(2023)
Construction	$13,195,000	(2025)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

SAN ANTONIO WATER SYSTEM
2023 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-11650
Project:	SMC WRC Biosolids System Upgrades
Programmed Amount:	$13,797,000 (2023)
Core Business:	Wastewater
Category:	WW - Treatment
Phase:	Design
Council District:	District 03

Description and Scope:

The purpose of this project is to construct a new centralized solids processing facility that will replace the existing solids processing facilities. This project includes the installation of a new sludge screening, thickening centrifuges, and dewatering centrifuge building. The biosolids processing building will be located Southwest of the existing sludge drying beds. A new biosolids lab, parking lot to include approximately 15 spaces, and additional offices in the new biosolids building are also included in this project. A new road and sidewalk will be constructed to provide access for operators and visitors. All new electrical and SCADA equipment will be provided including extending ductbanks to the new facility. The current Belt Filter Press Pavilion should be demolished once the new building and dewatering system are in service. This project also includes the demolition of the screening facility once the new thickening and dewatering system in the new building is put into the service.

Justification:

There is an urgent need for additional dewatering capacity due to the limited remaining lifespan of existing BFPs. There is inadequate capacity in existing sludge screens for future flows. The additional thickening and sludge screening units will address future capacity needs. Constructing a centralized solids processing facility will decrease the operational complexity of the solids processing process. Laboratory availability and storage space are currently limited to a few areas at the SMCWRC. A new biosolids lab space will help give the operators the tools they need to execute their jobs.

Funding Information

Acquisition

Design	$13,140,000	(2023)
Construction	$65,700,000	(2025)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

San Antonio Water System
2023 Capital Improvement Program
Project Data Sheet

PROJECT OVERVIEW

Project ID: Pro-11938

Project: SMC WRC Boiler Facility Improvements

Programmed Amount: $472,500 (2023)

Core Business: Wastewater

Category: WW - Treatment

Phase: Design

Council District: District 03

Description and Scope:

This project will replace the oldest boiler at the Boilers Facility at the Steven M. Clouse (SMC) WRC. The new boiler will be a non-condensing boiler to match the existing two non-condensing boilers and will run on both natural gas and biogas (dual-fuel source). The other two existing boilers will be retrofitted to have the capability to burn natural gas and biogas (dual-fuel source). With the replacement of the oldest boiler, the digesters will be reliably heated to their design temperature for optimal digestion using the three boilers, as needed. The conversion to dual-fuel source boilers will allow SAWS to use natural gas when the market conditions allow, and thereby maximize the amount of biogas sold to Ameresco through the current Biogas Sale Contract agreement.

Justification:

The anaerobic digesters at the SMCWRC are heated by recirculating digester sludge through heat exchangers. The hot water in these heat exchangers is heated by the boilers that currently burn biogas as the primary fuel source. SAWS has to provide a certain quantity of biogas to Ameresco per the Biogas Sale Contract. Since the biogas is currently used as the primary fuel source for the boilers, the amount of leftover biogas SAWS can sell to Ameresco is minimized. Switching to a dual-fuel (natural gas and biogas) boiler system will allow SAWS to switch from biogas to natural gas when the market conditions allow, and/or when it makes more financial sense to use natural gas over biogas to make up any deficit in the biogas quantity sold to Ameresco.

Funding Information

Acquisition

Design	$450,000	(2023)
Construction	$3,000,000	(2024)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

SAN ANTONIO WATER SYSTEM
2023 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-11045
Project:	SMC WRC Digester Mixing and System Enhancements Phase 3
Programmed Amount:	$17,850,000
Core Business:	Wastewater
Category:	WW - Treatment
Phase:	Construction
Council District:	District 03

Description and Scope:

The design will address improvements to the Steven M. Clouse (SMC) WRC's four existing digesters (Nos. 5, 6, 7 and 8) at the digester complex including cleaning of digesters, repair of the dome liners, repair and/or replacement of dome hatches / manways, dome pressure / vacuum relief assemblies and valves, replacement of existing digester mixing systems, and enhancements of existing digester gas meters. The digester pumping and heat exchanger systems will be rehabilitated or replaced, if deemed necessary. The design will also incorporate various electrical and instrumentation and control improvements.

Justification:

These improvements will increase operational reliability and efficiency of the sludge digestion process.

Funding Information

Acquisition		
Design	$1,542,000	(2020)
Construction	$17,000,000	(2023)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

SAN ANTONIO WATER SYSTEM
2023 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID: Pro-11758

Project: SMC WRC Electrical System Improvements – Phase 2B

Programmed Amount: $6,300,000

Core Business: Wastewater

Category: WW - Treatment

Phase: Construction

Council District: District 03

Description and Scope:

This project will replace various plant electrical switchgear, motor control centers, transformers and generators that are aging, in poor condition and/or do not meet Federal, State and Local electrical codes. All plant electrical equipment was assessed and evaluated, and the electrical equipment to be replaced in Phase 2B was deemed to be in poor condition.

Phase 1 has been completed and focused on the high voltage equipment and installed a new main switchgear building that laid the foundation for tie in of all future phased improvements. Phase 2A was awarded for construction in late 2021. Included in the construction is the work associated with transitioning the existing distributed control system into a programmable logic controller-based system to align with the other core service areas in SAWS system. Phase 2B will be constructed in 2023. The work associated with the Aeration Basins is Included in the construction scope.

Justification:

The Steven M. Clouse 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. The project will include the change in scope associated with the WRC Control System Upgrade project.

Funding Information

Acquisition		
Design		
Construction	$6,000,000	(2023)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

SAN ANTONIO WATER SYSTEM
2023 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-11974
Project:	SMC WRC Secondary Treatment Expansion and Blower Improvements (Package A)
Programmed Amount:	$14,839,650 (2023)
Core Business:	Wastewater
Category:	WW - Treatment
Phase:	Design
Council District:	District 03

Description and Scope:

The purpose of this project is to improve the capacity of the existing secondary treatment area. This project package includes the replacement of the five existing positive displacement blowers at SMCWRC which are in poor condition with five new single stage centrifugal blowers, and to upgrade the blower controls for improved energy efficiency. The new blowers, tentatively each at 39,000 standard cubic feet per minute (scfm) and 2500 horsepower, will be installed in the existing blower building and must provide a firm capacity of at least 153,000 scfm to meet the 2050 max day demand. This project includes a study to analyze and develop a strategy for optimizing the blower and aeration system. The results from this study will provide the best course of action when installing the new blower and aeration systems.

