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# Water Supply Fee Semiannual Report January - June 2023

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#### About the cover:

Top: Brackish groundwater desalination post treatment process at the SAWS H<sub>2</sub>Oaks facility.

Middle: Staff is dedicated to ensuring high quality drinking water. San Antonio has been rated as having a superior water system by the Texas Commission on Environmental Quality since 1936.

Bottom: After three years of pandemic pause, Spring Bloom returned to SAWS HQ in March. This free event provides SAWS customers the opportunity to learn about low water use gardening and landscape care.



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### Introduction

San Antonio Water System (SAWS) is pleased to present the January - June 2023 Water Supply Fee Semiannual Report to San Antonio City Council. This report is a requirement of Chapter 34 of the Municipal Code, Section 34-1349 and put in place by a 2005 initiative to ensure SAWS was achieving the development of the water supply plan. The requirement has never been altered and as such, is submitted to City Council twice each year, covering the periods of January through June, and July through December.

SAWS was created by an act of the City Council in May 1992, through Ordinance 75686. SAWS serves over 2 million people. The service area covers 928 square miles primarily in Bexar County and portions of Atascosa, Comal, and Medina counties.

This report documents the water resources activities pertaining to the implementation of San Antonio Water System's long-term planning efforts, with focus on activities during the period of January 1 through June 30, 2023. The report will:

- Review the progress on the updates to the 2017 Water Management Plan
- Provide a status report on the utility's water production
- Recap the Edwards Aquifer Authority (EAA) critical period cutbacks and drought restrictions during the reporting period
- Provide an update on conservation programs
- Provide an update on the ongoing planning of the Water Management Plan
- Summarize the revenues generated from the water supply fee, and capital spending on water supply projects
- Summarize the maintenance and operational expenses for completed projects

SAWS had a total potable and non-potable demand of 144,771 AF during the first half of 2023. Of that total, 80,634 AF came from the Edwards Aquifer, which accounted for approximately 55.7 percent of the total water distributed to customers. One AF of water is equal to 325,851 gallons.

The current diversified water supply portfolio consists of the following sources:

- Edwards Aquifer
- Canyon Lake
- Carrizo Aquifer
- Lake Dunlap
- Lower Wilcox Aquifer
- Recycled Water (non-potable)
- Simsboro Aquifer
- Trinity Aquifer



### **EAA: Critical Period Update**

In the first half of 2023, San Antonio recorded 12.75 inches of rain. This is 3.35 inches below the 30-year average of 16.10 inches for the first 6 months of the year.

SAWS finished the first half of 2023 with a 16.75 percent critical period drought cutback to its Edwards Aquifer supply. The EAA started the year in Stage 3 critical period and remained in critical period throughout the first half of the year.

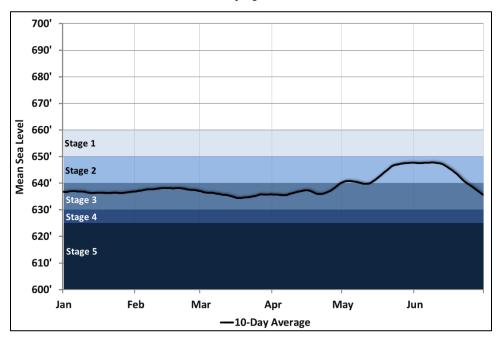
Since April 13 of 2022, SAWS customers entered and remain in stage 2 watering rules. Under stage 2 watering rules, SAWS customers may water with an irrigation system once a week between 7-11 a.m. and 7-11 p.m. on the designated watering day.

#### EAA Critical Period

Days in Critical Period	Start	End	Reduction
181	1/01/2023	6/30/2023	16.75%

Total Edwards permit reduction of 16.75% by the end of the reporting period.

#### Edwards Aquifer J-17 Level



San Antonio J-17 Index well level based on mean sea level (msl) for the reporting period.



# **Water Supply Summary**

This section summarizes the status for each water resource project for the first half of 2023.

Supply	Acre-Feet Distributed (January-June 2023)	Activity
Edwards Aquifer	80,634	<ul> <li>2023 Permitted inventory 259,430 AF</li> <li>Regulatory cutback was 16.75% through the reporting period</li> </ul>
Direct Recycled Water  6,227  • 2,828 (consumptive) • 3,257 (river flow) • 142 (Mitchell Lake)  • System Supply: 25,000 AF*		• System Supply: 25,000 AF*
Trinity Aquifer	1,544	Current drought conditions led to decreased production volumes in the first half of 2023
Canyon Regional Water Authority (CRWA)	3,056	48% of annual contracted volume received during the reporting period

