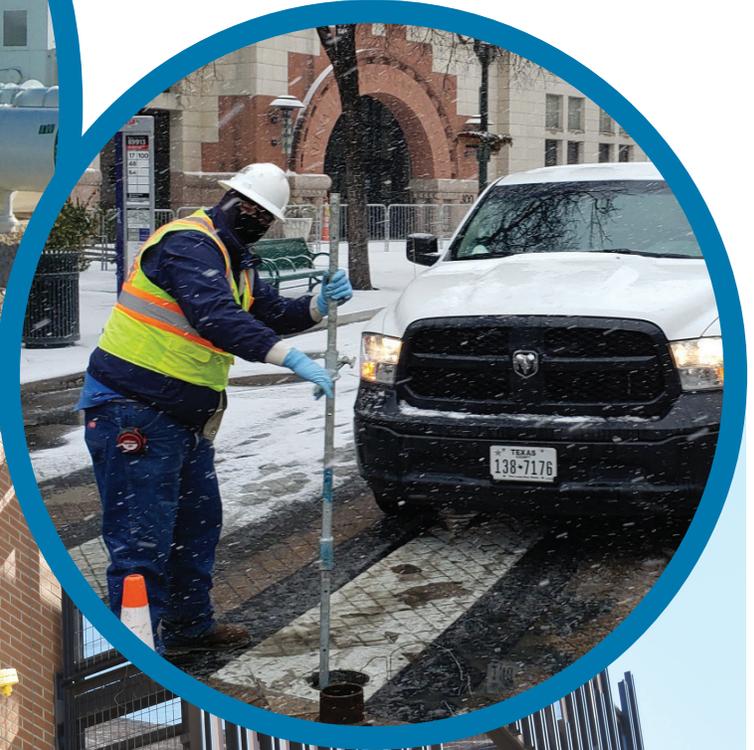




**San Antonio
Water
System**

Water Supply Fee Semiannual Report

January-June 2021



Agua Reciclada - NO TOME EL AGUA



Recycled Water
DO NOT DRINK

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Water Supply Fee Semiannual Report January-June 2021

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About the cover:

Top Left: High service pumps capable of producing 17 million gallons per day at the high service pump station in Caldwell, Texas.

Center Right: SAWScrew operating a main line valve during Winter Storm Uri to provide water to critical facilities.

Bottom: Five recycled water vent pipes between the zoo entrance and the corner of Tuleta and Stadium Drive are painted with animal patterns: giraffe, jaguar, zebra, snake, and elephant designed in partnership with San Antonio Water System and San Antonio Zoo. SAWS recycled water system can provide up to 29 million gallons of recycled water per day to nearby business for irrigation.

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Introduction

San Antonio Water System (SAWS) is pleased to present the January - June 2021 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 approximately 1.9 million people. The service area covers 933 square miles primarily in Bexar County and portions of Atascosa, Comal, Kendall, 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 31, 2021. The report will:

- Review the progress on the Water Management Plan,
- Provide a status report on the utility's water production,
- Recap the water supplies developed and costs during the reporting period,
- Provide an update on the acquisition of potential additional water supplies,
- Summarize revenues generated from the water supply fee, capital spending on water supply projects, and,
- Summarize the maintenance and operational expenses for completed projects.

SAWS had a total potable demand of 122,831 acre-feet (AF) during the first half of 2021. Included in this total is 72,513 AF of Edwards Aquifer production to distribution. During this reporting period, Edwards Aquifer supply accounted for approximately 59 percent of the total potable demand. 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 2020, the Vista Ridge Project was added to SAWS' diversified water supply portfolio. Environmentally, the diversification from this project results in substantially reduced dependence on San Antonio's historically predominate groundwater supply supporting endangered species.

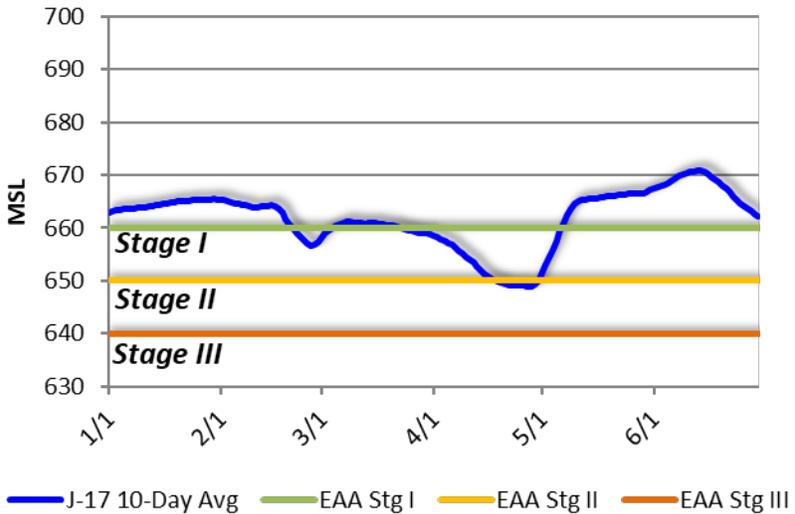
With personalized monthly WaterSmart reports, SAWS has notified over 110,000 customers of their usage and ways to save.