Justification:

The aeration process currently consists of five blowers that can produce approximately 152,000 SCFM firm capacity. The future aeration requirements slightly exceed the current installed capacity of the blowers. A higher efficiency blower and aeration system will lower power consumption and increase the effectiveness of the aeration basins.

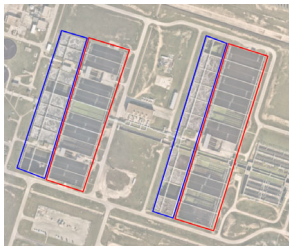
Funding Information

Acquisition		
Design	$14,133,000	(2023)
Construction	$70,665,000	(2024)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

SAN ANTONIO WATER SYSTEM
2023 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW



Project ID: Pro-11934

Project: SMC Skimmings Handling and Aeration Tunnel Ventilation

Programmed Amount: $1,365,000

Core Business: Wastewater

Category: WW - Treatment

Phase: Construction

Council District: District 02

Description and Scope:

This project will:
-install approximately one mile of new clarifier skimmings lines that will allow Operators to direct both 1st and 2nd Stages' skimmings to the Headworks
-install four new macerators and four new positive displacement pumps in 1st Stage
-install six new macerators and six new positive displacement pumps in 2nd Stage
-install new electrical supply to the 1st and 2nd stages
-demolish and remove the supply and exhaust fans and install new fans to supply six air changes per hour

Justification:

The 1st and 2nd Stage skimmings systems were modified approximately 15 years ago and are no longer capable of pumping skimmings to the Headworks. Due to this lack of pumping ability, skimmings are currently sent to return activated sludge or the mixed liquor channel. This recirculation exacerbates filamentous bacteria growth, which is decreasing plant performance. Filamentous bacteria is the leading known cause of SMC WRC's permit breach in January of 2022 and, thus far, appears to be a chronic issue. This project will provide operators with a tool to aid in filamentous bacteria removal.

The 1st Stage Tunnel has an exhaust fan near the supply fan which is resulting in half the air being short circuited. The ventilation for the 2nd Stage Tunnel lacks a supply fan and relies on two exhaust fans to pull in air via an air intake pipe. Both 1st and 2nd Stages' supply and exhaust fans are at or nearing the end of their useful lives.

Funding Information

Acquisition

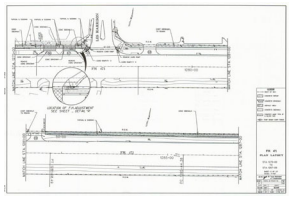
Design

Construction $1,300,000 (2023)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

SAN ANTONIO WATER SYSTEM
2023 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW



Project ID: Pro-11859

Project: Treatment Facilities Engineering Work Order Contract

Programmed Amount: $1,575,000

Core Business: Wastewater

Category: WW - 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 bid processes.

Justification:

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

Funding Information

Acquisition		
Design	$1,500,000	(2023)
Construction		

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

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WATER SUPPLY

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SAN ANTONIO WATER SYSTEM
2023 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID: Pro-11829

Project: Artesia Pump Station Pumps & Motors

Programmed Amount: $10,080,000

Core Business: Water Supply

Category: WR - ASR

Phase: Construction

Council District: District 02

Description and Scope:

This project will install new well pumps, motors, conveyance and flush piping, and perform electrical, instrumentation and controls work required for wells 7 and 8. It will also replace the well pumps and motors for the existing wells 3, 4, and 5.

Justification:

The Artesia Pump Station is a critical pump station serving a very large area in PZ 828 and is the main pump station for the operation of the Aquifer Storage and Recovery (ASR) site. Failure of the well pumps, or the entire pump station, will result in boil water notices for much of the pressure zone in the eastern part of the City of San Antonio and Bexar County. In addition, SAWS will not be able to bank as much water at the ASR and this would be detrimental during a drought of record.

Funding Information

Acquisition

Design

Construction	$9,600,000	(2023)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

San Antonio Water System
2023 Capital Improvement Program
Project Data Sheet

PROJECT OVERVIEW

Project ID:	Pro-11683
Project:	ASR Pipeline Cathodic Protection
Programmed Amount:	$2,100,000
Core Business:	Water Supply
Category:	WR - ASR
Phase:	Design
Council District:	OCL

Description and Scope:

The project includes corrosion protection engineering services for approximately 2.8 miles of existing 60-inch and 10.9 miles of 42-inch diameter steel Aquifer Storage and Recovery (ASR) pipeline (Segments 4, 5 and 6). The scope includes field investigations, design development, and support during the construction phase of the project related to the corrosion protection systems. As part of the field investigations, the consultant will collect structure-to-soil potential measurements in accordance with NACE corrosion protection requirements.

Justification:

The ASR pipeline is approaching 20 years of operation and is need of a new cathodic protection system due to the depleted sacrificial anode system. Based on available test reports the total anode current output has been diminishing throughout the years which indicates significant failure rates that must be addressed. Otherwise, the anticipated remaining anode life will be less than three years.

Funding Information

Acquisition

Design	$308,400	(2022)
Construction	$2,000,000	(2023)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

SAN ANTONIO WATER SYSTEM
2023 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID: Pro-11935

Project: Color Spot Station SCADA Upgrades Project

Programmed Amount: $262,500

Core Business: Water Supply

Category: WR - Corporate WR

Phase: Construction

Council District: OCL

Description and Scope:

This project includes design and construction of a narrow band antenna, programmable logic controllers, and programming to provide for automated pump operation and flow monitoring via SCADA. It also includes a new flow meter and piping at the flow meter connection. SAWS will work with a consultant to do the design in 2022 and construction in 2023.

Justification:

The pump station providing water to Color Spot Nursery is not connected to SCADA. SAWS Operations staff currently has to drive to the site each time the customer calls for starting and stopping the pump. The current flow meter for this pump is a mechanical meter and must be read manually for billing. This project will connect the station to SCADA allowing pumps to be operated remotely and eliminate daily trips for staff and improve response time for water delivery. Flow metering will also be upgraded and connected to SCADA to improve accuracy for metering and billing.

