



Water Supply Fee Semiannual Report

January-June 2022



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About the cover:

Backdrop: Aquifer Storage and Recovery clarifier. ASR is a valuable asset that allows SAWS to store Edwards Aquifer water, and to recover that water when needed to meet customer demand and reduce production on the Edwards Aquifer.

Top Left: Storage tanks at Canyon Regional Water Authority in New Braunfels CRWA is a regional wholesale water provider which is part of SAWS diversified water supply portfolio.

Bottom Right: Cedar Sage, a small perennial specially adapted to grow in the shade. Scarlet red flowers appear from spring through summer.

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Introduction

San Antonio Water System (SAWS) is pleased to present the January - June 2022 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, 2022. The report will:

- Review the progress on the 2017 Water Management Plan
- Update on the development of the 2022 Water Management Plan
- Provide a status report on the utility's water production
- Recap the EAA critical period cutbacks and drought restrictions during the reporting period
- Provide an update on conservation programs
- 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 158,805 acre-feet (AF) during the first half of 2022. Of that total, 81,516 AF came from the Edwards Aquifer, which accounted for approximately 51.3 percent of the total water demand to customers. One AF of water is equal to 325,851 gallons.

The current groundwater and surface water supply portfolio consists of:

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

EAA: Critical Period Update

In the first half of 2022, San Antonio recorded its second lowest amount of rainfall in 40 years with only 5.11 inches of rain. This is 10.87 inches below the historical average of 15.98 inches.

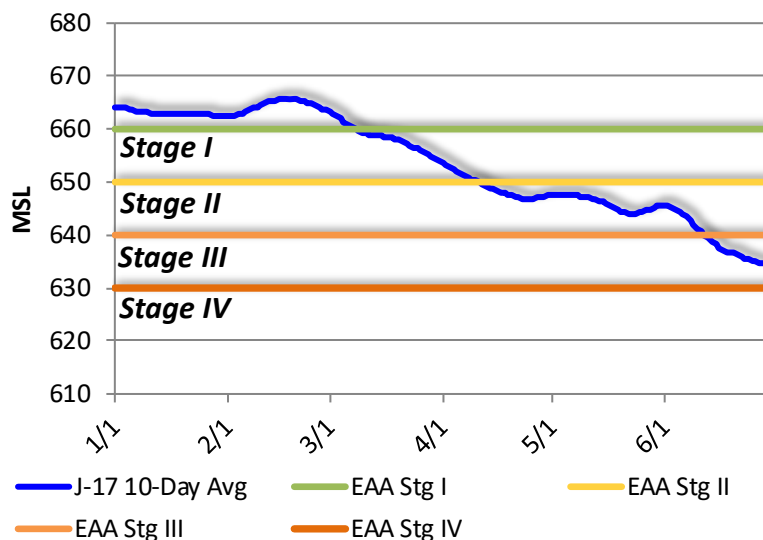
SAWS finished the first half of 2022 with an 8.71 percent critical period drought cutback to its Edwards Aquifer supply through the Edwards Aquifer Authority (EAA). The EAA declared stage 3 critical period on June 13, further reducing our permit by 35 percent. City of San Antonio SAWS customers have been in stage 2 watering restrictions since April 13. SAWS customers in stage 2 drought restrictions through City of San Antonio ordinance, may water with an irrigation System once a week between 7-11am and 7-11pm on the designated watering days.



In May of 2022, SAWS began rolling out new electronic meters for the Connect H₂O Program which will allow customers to view and better understand and manage their water usage

Entity	Entered Stage 1	Entered Stage 2	Entered Stage 3
Edwards Aquifer Authority (Critical Period)	March 9, 2022	April 11, 2022	June 13, 2022
SAWS (Drought Restrictions)	March 10, 2022	April 13, 2022	-

Edwards Aquifer



San Antonio J-17 Index well level for the reporting period

Water Supply Summary

This section summarizes the status for each water resource project for the first half of 2022.