<sup>\*</sup>This does not include the volume supplied to CPS Energy



Supply	Acre-Feet Distributed (January-June 2023)	Activity
Canyon Lake	3,190	Canyon Lake was at 74.4% of capacity at the end of the reporting period
H₂Oaks Aquifer Storage and Recovery	ASR water recovered and sent to distribution system: 3,018 AF Edwards Water Stored: 5,622 AF	<ul> <li>Stored January 1<sup>st</sup> through April 7<sup>th</sup> due to beneficial rains</li> <li>An average of 13 MGD sent to distribution system between April 17<sup>th</sup> to June 30<sup>th</sup></li> <li>190,604 AF of total stored water as of June 30, 2023</li> </ul>
H₂Oaks Carrizo Aquifer	3,665	<ul> <li>9,900 AF annual production capacity</li> <li>37% of annual capacity produced during the reporting period</li> </ul>
H₂Oaks Brackish Groundwater Desalination	2,773	<ul> <li>Produced an average of 5 MGD during the reporting period</li> </ul>
Regional Carrizo Project	4,417	<ul> <li>Includes SAWS Buckhorn wellfield production in Gonzales County plus water purchased from Schertz-Seguin Local Government Corporation</li> <li>Purchased 273 AF from SSLGC in the reporting period</li> </ul>
Vista Ridge	24,947	99% of the contracted volume made available was received from January to June



Planned Projects 2017-2025	Status			
Conservation Programming	Program highlights from the first half of 2023 include:  Increased Conservation messaging by sending personalized WaterSmart reports to over 385,000 customers on a monthly basis, helping single family residential customers identify and participate in conservation opportunities. All low-income customers receiving an affordability discount that we have an email for are auto-enrolled in WaterSmart reports.  GardenStyle visitors have grown by 13% since mid-2022. Subscribers to the weekly GardenStyleSA newsletter continues to increase now having just under 36,000 subscribers.  607 customers served through Plumbers to People and Conservation Makeover visits in the first half of 2023, with ongoing efforts to assist more customers through collaboration with the Uplift Team.  Nearly 1,100 Irrigation Consultations completed at homes in the first half of 2023.  129 households, 3 multifamily, and 4 businesses used Irrigation Efficiency rebates in 2023.  449 WaterSaver Landscape Coupons redeemed to replace grass with drought-tolerant plants.  The number of customers signed up for the WaterSaver Rewards program grew by 22% as compared to mid-2022. As of mid-2023 over 12,000 customers may benefit from virtual and in-person Rewards education opportunities provided by SAWS Conservation and non-profit partner or ganizations.  2,600 large commercial user accounts are in compliance with the Irrigation Check-Up regulation as of the end of June resulting in 67% overall compliance.  16 flow sensor rebates were approved and 214 smart irrigation controller coupons have been redeemed, helping customers better understand and control their water consumption.  Over 3,100 water waste citations and over 1,600 water waste alerts have been issued year-to-date as San Antonio experiences another exceptionally hot and dry summer.  Conservation initiatives have successfully targeted the need for management of outdoor water demands.  Continue promoting conservation to address drought demand management and reduce year-to-und water consumption from 1			



### **Water Management Plan Process**

SAWS Water Management Plan (WMP) serves as the organization's guiding document to project water demands and identify future firm water supplies and progressive water conservation programs to meet the communities water needs for the next 50 years.

The WMP is generally updated on a five-year basis or as conditions warrant to incorporate changes in focus topics such as:

- Population growth and development
- Water demand patterns
- Climate change
- Regulatory changes
- Water supply and future options
- Conservation programs

SAWS started the most recent WMP process in 2022 by engaging with the community through WaterCitySA.com. The community participated in a survey to rank various plan components by level of importance to them. SAWS has received over 1,000 community responses to the survey.

Due to the ongoing extreme drought, SAWS continues to analyze supply and demand data to inform and update the water management plan process. The Draft 2023 WMP is expected to be available early 2024 for community comment prior to SAWS Board approval later in the year.