Funding Information

Acquisition		
Design		
Construction	$250,000	(2023)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

SAN ANTONIO WATER SYSTEM
2023 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID: Pro-11851

Project: General Legal Services - WR

Programmed Amount: $26,250

Core Business: Water Supply

Category: WR - Corporate WR

Phase: Acquisition

Council District: System Wide

Description and Scope:

Specialized legal support is required for critical projects.

Justification:

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

Funding Information

Acquisition	$25,000	(2023)
Design		
Construction		

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

SAN ANTONIO WATER SYSTEM
2023 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID: Pro-11926

Project: H2Oaks Center (Twin Oaks Pressure Reducing Station)

Programmed Amount: $252,000 (2023)

Core Business: Water Supply

Category: WR - ASR

Phase: Design

Council District: OCL

Description and Scope:

This project includes design and construction for the replacement of two 36-inch manually actuated butterfly valves, four 24-inch manually actuated butterfly valves, and evaluation and replacement of two 24-inch pressure sustaining valves (PSV) at the Aquifer Storage and Recovery's pressure reducing valve (PRV) station. This project will also replace a hydropneumatic actuator for an existing 36-inch ball valve with a proposed electric actuator. The project will include condition assessment and potential replacement of the existing 36-inch metal seated ball valve. The project will also include electrical upgrades to accommodate the new electrical actuator and upgrading the existing programmable logic controller (PLC) that sends the signal from the proposed PSV and ball valve actuator to the supervisory control and data acquisition (SCADA) system. Design will be in 2023 and construction in 2025.

Justification:

Valves and appurtenances at the Aquifer Storage and Recovery's PRV station were installed in 2006-2007. The system is now over 15 years old. The existing butterfly valves are leaking. These valves do not seal properly and need to be replaced. The existing PSVs are not able to maintain the upstream pressure adequately. These valves cannot be operated by the current PLC. The condition of these valves needs to be evaluated. If required, these valves should be replaced. The hydropneumatic actuator serving the 36-inch ball valve has proven to be unreliable and needs to be replaced with a more reliable electric actuator. Additionally, the existing PLC is outdated and needs to be upgraded to communicate properly with the existing SCADA system.

Funding Information

Acquisition

Design	$240,000	(2023)
Construction	$1,200,000	(2025)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

San Antonio Water System
2023 Capital Improvement Program
Project Data Sheet

PROJECT OVERVIEW

Project ID: Pro-00300

Project: Seale Pump Station Improvements - Phase 12

Programmed Amount: $2,362,500 (2023)

Core Business: Water Supply

Category: WR - ASR

Phase: Design

Council District: District 02

Description and Scope:

The scope consists of the evaluation and replacement of high service pumps and motors, well pumps and motors, control valves, motor operated valves, and miscellaneous piping; complete replacement of electrical gear including all existing low and medium voltage wiring, flow meters, and SCADA system; installation of a new electrical building; new generators; and cathodic protection system for buried piping; and miscellaneous other improvements such as site grading, painting, site drainage improvements, site security and lighting. Specialized construction inspections, commissioning and other construction phase services are included, as requested.

Justification:

The project will replace aging, obsolete, and unserviceable equipment, electrical gears and controls, and other infrastructure. This project is Phase 12 of the Pump Station Rehabilitation Program. Some of the electrical and mechanical components at the pump station were installed in 1992. These components are aging and difficult to operate. This project will evaluate and replace the electrical and mechanical components of the Seale pump station to improve the pump station's reliability and operational efficiency. The facility has a total well pump capacity of 15 million gallons per day (MGD) and a firm pumping capacity of 27 MGD.

Funding Information

Acquisition

Design	$2,250,000	(2023)
Construction	$15,000,000	(2025)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

San Antonio Water System
2023 Capital Improvement Program
Project Data Sheet

PROJECT OVERVIEW

Project ID: Pro-11869

Project: Water Resources OCCC

Programmed Amount: $787,500

Core Business: Water Supply

Category: WR - Corporate WR

Phase: Construction

Council District: System Wide

Description and Scope:

The Owner Controlled Construction Changes (OCCC) fund was established to improve monitoring and efficiency of construction requested by SAWS. Funding amounts are determined by reviewing historical data and project schedules to determine the estimated amount needed for present and future years.

Justification:

Changes that occur on construction projects must be approved by SAWS Board of Trustees if over $100,000.

Funding Information

Acquisition		
Design		
Construction	$750,000	(2023)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

San Antonio Water System
2023 Capital Improvement Program
Project Data Sheet

PROJECT OVERVIEW

Project ID:	Pro-11868
Project:	Water Resources Overhead
Programmed Amount:	$3,775,000
Core Business:	Water Supply
Category:	WR - Corporate WR
Phase:	Construction
Council District:	System Wide

Description and Scope:

SAWS overhead costs cover the direct costs associated with SAWS personnel that manage and support CIP projects during the capitalizable phases of the project. The overhead costs were calculated primarily using the capitalized costs from staff time charged using the CIP Time Tracker on an annualized basis and analyzing the remaining 2022 and prior year CIP projects and the future 2023 CIP projects.

Justification:

Overhead costs are applied to SAWS personnel costs in order to capture direct incremental costs associated with SAWS personnel that support the development and construction of CIP projects.

Funding Information

Acquisition		
Design		
Construction	$3,775,000	(2023)

San Antonio Water System
2023 Capital Improvement Program
Project Data Sheet

PROJECT OVERVIEW

Project ID:	Pro-00320
Project:	Brooks Recycled Water Pump Station Upgrade
Programmed Amount:	$3,780,000
Core Business:	Water Supply
Category:	RW - Recycled Water
Phase:	Construction
Council District:	District 03

Description and Scope:

The recycled water pump station is located inside Brooks City Base and serves recycled water customers in the southeast part of Bexar County. The project scope includes the evaluation and replacement of the four high service pumps, complete replacement of electrical and communication equipment, instrumentation and controls equipment, yard piping, construction of a canopy protective structure for the electrical and mechanical equipment, and any necessary site civil improvements, security fencing, site lighting, and pavement.

Justification:

Demand has increased in the Brooks area beyond the capabilities of this pump station over the 20 years the station has been in service. The current station struggles to provide adequate flows and pressure to its customers, experiences frequent maintenance issues, and runs inefficiently. Proper upgrades are vital to prevent premature wear and tear and high maintenance costs. SAWS risks having a failure at this site if no action is taken. This failure would put a significant number of customers out of service.