Supply	Acre-Feet Distributed (January-June 2022)	Activity
Edwards Aquifer	81,516	<ul style="list-style-type: none"> Permitted inventory for 2022 is 267,373 AF Regulatory cutback was 8.71% through June 30, 2022
Medina Lake and River System	0	<ul style="list-style-type: none"> Medina Lake at 13.6% of capacity at the end of the reporting period Supply offline since 2015
Direct Recycled Water	7,979 • 3,732 (consumptive) • 2,743 (river flow) • 1,504 (Mitchell Lake)	<ul style="list-style-type: none"> System Supply: 25,000 AF Approved new COSA recycled water contract
Trinity Aquifer	3,334	<ul style="list-style-type: none"> Below normal precipitation resulted in decreased Trinity Aquifer recharge in Q2 of 2022. This has led to decreased production volumes in the first half of 2022

Supply	Acre-Feet Distributed (January-June 2022)	Activity
Canyon Regional Water Authority (CRWA)	1,691	<ul style="list-style-type: none"> Received 27% of contracted volume through the end of the reporting period
Canyon Lake	3,564	<ul style="list-style-type: none"> Canyon Lake at 92.8% of capacity at the end of the reporting period
H ₂ Oaks Aquifer Storage and Recovery	ASR stored water to distribution system: 6,584 AF Edwards Water Stored: 6,706 AF	<ul style="list-style-type: none"> ASR system performance test began on May 16, 2022 192,439 AF of stored water as of June 30
H ₂ Oaks Carrizo Aquifer	2,612	<ul style="list-style-type: none"> Produced 26% of the 9,900 AF during the reporting period
H ₂ Oaks Brackish Groundwater Desalination Program	2,629	<ul style="list-style-type: none"> Average production 4.8 MGD
Regional Carrizo Project	5,245*	<ul style="list-style-type: none"> Includes SAWS Buckhorn wellfield production in Gonzales County plus water purchased from Schertz-Seguin Local Government Corporation Purchased 275 AF from SSLGC in the first half of the year
Vista Ridge	23,583	<ul style="list-style-type: none"> Received 47% of the contractual 50,000 AF during this reporting period

* Volume corrected, removed 61 AF of distributed Regional Carrizo water volume that was produced in July and subsequently double-counted with July – December 2022 Water Supply Fee Semiannual Report.

Planned Projects 2017-2025	Status
Conservation Programming	<p>Program highlights from the first half of 2022 include:</p> <ul style="list-style-type: none"> • Sending over 180,000 personalized WaterSmart reports per month helping single family residential customers identify and participate in conservation opportunities. All low-income customers receiving an affordability discount that have provided an email are auto enrolled in WaterSmart reports. • 517 Plumbers to People and Conservation Makeover visits in the first half of 2022, with ongoing efforts to assist more customers through collaboration with the Uplift Team • 909 Irrigation Consultations completed at homes in the first half of 2022, averaging over 1,100 gallons per month in savings at each home • 88 households and 4 businesses used Irrigation Efficiency rebates in the first half of 2022 • 291 WaterSaver Landscape Coupons redeemed in the first half of 2022 to replace grass with drought-tolerant plants. • Over 9,900 customers are signed up for the WaterSaver Rewards program, with virtual and in-person Rewards education opportunities provided by SAWS Conservation and non-profit partner organizations • 2,590 required accounts are in compliance with the Irrigation Check-Up regulation as of the end of June 2022, resulting in 70% overall compliance • 358 flow sensor rebates were approved, and 75 smart irrigation controller coupons have been redeemed in the first half of 2022, helping customers better understand and control their water consumption • In the first half of 2022, with a return of hot, dry weather and watering rules, over 2,100 residential water waste alerts and 421 residential citations have been issued. Over 670 commercial properties have received alerts and 77 have received citations. • Conservation initiatives have successfully targeted the need for management of outdoor water demands • Programming to reduce planned average year consumption from 124 gallons per capita per day (GPCD) in 2017 to 111 GPCD in 2025.

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 sources 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 to incorporate changes in focus topics such as:

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

SAWS started the WMP process by engaging with the community. The depth of community engagement in the development of this plan will be critical to its success and will be persistent throughout the WMP process. As part of this effort, SAWS is inviting the community to engage with **WaterCitySA.com**. SAWS is asking the community to rank various plan components by level of importance to them that will be presented in this year's WMP. SAWS will also ask guided questions on the site to gather valuable feedback to help inform the focus topics of the WMP.