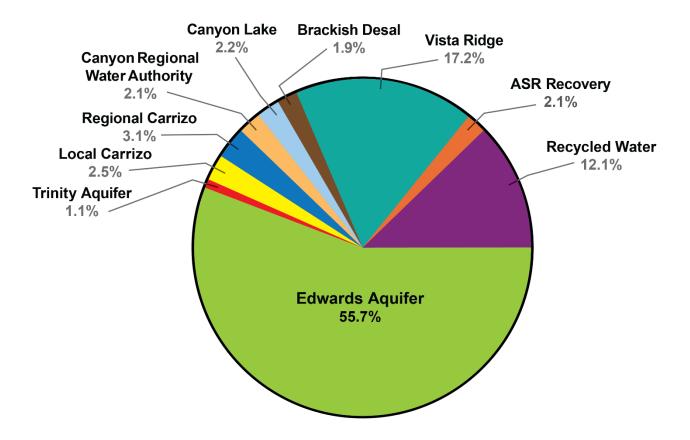




### **Distribution to Customers**

#### 2023 Distribution of Potable and Non-Potable Water to Customers

During the first six months of 2023, San Antonio Water System (SAWS) distributed a total potable water volume of 127,244 acre-feet (AF). This does not include the 5,622 AF of Edwards Aquifer water that was stored in the H<sub>2</sub>Oaks Aquifer Storage & Recovery facility. In addition, 17,527 AF of recycled water was supplied to our customers; 11,300 AF to CPS Energy and 6,227 AF to the remaining customers. The percentage of total water demand was supplied by the following sources:

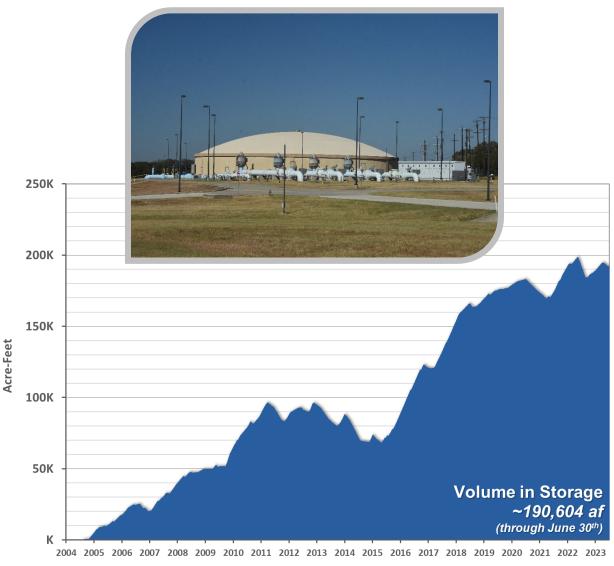




# **Aquifer Storage and Recovery**

SAWS maximizes its annual Edwards Aquifer permitted volume by storing Edwards Aquifer water during low demand periods. During drought, SAWS utilizes the ASR facility to recover stored water to distribute to SAWS customers. This reduces demand on the Edwards Aquifer to help maintain spring flow for endangered species.

During the reporting period, SAWS stored 5,622 AF of water into ASR due to beneficial spring rains. By mid-April, SAWS began sending water to its customers to help meet demand and has since delivered 3,018 AF of stored Edwards Aquifer Water. By the end of the reporting period ASR had a storage volume of 190,604 AF.



Source: San Antonio Water System



### **Financial Report**

#### Water Supply Fee

On October 19, 2000, the San Antonio City Council via Ordinance #92753 approved a funding mechanism for the construction and development of additional water resources to meet projected water demands for the SAWS service area for the next 50 years.

The Water Supply Fee assists in funding expenditures for the development of new water resources to include all operating, maintenance, research and development, and capital costs (including debt service when capital expenditures are debt funded). SAWS has the largest direct recycled water system in the nation, and along with SAWS conservation programs, moderates the size of the Water Supply Fee by reducing the need for additional water supplies.

In 2022, SAWS conducted a cost of service and rate design study with the Rate Advisory Committee (RAC), a diverse cross section of customers. The recommendations from the RAC were submitted to the SAWS Board and were approved for 2023 fiscal year budget. The new rate structure was approved by city council in November of 2022 and became effective January 1, 2023.



Sample testing at the Steven M. Clouse Water Recycling Center outfall where highly treated effluent is released into the Medina River which then merges with the San Antonio River.



The Water Supply Fee per 1,000 gallons in 2023 for each customer class is summarized below.

RATE CLASS	Usage Block Thresholds Gallons	Assessed Fee RATE PER 1000 GALLONS
Residential	4,000 7,000 12,000 20,000 Over 20,000	\$1.631 \$3.018 \$5.464 \$7.177 \$10.194
General	Base* 125% of Base 175% of Base Over 175% of Base	\$3.079 \$3.541 \$4.619 \$5.389
Wholesale	Base** Over Base	\$3.567 \$7.134
Irrigation	8,000 18,000 160,000 Over 160,000	\$3.813 \$5.339 \$6.864 \$8.770

 $<sup>\</sup>mbox{\ensuremath{^{\ast}}}$  The Base Use for General Class is defined as 100 percent of the Annual Average Consumption.

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



#### Water Supply Fee Financial Reports

The following tables provide an accounting of the collection and uses of the Water Supply Fee since its inception in 2001.