Funding Information

Acquisition

Design	$542,472	(2021)
Construction	$3,600,000	(2023)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

San Antonio Water System
2023 Capital Improvement Program
Project Data Sheet

PROJECT OVERVIEW

Project ID: Pro-11856

Project: Recycled Water Customer Lines

Programmed Amount: $210,000

Core Business: Water Supply

Category: RW - Recycled Water

Phase: Construction

Council District: System Wide

Description and Scope:

Provide recycled water to customers for irrigation, cooling towers, and industrial uses.

Justification:

Providing recycled water avoids the use of potable water sources.

Funding Information

Acquisition		
Design		
Construction	$200,000	(2023)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

San Antonio Water System
2023 Capital Improvement Program
Project Data Sheet

PROJECT OVERVIEW

Project ID: Pro-11853

Project: Recycled Water Governmental Adjustments

Programmed Amount: $525,000

Core Business: Water Supply

Category: RW - Recycled Water

Phase: Construction

Council District: System Wide

Description and Scope:

The governmental recycled water program consists of projects implemented in conjunction with other government entities, when they implement maintenance and/or capital improvement projects. Through this program, SAWS participates in the relocation and replacement of recycled water facilities, when appropriate or required. 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 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. Funding is increased to $500K in 2023 to accommodate the TXDOT Hwy 151 to US Hwy Loop 410 project.

Funding Information

Acquisition		
Design		
Construction	$500,000	(2023)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

SAN ANTONIO WATER SYSTEM
2023 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID: Pro-11958

Project: Riverside Golf Course Pump Station Rehabilitation

Programmed Amount: $409,500

Core Business: Water Supply

Category: RW - Recycled Water

Phase: Design

Council District: District 03

Description and Scope:

This project will design the rehabilitation or replacement of the Riverside Golf Course Pump Station, including the pond liner, screen and vault, pumps, piping, filter media, as well as site work, electrical components, and demolition and disposal.

Justification:

The Riverside pump station is in poor shape and must be rehabilitated to ensure it will continue to meet customer needs. There are structural problems with the canopy and equipment supports which need to be addressed to ensure access to the site remains safe.

The Riverside Golf Course has plans for a major refurbishment of its campus. Demand on the pump station is expected to increase during and after these improvements. The equipment and piping are aging and show corrosion over much of its surface. There is localized corrosion on the canopy supports which may result in failure of the structure.
There is discussion between SAWS and COSA about transfer of the facility to COSA since recycle water supply is made to the pond adjacent to the pump station and the station and pond are on golf course property. COSA requires the station to be in good working order before this transfer can take place. Transfer of the station would result in a reduced operation and maintenance cost to SAWS.

Funding Information

Acquisition		
Design	$390,000	(2023)
Construction	$2,600,000	(2024)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

SAN ANTONIO WATER SYSTEM
2023 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID: Pro-11943

Project: Recycled Water OCCC

Programmed Amount: $262,500

Core Business: Water Supply

Category: RW - Recycled Water

Phase: Construction

Council District: System Wide

Description and Scope:

The Owner Controlled Construction Changes (OCCC) fund was established to improve monitoring and efficiency of construction requested by SAWS. Funding amounts are determined by reviewing historical data and project schedules to determine the estimated amount needed for present and future years.

Justification:

Changes that occur on construction projects must be approved by SAWS Board of Trustees if over $100,000.

Funding Information

Acquisition		
Design		
Construction	$250,000	(2023)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

San Antonio Water System
2023 Capital Improvement Program
Project Data Sheet

PROJECT OVERVIEW

Project ID:	Pro-11870
Project:	Recycled Water Overhead
Programmed Amount:	$325,000
Core Business:	Water Supply
Category:	RW - Recycled Water
Phase:	Construction
Council District:	System Wide

Description and Scope:

SAWS overhead costs cover the direct costs associated with SAWS personnel that manage and support CIP projects during the capitalizable phases of the project. The overhead costs were calculated primarily using the capitalized costs from staff time charged using the CIP Time Tracker on an annualized basis, and analyzing the remaining 2022 and prior year CIP projects and the future 2023 CIP projects.

Justification:

Overhead costs are applied to SAWS personnel costs in order to capture direct incremental costs associated with SAWS personnel that support the development and construction of CIP projects.

Funding Information

Acquisition		
Design		
Construction	$325,000	(2023)

CHILLED WATER

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San Antonio Water System
2023 Capital Improvement Program
Project Data Sheet

PROJECT OVERVIEW

Project ID: Pro-12063

Project: JBSA Bldg. 356 Chiller Replacement

Programmed Amount: $1,582,350

Core Business: Chilled Water

Category: CW - Chilled Water

Phase: Construction

Council District: OCL

Description and Scope:

Remove the existing 27-year-old centrifugal chiller and associated infrastructure and replace with a new energy efficient chiller with variable frequency drive (VFD) technology. As part of this project, the existing chilled water and condenser pumps will also be replaced and equipped with VFDs.

Justification:

The building 356 Chilled Water Plant supplies chilled water to critical Port San Antonio facilities including Boeing, Chromalloy, and Standard Aero. Chiller #1 is past its useful life and if it were to fail during a high demand scenario, it is likely that the plant would be unable to adequately provide cooling to these facilities. According to the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), the estimated useful life of centrifugal chillers is 25 years. Historically SAWS has experienced failures of chillers in service past their recommended useful life.

Funding Information

Acquisition		
Design		
Construction	$1,507,000	(2023)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

San Antonio Water System
2023 Capital Improvement Program
Project Data Sheet

PROJECT OVERVIEW

Project ID: Pro-11708

Project: Chilled Water Downtown and JBSA Plant Improvements

Programmed Amount: $8,004,150

Core Business: Chilled Water

Category: CW - Chilled Water

Phase: Construction

Council District: District 01, OCL

Description and Scope:

These plant improvements address the mechanical deficiencies within SAWS' chilled water pumps, glycol pumps, condenser pumps, electric motors, cooling tower gear boxes and fan blades. This project will also address heat exchangers and the thermal storage system. Energy efficiency improvements like variable frequency drives will be integrated into the plants to meet The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) code of industry standards.