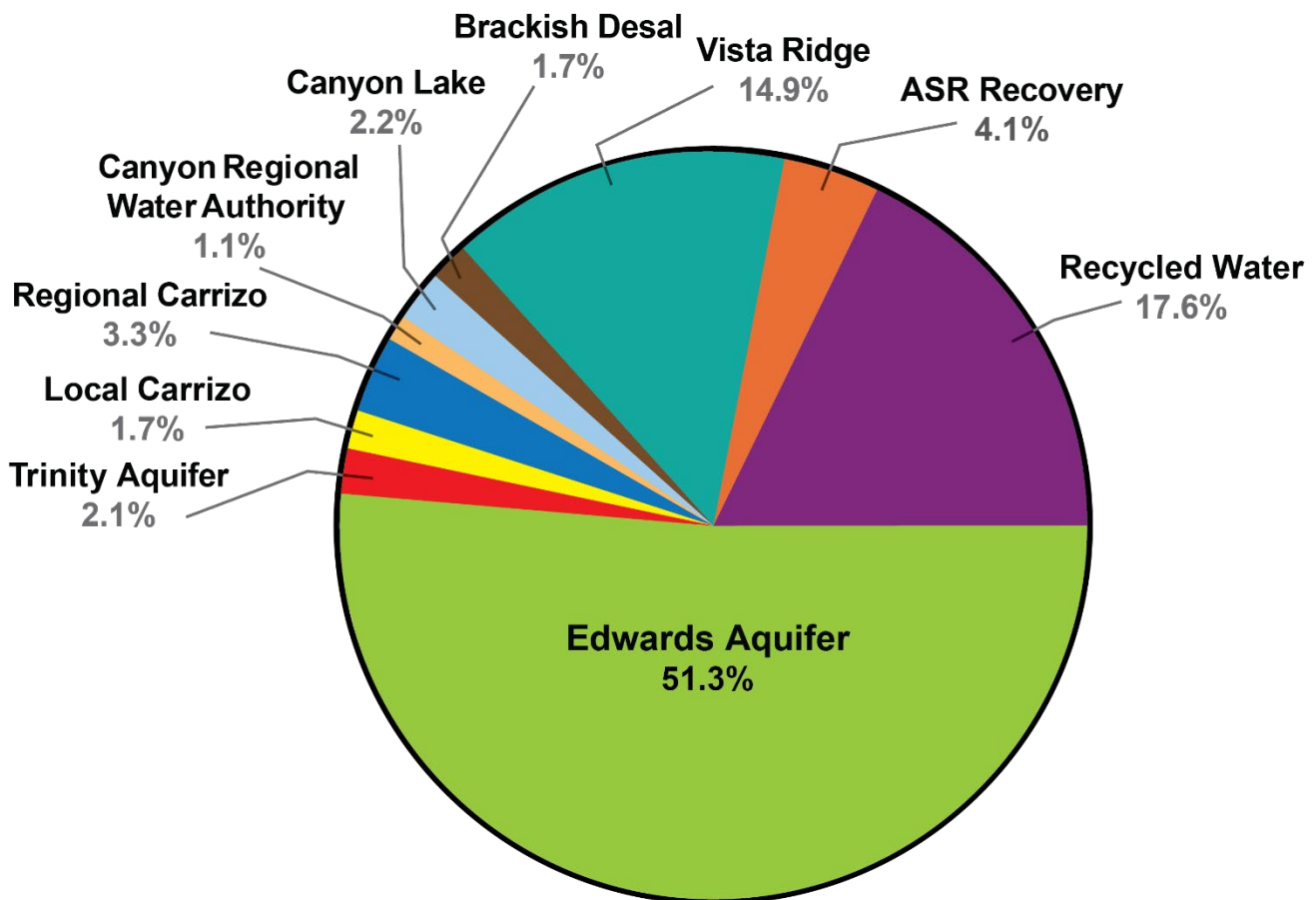


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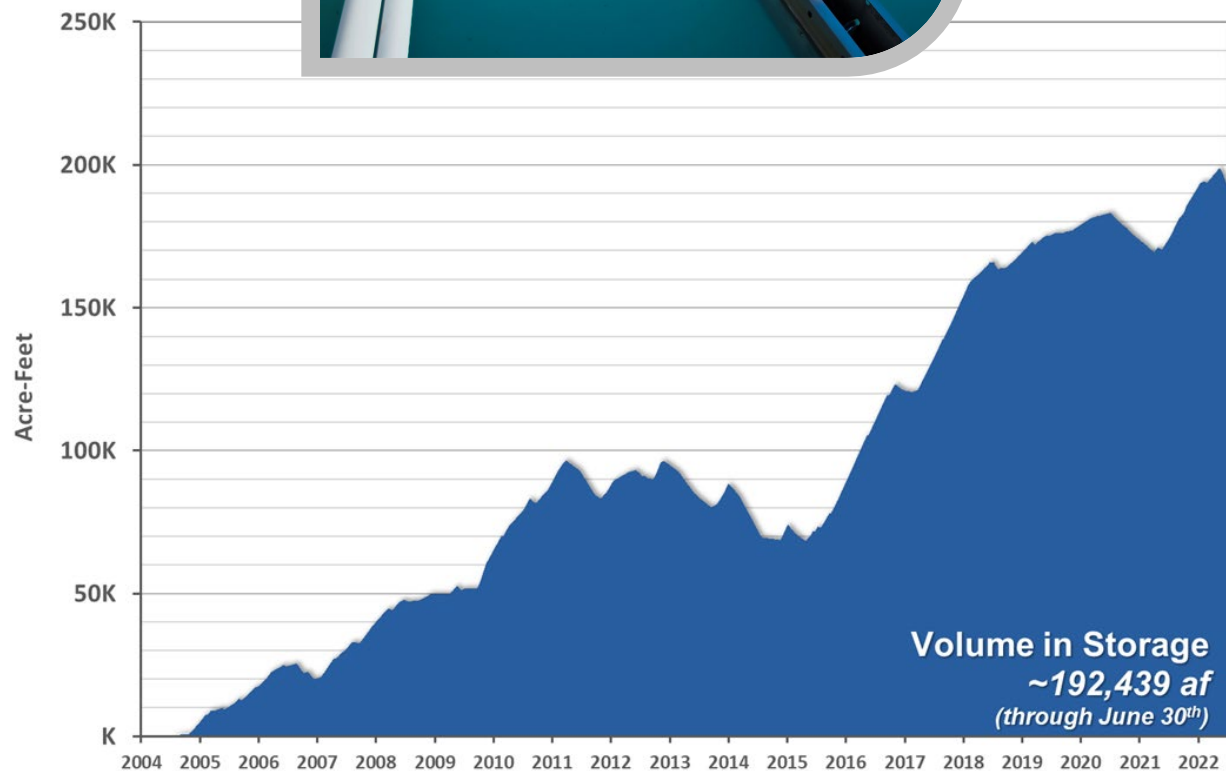
Distribution to Customers

2022 Distribution of Potable and Non-Potable Water to Customers

In the first half of 2022, San Antonio Water System (SAWS) distributed a total potable water volume of 130,819 acre-feet (AF). This does not include the 6,706 AF of Edwards Aquifer water that was stored in the H₂Oaks Aquifer Storage & Recovery facility. In addition, 27,986 AF of recycled water was supplied to our customers; 20,007 AF to CPS Energy and 7,979 AF to the remaining customers. The total water demand was supplied by the following sources:



At the start of 2022, SAWS stored 6,706 AF of Edwards Aquiferwater in ASR. On May 16, SAWS initiated a planned ASR performance test to evaluate system components. This test also corresponded with an unprecedented dry spring and was able to help meet customer demand. By the end of the reporting period, SAWS had delivered 6,584 AF of water to customers, leaving a remainder of 192,439 AF of total water stored.



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). As mentioned earlier, SAWS has the largest direct recycled water system in the nation, which moderates the size of the Water Supply Fee by reducing the need for additional water supplies.

In 2022, SAWS began a new comprehensive rates, fees, and charges study with a new SAWS board appointed Rate Advisory Committee (RAC). The RAC met seven times from February 2022 through June 2022 and has finalized their rate design recommendations. The recommendations will be submitted to the Board for consideration in late 2022, and ultimately seeking city council approval.



One of the storage tanks and high service pumps at the Agua Vista Station which pumps Vista Ridge water into SAWS distribution lines

The Water Supply Fee per 100 gallons in 2022 for each customer class is summarized below.