San Antonio Water System Sources an Uses of Funds WaterSupply 2001 – June 2023 (\$in Millions)	nd
Water Supply Fee Operating Transfer from Water Delivery Non-operating income & Other Recycle Water Revenues Water Supply Impact Fees Bond Proceeds Water Supply O&M Debt Service¹ Capital Funding	\$2,550.92 193.26 125.32 104.67 418.79 886.71 (1,563.89) (926.82) (1,480.30)
Funds Provided	308.66
Restrictions on Cash Designations on Cash Unrestricted/Undesignated Funds	128.46 160.51 \$ 19.69

<sup>&</sup>lt;sup>1</sup> Includes Principal, Interest and Bond Defeasance Payments.



#### San Antonio Water System **Operating & Maintenance Expenditures** 2001 - June 2023 (\$ in Millions)

Operating and Maintenance Costs	
Western Canyon Project - GBRA	\$ 131.87
Oliver Ranch - Lease Payments & Production Costs	37.27
BSR – Lease Payments & Production Costs	6.66
Regional Carrizo - Water Sales Agreements & Other	109.21
Brackish Desalination	23.32
Edwards - Lease Expense & Other	86.62
Aquifer Storage & Recovery Project	65.39
Aguifer Protection & Compliance	56.68
Vista Ridge	335.93
Recycled Water Operations	52.44
Canyon Regional	54.03
Medina Lake	22.20
Trinity Stein/Rogers Ranch	70.61
Conservation Program - net loss/(income)	(20.31
Stormwater program - net loss	0.43
LCRA - Study Period and Other, Net of Cash Recovery	13.77
Lower Guadalupe Water Supply Project	6.26
Simsboro Aquifer	4.41
Recharge Initiative	0.80
Other Water Resources Cost	24.96
Facilities Maintenance	67.73
Communication & Outreach	20.99
Legal - Water Law	10.57
Billing & Collections	83.20
Finance & Information Systems	79.28
Corporate Facilities	18.07
Human Resources, Safety, Other Benefits	69.83
Other Support Services	40.37
Transfer to COSA	91.30



San Antonio Water System Water Supply Capital **Spending 2001 – June 2023** (\$ in Millions)

		FUNDING				
	Cas	Cash Funding		Debt		Total
Water Supplies:						
Non-Edwards Water Supplies						
Western Canyon Project - GBRA	\$	3.31	\$	10.87	\$	14.18
Trinity Aquifer Projects (Oliver Ranch/BSR)		12.49		-		12.49
Local Carrizo		1.31		13.51		14.82
Brackish Desalination		59.89		149.37		209.26
Regional Carrizo		56.00		63.81		119.81
Aquifer Storage & Recovery Project (ASR)		29.22		245.66		274.88
Recycled Water System		1.99		89.30		91.29
Total Non-Edwards		164.21		572.52		736.73
Edwards Aquifer Water Rights		87.83		153.16		240.99
Total Water Supply Capital Spending		252.04		725.68		977.72
Other Capital Spending:						
Integration		296.81		136.93		433.74
Advanced Meter Infrastructure		32.75		-		32.75
Land, Buildings & Equipment		30.81		5.28		36.09
		360.37		142.21		502.58
Total Capital Spending	\$	612.41	\$	867.89	\$	1,480.30



San Antonio Water System Cash Restrictions/Designations Water Supply 2001 – June 2023 (\$ in Millions)	
Restrictions on Cash:	
Operating Reserve	\$ 41.30
Reserve Fund	8.90
Construction Funds:	
Debt Funds <sup>1</sup>	15.96
Impact Fees <sup>2</sup>	62.30
	128.46
Designations on Cash:	24.06
PGA Monitoring/WQEE/Conservation Interest Mitigation Fund <sup>3</sup>	24.06 1.05
2022 & Prior CIP program (cash funds)	<u>135.40</u> 160.51
Unrestricted/Undesignated Funds	19.69
Total Water Supply Funds Available	\$ 308.66

<sup>&</sup>lt;sup>1</sup> Represents bond proceeds currently on hand. These proceeds have all been committed to be used on existing projects.

<sup>&</sup>lt;sup>2</sup> Represents unspent impact fees. These have all been committed to fund Capital Improvement Program (CIP) projects in the 2022 & prior CIP program or they will be used to help fund future CIP programs.

<sup>&</sup>lt;sup>3</sup> Represents funds accumulated as a result of favorable variances in debt service. Funds may be used for CIP or to otherwise reduce debt service costs.



# **Acronyms and Abbreviations**

AF Acre-Foot (325,851 gallons)

ASR Aquifer Storage & Recovery Facility / underground storage facility

CIP Capital Improvement Program
CRWA Canyon Regional Water Authority

EAA Edwards Aquifer Authority GPCD Gallons per Capita per Day

MSL Mean Sea Level

RAC Rate Advisory Committee SAWS San Antonio Water System WMP Water Management Plan