Justification:

This project will ensure that all Chilled Water mechanical infrastructure components operate within their life expectancy established by ASHRAE. New technologies to improve energy efficiencies will be included to reduce energy costs.

Funding Information

Acquisition		
Design		
Construction	$7,623,000	(2023)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

San Antonio Water System
2023 Capital Improvement Program
Project Data Sheet

PROJECT OVERVIEW

Project ID: Pro-11909

Project: Chilled Water Electrical Upgrades

Programmed Amount: $7,276,500

Core Business: Chilled Water

Category: CW - Chilled Water

Phase: Construction

Council District: System Wide

Description and Scope:

This project will perform electrical upgrades to the Chilled Water system. Design will occur in 2022, and construction in 2023 at the following locations.

-Central Chilled Water Plant: Remove the existing outdated switchgear and motor control center feeders and replace with new in-kind switchgear and motor control center feeders.
-Building 1625 Chilled Water Plant: Remove the existing outdated switchgear and motor control center feeders and replace with new in-kind switchgear and motor control center feeders.
-Building 356 Chilled Water Plant: Perform engineering design needed to replace the existing outdated switchgear and motor control center feeders.

Justification:

The plant switchgear at each location is past its useful life and at risk for failure. Failure of the switchgear or motor control center feeders would render the plant's chillers inoperable and put customers at a serious risk for losing cooling. Replacing this switchgear is critical in ensuring system reliability moving forward.

Funding Information

Acquisition		
Design		
Construction	$6,930,000	(2023)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

SAN ANTONIO WATER SYSTEM
2023 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID: Pro-11910

Project: Chilled Water SCADA Controls & Metering

Programmed Amount: $519,750

Core Business: Chilled Water

Category: CW - Chilled Water

Phase: Design

Council District: System Wide

Description and Scope:

This project will design the replacement of the communication and automated control for the Central chilled water plant and JBSA chilled water plants.

Justification:

The Central plant customers use 4G communications and this project will upgrade the system to use new ethernet-based metering communication to ensure that SAWS continues to receive timely and accurate customer data which SAWS uses for billing, plant operations, and trending. The JBSA plants have no automation, and all control is on-site and manual. Automation is key in ensuring plants operate effectively, efficiently, and at maximum capacity.

Funding Information

Acquisition		
Design		
Construction	$495,000	(2023)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

SAN ANTONIO WATER SYSTEM
2023 CAPITAL IMPROVEMENT PROGRAM
PROJECT DATA SHEET

PROJECT OVERVIEW

Project ID:	Pro-11982
Project:	General Legal Services - CW
Programmed Amount:	$52,500
Core Business:	Chilled Water
Category:	CW - Chilled Water
Phase:	Acquisition
Council District:	System Wide

Description and Scope:

Specialized legal support is required for critical projects.

Justification:

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

Funding Information

Acquisition	$50,000	(2023)
Design		
Construction		

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

San Antonio Water System
2023 Capital Improvement Program
Project Data Sheet

PROJECT OVERVIEW

Project ID: Pro-11848

Project: Chilled Water OCCC

Programmed Amount: $134,400

Core Business: Chilled Water

Category: CW - Chilled Water

Phase: Construction

Council District: System Wide

Description and Scope:

The Owner Controlled Construction Changes (OCCC) fund was established to improve monitoring and efficiency of construction requested by SAWS. Funding amounts are determined by reviewing historical data and project schedules to determine the estimated amount needed for present and future years.

Justification:

Changes that occur on construction projects must be approved by SAWS Board of Trustees if over $100,000.

Funding Information

Acquisition		
Design		
Construction	$128,000	(2023)

Amounts shown are estimated costs excluding SAWS overhead, which is reported in a separate CIP project.

San Antonio Water System
2023 Capital Improvement Program
Project Data Sheet

PROJECT OVERVIEW

Project ID:	Pro-11849
Project:	Chilled Water Overhead
Programmed Amount:	$200,000
Core Business:	Chilled Water
Category:	CW - Chilled Water
Phase:	Construction
Council District:	System Wide

Description and Scope:

SAWS overhead costs cover the direct costs associated with SAWS personnel that manage and support CIP projects during the capitalizable phases of the project. The overhead costs were calculated primarily using the capitalized costs from staff time charged using the CIP Time Tracker on an annualized basis and analyzing the remaining 2022 and prior year CIP projects and the future 2023 CIP projects.

Justification:

Overhead costs are applied to SAWS personnel costs in order to capture direct incremental costs associated with SAWS personnel that support the development and construction of CIP projects.

Funding Information

Acquisition		
Design		
Construction	$200,000	(2023)

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Supplemental Information

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WATER SUPPLY FEE

Effective for all potable water consumption on or about January 1, 2023. This fee directly funds the acquisition of new water supplies to reduce dependence on the Edwards Aquifer. The Water Supply Fee shall be assessed on all potable water service for water usage, measured per 1,000 gallons for each month or fraction thereof, according to the schedule below:

WATER SUPPLY FEE

RATE CLASS	USAGE GALLON - BLOCK THRESHOLD	ASSESSED FEE RATE PER 1,000 GALLONS
		Approved 2023
Residential	4,000	$1.631
	7,000	$3.018
	12,000	$5.464
	20,000	$7.177
	Over 20,000	$10.194
General	Base*	$3.079
	125% of Base	$3.541
	175% of Base	$4.619
	Over 175% of Base	$5.389
Wholesale	Base**	$3.567
	Over Base	$7.134
Irrigation	8,000	$3.813
	18,000	$5.339
	160,000	$6.864
	Over 160,000	$8.770
Uplift Assistance Program Residential	2,000	$0.000
	6,000	$1.650
	10,000	$2.475
	15,000	$4.125
	Over 15,000	$5.775

* The Base Use for General Class is defined as 100% of the prior year's average monthly consumption.

**The Base Use for the Wholesale Class is defined as 100% of the prior year's average monthly consumption or as agreed to by the wholesale customer and approved by the SAWS Board of Trustees.