RATE CLASS	Usage Block Thresholds Gallons	Assessed Fee RATE PER 100 GALLONS
<i>Residential</i>	2,992	\$0.1585
	4,489	\$0.2772
	5,985	\$0.3563
	7,481	\$0.4357
	10,473	\$0.5150
	14,962	\$0.5942
	20,199	\$0.7129
	Over 20,199	\$1.0296
<i>General</i>	Base*	\$0.2989
	125% of Base	\$0.3438
	175% of Base	\$0.4482
	Over 175% of Base	\$0.5232
<i>Wholesale</i>	Base**	\$0.3892
	Over Base	\$1.1681
<i>Irrigation</i>	8,229	\$0.3911
	17,954	\$0.5474
	162,316	\$0.7039
	Over 162,316	\$0.8996

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

** 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 and Uses of Funds WaterSupply 2001 – 2022 <i>(\$ in Millions)</i>	
Water Supply Fee	\$2,295.11
Operating Transfer from Water Delivery	187.63
Non-operating income & Other	110.94
Recycle Water Revenues	96.74
Water Supply Impact Fees	370.89
Bond Proceeds	893.78
Water Supply O&M	(1,369.47)
Debt Service ¹	(842.94)
Capital Funding	<u>(1,413.75)</u>
Funds Provided	<u>328.93</u>
Restrictions on Cash	149.22
Designations on Cash	<u>101.39</u>
Unrestricted/Undesignated Funds	<u>\$ 78.32</u>

¹ Includes Principal, Interest and Bond Defeasance Payments.

San Antonio Water System
Operating & Maintenance Expenditures
2001 – 2022
(\$ in Millions)

Operating and Maintenance Costs	
Western Canyon Project - GBRA	\$ 126.26
Oliver Ranch - Lease Payments & Production Costs	35.01
BSR – Lease Payments & Production Costs	6.97
Regional Carrizo - Water Sales Agreements & Other	100.72
Brackish Desalination	20.30
Edwards - Lease Expense & Other	84.07
Aquifer Storage & Recovery Project	58.85
Aquifer Protection & Compliance	53.38
Vista Ridge	231.63
Recycled Water Operations	49.79
Canyon Regional	45.78
Medina Lake	19.25
Trinity Stein/Rogers Ranch	68.83
Conservation Program - net loss/(income)	(16.46)
Stormwater program - net loss	1.91
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	23.19
Facilities Maintenance	55.88
Communication & Outreach	19.30
Legal - Water Law	9.89
Billing & Collections	78.36
Finance & Information Systems	72.23
Corporate Facilities	16.77
Human Resources, Safety, Other Benefits	63.77
Other Support Services	38.36
Transfer to COSA	80.19
Total Operating & Maintenance	\$1,369.47

San Antonio Water System
Water Supply Capital
Spending 2001 – 2022
(\$ in Millions)

	FUNDING		
	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	59.31	149.37	208.68
Regional Carrizo	56.00	63.81	119.81
Aquifer Storage & Recovery Project (ASR)	11.47	245.61	257.08
Recycled Water System	1.73	86.40	88.13
Total Non-Edwards	145.62	569.57	715.19
Edwards Aquifer Water Rights	87.83	153.16	240.99
Total Water Supply Capital Spending	233.45	722.73	956.18
Other Capital Spending:			
Integration	280.48	136.73	417.21
Land, Buildings & Equipment	35.07	5.30	40.36
	315.55	142.03	457.57
Total Capital Spending	\$ 549.00	\$ 864.76	\$ 1,413.75

San Antonio Water System
Cash Restrictions/Designations
Water Supply
2001 – 2022
(\$ in Millions)

Restrictions on Cash:	
Operating Reserve	\$ 40.00
Reserve Fund	8.90
Construction Funds:	
Debt Funds ¹	14.02
Impact Fees ²	<u>86.30</u>
	149.22
Designations on Cash:	
PGA Monitoring/WQEE/Conservation	21.19
Interest Mitigation Fund ³	7.10
2021 & Prior CIP program (cash funds)	<u>73.10</u>
	101.39
Unrestricted/Undesignated Funds	<u>78.32</u>
Total Water Supply Funds Available	<u>\$ 328.93</u>

¹ Represents bond proceeds currently on hand. These proceeds have all been committed to be used on existing projects.

² Represents unspent impact fees. These have all been committed to fund CIP projects in the 2022 & prior CIP program or they will be used to help fund future CIP programs.

³ 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)
AFY	Acre-Feet per Year
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
MGD	Million Gallons per Day
MSL	Mean Sea Level
SAWS	San Antonio Water System
SCADA	Supervisory Control and Data Acquisition
WMP	Water Management Plan