Residential Water and Sewer Rates

Residential Water Rates

Effective for all potable water consumption on or about January 1, 2023. The Service Availability Charge (minimum bill) is assessed for all residential water service furnished through meters of the following sizes together with the Monthly Water Volume Charge and the Water ADP Discount Program Recovery Rate volumetric rate, measured per 1,000 gallons of water usage for each month or fraction thereof, shall be as follows:

MONTHLY SERVICE AVAILABILITY CHARGE

METER SIZE	INSIDE CITY LIMITS *	OUTSIDE CITY LIMITS **
	Approved 2023	Approved 2023
5/8"	$9.00	$11.70
3/4"	11.93	15.51
1"	17.79	23.13
1-1/2"	32.44	42.18
2"	50.02	65.03
3"	96.90	125.97
4"	149.64	194.54
6"	296.14	384.99
8"	471.94	613.53
10"	589.14	765.89
12"	823.54	1,070.61

* For Inside City Limits customers, the Water Service Availability Charge shall be increased by $2.00 if monthly usage exceeds 4,000 gallons.

** For Outside City Limits customers, the Water Service Availability Charge shall be increased by $2.60 if monthly usage exceeds 4,000 gallons.

MONTHLY WATER DELIVERY VOLUME CHARGE

	INSIDE CITY LIMITS	OUTSIDE CITY LIMITS
	RATE PER 1,000 GALLONS	RATE PER 1,000 GALLONS
Usage Gallons Block Threshold	Approved 2023	Approved 2023
4,000	$0.907	$1.180
7,000	$1.678	$2.182
12,000	$3.039	$3.951
20,000	$3.991	$5.189
Over 20,000	$5.669	$7.370

Water Uplift Assistance Program Fee Rate

	INSIDE CITY LIMITS	OUTSIDE CITY LIMITS
	RATE PER 1,000 GALLONS	RATE PER 1,000 GALLONS
	Approved 2023	Approved 2023
All Volumes	$0.159	$0.159

RESIDENTIAL SEWER RATES

Effective for all sewer usage on or about January 1, 2023. The below Monthly Sewer Service Availability Charge, the Monthly Sewer Volume Charge and the Sewer ADP Discount Program Recovery Rate volume charge are assessed for all metered residential connections. The charges are computed based on 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.

MONTHLY SERVICE AVAILABILITY CHARGE

METER SIZE	INSIDE CITY LIMITS	OUTSIDE CITY LIMITS
	Approved 2023	Approved 2023
5/8"	$10.00	$12.00
3/4"	13.89	16.67
1"	21.66	26.00
1-1/2"	41.08	49.30
2"	64.39	77.27
3"	126.55	151.86
4"	196.48	235.78
6"	390.73	468.88
8"	623.83	748.60
10"	779.23	935.08
12"	1,090.03	1,308.04

Customers who do not have a winter record of water usage or an interim average will be billed for sewer service assuming 5,985 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.

MONTHLY SEWER VOLUME CHARGE

	INSIDE CITY LIMITS	OUTSIDE CITY LIMITS
	RATE PER 1,000 GALLONS	RATE PER 1,000 GALLONS
Usage Gallons Block Threshold	Approved 2023	Approved 2023
4,000	$2.539	$3.047
Over 4,000	$4.444	$5.333

Sewer Uplift Assistance Program Fee Rate

	INSIDE CITY LIMITS	OUTSIDE CITY LIMITS
	RATE PER 1,000 GALLONS	RATE PER 1,000 GALLONS
	Approved 2023	Approved 2023
All Volumes	$0.161	$0.161

Uplift Assistance Program Rates

Households inside the City Limits or outside the City Limits with income at or below 125 percent of the Federal Poverty Level (FPL) are eligible to apply to be subject to the below Uplift Assistance Program water and sewer rates. Rates are effective for consumption on or about January 1, 2023.

Uplift Assistance Program Residential Water Rates

The Uplift Assistance Program (UAP) Residential Service Availability Charge (minimum bill) is assessed for all residential water service exceeding 2,000 gallons per month of usage furnished through meters of the following sizes together with the Monthly Volume Charge measured per 1,000 gallons of water usage for each month or fraction thereof shall be as follows:

MONTHLY SERVICE AVAILABILITY CHARGE

METER SIZE	INSIDE CITY LIMITS	OUTSIDE CITY LIMITS
	Approved 2023	Approved 2023
Tier 1 *	$0.00	$0.00
Tiers 2-5	3.00	3.90

MONTHLY WATER DELIVERY VOLUME CHARGE

	INSIDE CITY LIMITS	OUTSIDE CITY LIMITS
	RATE PER 1,000 GALLONS	RATE PER 1,000 GALLONS
Usage Gallons Block Threshold	Approved 2023	Approved 2023
2,000	$0.000	$0.000
6,000	$1.000	$1.300
10,000	$1.500	$1.950
15,000	$2.500	$3.250
Over 15,000	$3.500	$4.550

* The UAP Water Service Availability Charge is zero if monthly consumption does not exceed the Tier 1 usage block threshold of 2,000 gallons.

UPLIFT ASSISTANCE PROGRAM RESIDENTIAL SEWER RATES

Effective for all potable water consumption on or about January 1, 2023. UAP sewer service volumetric 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.

MONTHLY SEWER VOLUME CHARGE

	INSIDE CITY LIMITS	OUTSIDE CITY LIMITS
	RATE PER 1,000 GALLONS	RATE PER 1,000 GALLONS
Usage Gallons Block Threshold	Approved 2023	Approved 2023
2,000	$0.000	$0.000
Over 2,000	$2.700	$3.240

Customers who do not have a winter record of water usage or an interim average will be billed for sewer service assuming 5,985 gallons monthly sewer usage.

General Class Water Service and Sewer Rates

Including Apartment, Commercial, Industrial and Municipal
Effective for consumption on or about January 1, 2023. 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 prior year's average monthly usage. Increased unit rates apply as usage exceeds each customer's base amount.

General Class Water Rates

Effective for all potable water consumption on or about January 1, 2023. The below Water Service Availability Charge, the Monthly Water Volume Charge and the Water ADP Discount Program Recovery Rate volume charge are assessed for all metered General Class connections. The charges are computed based on actual water consumption and are billed according to the rate schedules below.

MONTHLY SERVICE AVAILABILITY CHARGE

METER SIZE	INSIDE CITY LIMITS	OUTSIDE CITY LIMITS
	Approved 2023	Approved 2023
5/8"	$12.70	$16.00
3/4"	16.48	20.66
1"	24.04	29.98
1-1/2"	42.94	53.28
2"	65.62	81.23
3"	126.10	155.77
4"	194.14	239.64
6"	383.14	472.59
8"	609.94	752.13
10"	761.14	938.49
12"	1,063.54	1,311.21

MONTHLY WATER DELIVERY VOLUME CHARGE

	INSIDE CITY LIMITS	OUTSIDE CITY LIMITS
	RATE PER 1,000 GALLONS	RATE PER 1,000 GALLONS
Usage Gallons Block Threshold	Approved 2023	Approved 2023
Base*	$1.958	$2.546
>100-125% of Base	$2.252	$2.928
>125-175% of Base	$2.937	$3.819
>175% of Base	$3.427	$4.456

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

Water Uplift Assistance Program Fee Rate

	INSIDE CITY LIMITS RATE PER 1,000 GALLONS	OUTSIDE CITY LIMITS RATE PER 1,000 GALLONS
	Approved 2023	**Approved 2023**
All Volumes	$0.159	$0.159

For a new General Class water customer who does not have a record of prior-year consumption history, in order to establish a base use for the assessment of the above volumetric rates, a default base amount shall be assigned using the average monthly consumption for the prior calendar year for the average apartment, general or industrial account (as applicable) having the same meter size and sub-classification as the customer. A table of average monthly consumptions by general class sub-classification and meter size shall be updated annually with actual prior calendar year consumption history information to serve as the source of default base amount assignments.

General Class Sewer Rates

Effective for all sewer usage on or about January 1, 2023. The below Sewer Service Availability Charge, the Monthly Sewer Volume Charge and the Sewer ADP Discount Program Recovery Rate volume charge are assessed for all metered General Class connections. The charges are computed based on actual water consumption and are billed according to the rate schedules below.

MONTHLY SERVICE AVAILABILITY CHARGE

METER SIZE	INSIDE CITY LIMITS	OUTSIDE CITY LIMITS
	Approved 2023	**Approved 2023**
5/8”	$10.00	$12.00
3/4”	13.89	16.67
1”	21.66	26.00
1-1/2”	41.08	49.30
2”	64.39	77.27
3”	126.55	151.86
4”	196.48	235.78
6”	390.73	468.88
8”	623.83	748.60
10”	779.23	935.08
12”	1,090.03	1,308.04

Customers who do not have a San Antonio Water System water meter will be charged the Sewer Service Availability Charge based on a 2" meter size.

MONTHLY SEWER VOLUME CHARGE

	INSIDE CITY LIMITS	OUTSIDE CITY LIMITS
	RATE PER 1,000 GALLONS	RATE PER 1,000 GALLONS
Usage Gallons Block Threshold	Approved 2023	Approved 2023
All Volumes	$4.368	$5.242

Sewer Uplift Assistance Program Fee Rate

	INSIDE CITY LIMITS	OUTSIDE CITY LIMITS
	RATE PER 1,000 GALLONS	RATE PER 1,000 GALLONS
	Approved 2023	Approved 2023
All Volumes	$0.161	$0.161

LANDSCAPE IRRIGATION SERVICE RATES

Effective for consumption on or about January 1, 2023. 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 commercial businesses 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.

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 and the Water ADP Discount Program Recovery Rate volumetric charge, measured per 1,000 gallons for water usage in every instance of service for each month or fraction thereof, shall be as follows:

MONTHLY SERVICE AVAILABILITY CHARGE

METER SIZE	INSIDE CITY LIMITS	OUTSIDE CITY LIMITS
	Approved 2023	Approved 2023
5/8"	$12.70	$16.00
3/4"	16.48	20.66
1"	24.04	29.98
1-1/2"	42.94	53.28
2"	65.62	81.23
3"	126.10	155.77
4"	194.14	239.64
6"	383.14	472.59
8"	609.94	752.13
10"	761.14	938.49
12"	1,063.54	1,311.21

MONTHLY WATER DELIVERY VOLUME CHARGE

	INSIDE CITY LIMITS	OUTSIDE CITY LIMITS
	RATE PER 1,000 GALLONS	RATE PER 1,000 GALLONS
Usage Gallons Block Threshold	Approved 2023	Approved 2023
8,000	$3.475	$4.518
18,000	$4.865	$6.325
160,000	$6.255	$8.132
Over 160,000	$7.993	$10.391

Water Uplift Assistance Program Fee Rate

	INSIDE CITY LIMITS RATE PER 1,000 GALLONS Approved 2023	OUTSIDE CITY LIMITS RATE PER 1,000 GALLONS Approved 2023
All Volumes	$0.159	$0.159

Wholesale Water Service and Sewer Rates

Effective for consumption on or about January 1, 2023.

Water service charges for all metered wholesale water connections shall be the sum of the appropriate Water and Sewer Service Availability Charges and the application of the Water and Sewer 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.

Wholesale Monthly Service Availability Charges

MONTHLY SERVICE AVAILABILITY CHARGES

METER SIZE *	WATER	SEWER
	Approved 2023	Approved 2023
6"	$298.14	$340.07
8"	473.94	340.07
10"	591.14	340.07
12"	825.54	340.07

* Wholesale 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."

Wholesale Volume Charges

MONTHLY WATER DELIVERY VOLUME CHARGE

	WATER
	RATE PER 1,000 GALLONS
Usage Gallons Block Threshold	Approved 2023
Base**	$2.723
Over Base	$5.446

**The Base Use 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.

MONTHLY SEWER VOLUME CHARGE

	SEWER
	RATE PER 1,000 GALLONS
	Approved 2023
All Volumes	$4.256

EDWARDS AQUIFER AUTHORITY PERMIT FEE

Ordinance No. 87042 provides for the establishment and assessment of a pass-through charge of the Edwards Aquifer Authority (EAA) Permit Fee to all San Antonio Water System water customers. Fee is assessed on all potable water usage. Any changes to the pass-through fee for 2023 will be evaluated at the end of 2022.

2022 EAA PASS THROUGH FEE (per 1,000 gallons)
Monthly Rate
$0.3385

TCEQ FEE

San Antonio Water System works cooperatively with government agencies to comply with local, state and federal regulations. As the state-level environmental agency, the Texas Commission on Environmental Quality (TCEQ) generates part of its operating revenue from fees charged to utilities like SAWS.

To help recover the fees assessed by TCEQ, SAWS charges every customer a TCEQ pass-through fee.

The pass-through fee applies to all residential, commercial, and wholesale accounts. Any changes to the pass-through fees for 2023 will be evaluated at the end of 2022.

2022 TCEQ PASS-THROUGH FEE	
Service Type	**Monthly Rate**
Water Fee	$0.21
Wastewater Fee	$0.06

Recycled Water Service

Effective for all potable water consumption on or about January 1, 2023. 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 1,000 gallons for water usage in every instance of service for each month of fraction thereof shall be as follows:

Edwards Exchange Customers

MONTHLY SERVICE AVAILABILITY CHARGE

METER SIZE	Approved 2023
5/8"	$16.92
3/4"	22.00
1"	28.69
1-1/2"	45.57
2"	66.62
3"	177.21
4"	263.40
6"	502.44
8"	757.37
10"	1,038.52
12"	1,281.36

MONTHLY VOLUME CHARGE

	STANDARD RATE PER 1,000 GALLONS	SEASONAL RATE PER 1,000 GALLONS
Usage in Gallons	Approved 2023	Approved 2023
Transferred Amount	$0.446	$0.446
>100-125% of Base	$1.670	$1.774

The Volume Charge "Seasonal" Rate per 1,000 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 1,000 Gallons shall be utilized.

NON-EDWARDS EXCHANGE CUSTOMERS

MONTHLY SERVICE AVAILABILITY CHARGE

METER SIZE	Approved 2023
5/8"	$16.92
3/4"	22.00
1"	28.69
1-1/2"	45.57
2"	66.62
3"	177.21
4"	263.40
6"	502.44
8"	757.37
10"	1,038.52
12"	1,281.36

MONTHLY VOLUME CHARGE

	STANDARD	SEASONAL
	RATE PER 1,000 GALLONS	RATE PER 1,000 GALLONS
Usage Gallons Block Threshold	Approved 2023	Approved 2023
748,000	$1.786	$1.921
Over 748,000	$1.827	$1.937

The Volume Charge "Seasonal" Rate per 1,000 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 1,000 Gallons shall be utilized.

GLOSSARY

Acre-Foot/Acre-Feet	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.
Average Winter Consumption	Average water usage during three consecutive billing periods beginning after November 15 and ending on or about March 15 of each year
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	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.
ConnectH2O	SAWS Advanced Metering Infrastructure (AMI) project
Consent Decree	A legal agreement between SAWS and the U.S. Environmental Protection Agency (EPA) whereby SAWS agreed to make significant upgrades to reduce overflows from its sewer system and pay a civil penalty to resolve Clean Water Act (CWA) violations stemming from illegal discharges of raw sewage.
COVID-19	Coronavirus Pandemic
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.
Desalination	Brackish groundwater desalination
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.
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

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 period of three calendar years.
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.
H2Oaks	H_2Oaks Center, located in far south Bexar County at the site formerly known as SAWS Twin Oaks Aquifer Storage and Recovery. The location is now home to three water supplies, all operated from the H_2Oaks control room: desalinated water, aquifer storage and recovery, and local Carrizo Aquifer
Incidental Take Permit	A permit issued by the U.S. Fish and Wildlife Service which allows the permit-holder to legally proceed with an activity that would otherwise result in the unlawful take of a listed wildlife species.
J-17 Index Well	This well is situated on a major Edwards Aquifer recharge flow path and responds quickly to pumpage and recharge. The well has been used for many decades to record changes in the level of the aquifer in the San Antonio area
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
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 Bonds or any Debt.
Ordinance	Ordinance No. 75686 adopted by the City Council on April 30, 1992. This ordinance outlines important financial requirements and calculations to use for determining rates and charges, flow of funds, pledged revenues toward debt service, debt coverage ratios and fund requirements
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.
SAWS 2017 Water Management Plan	A plan which addresses the San Antonio's future needs by calling for investment in new supplies and a continued commitment to water conservation.
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 where 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 is 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.
Uplift Assistance Program	Households inside the City Limits or outside the City Limits with income at or below 125 percent of the Federal Poverty Level (FPL) are eligible to apply to be subject to the Uplift Assistance Program residential rates.
Uplift Assistance Program Fee	Water and sewer volumetric fee rates assessed Residential, General, and Irrigation customers to support the Uplift Program Assistance Program.
Watershed	An area or ridge of land that separates waters flowing to different rivers and basins
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.

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GLOSSARY OF ABBREVIATIONS

ADP	Affordability Discount Program
AMI	Advanced Metering Infrastructure
ASR	Aquifer Storage and Recovery
AWC	Average Winter Consumption
BGD	Brackish Groundwater Desalination
CCN	Certificates of Convenience and Necessity
CIP	Capital Improvement Program
COSA	City of San Antonio
CCTV	Closed circuit television
CFO	Chief Financial Officer
CMOM	Capacity Management Operation and Maintenance
COO	Chief Operating Officer
COVID-19	Coronavirus pandemic
CP	Commercial Paper Program
CPMS	Capital Project Management System
CPS	City Public Service Energy
CWIP	Central Water Integration Pipeline
DEM	Dead end main
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
EMT	SAWS Executive Management Team
EPA	U.S. Environmental Protection Agency
EST	Elevated Storage Tank

FTE	Full-time equivalent
GASB	Government Accounting Standards Board
GDP	Gross Domestic Product
GFOA	Government Finance Officers Association
GIS	Geographic Information System
GPCD	Gallons per capita per day
I/I	Inflow and infiltration
ITP	Incidental Take Permit
JBSA	Joint Base San Antonio
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
PLC	Programmable Logic Controllers
PZ	Pressure Zone
R&R	Renewal and Replacement
RAC	Rate Advisory Committee
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
SSO	Sanitary sewer overflow
SSORP	Sanitary sewer overflow reduction program
TCEQ	Texas Commission on Environmental Quality

TECP	Tax exempt commercial paper
TXDOT	Texas Department of Transportation
UAP	Uplift Assistance Program
USFWS	U.S. Fish and Wildlife Service
WCTS	Wastewater collection and transmission system
WD	Water Delivery
WRC	Water Recycling Center
WTPA	Water Transmission and Purchase Agreement
WW	Wastewater

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2800 U.S. Hwy 281 North | P.O. Box 2449 | San Antonio, Texas 78298-2449
210-704-SAWS (7297) | www.saws.org

San Antonio Water System