SAWS finished the first half of 2021 with a 3.32% critical period drought cutback to its Edwards Aquifer supply, as the Edwards Aquifer Authority (EAA) declared Stage 1 critical period in March and Stage 2 in April with critical period ending May 6. San Antonio recorded 17.61 inches of rain for the first half of the year, 1.65 inches above historical average of 16.10 inches. SAWS ended June 30 with 44 days of Stage 1 and 11 days of Stage 2 drought restrictions, whereby watering with an irrigation system or sprinkler is allowed once a week from 7:00am to 11:00am and 7:00pm to 11:00pm on the designated watering day.



San Antonio J-17 Index well levels for the reporting period are shown in the graph below. Edwards Aquifer 10-day average levels dropped below 660' mean sea level (msl) periodically through the first half of 2021.

Edwards



Water Supply Summary

This section summarizes the status for each water resource project for the first half of 2021.

Supply	Acre-Feet Distributed (Jan-June 2021)	Activity
Edwards Aquifer	72,513	<ul style="list-style-type: none"> Permitted inventory for 2021 is 269,441 AF Regulatory cutback was 3.32% through June 30, 2021
Medina Lake and River System	0	<ul style="list-style-type: none"> Medina Lake ended June at 34 percent of capacity and with average rainfall for the first half of 2021.
Direct Recycled Water	6,012 <ul style="list-style-type: none"> 2,929 (consumptive) 2,518 (river flow) 565 Mitchell Lake 	<ul style="list-style-type: none"> System Supply: 25,000 AF Contracted consumptive commitments: 12,070 AF (excludes volumes for streamflow augmentation) Volume available for consumptive use: 12,930 AF
Trinity Aquifer	2,536	<ul style="list-style-type: none"> Average precipitation in the region did not equate to increases in Trinity Aquifer recharge in the first half of 2021. This led to a continuation of below normal production volumes Received 13% of maximum available 20,000 AF during a wet year

Supply	Acre-Feet Distributed (Jan-June 2021)	Activity
Canyon Regional Water Authority (CRWA)	3,289	<ul style="list-style-type: none"> CRWA refinanced Wells Ranch Series 2009 and 2011 bonds Debt service savings of over \$1,000,000
Canyon Lake	4,019	<ul style="list-style-type: none"> Received 50% of the budgeted volume made available to SAWS from GBRA
H ₂ Oaks Aquifer Storage and Recovery	ASR storage to distribution system: 5,215 AF Edwards Water Stored: 2,481 AF	<ul style="list-style-type: none"> Volume of stored Edwards water on June 30, 2021: 174,070 AF <ul style="list-style-type: none"> Total volume of Edwards water stored on behalf of the EAHCP 2013-2020: 126,000 AF HCP storage completed in Q4 2020
H ₂ Oaks Carrizo Aquifer	3,012	<ul style="list-style-type: none"> Produced 30% of the 9,900 AF
H ₂ Oaks Brackish Groundwater Desalination Program	3,157	<ul style="list-style-type: none"> Average production 5.7 mgd Produced 28% of 11,200 AF H₂Oaks plant brackish desalination treatment capacity The construction of the electrical/SCADA building, yard piping, well site facilities, and flush ponds was completed for BGD-14 and Test Well 1 (TW-1) Pumps and motors were installed and tested
Regional Carrizo Project	4,683	<ul style="list-style-type: none"> Includes SAWS Buckhorn wellfield production in Gonzales County plus water purchased from Schertz-Seguin Local Government Corporation February production was 202 AF due to winter storm damage Produced 40% of the permitted 11,688 AF available Purchased 274 AF from SSLGC
Vista Ridge	23,683	<ul style="list-style-type: none"> 9th Amendment provides greater winter month operational flexibility benefiting SAWS and Project Company 392.8 AF of accrued demand shortfalls Received 49% of contractual 50,000 AF

Planned Projects 2017-2025	Status
<p>Central Water Integration Pipeline & Vista Ridge Production</p>	<ul style="list-style-type: none"> • Project online April 15, 2020
<p>Conservation Programming</p>	<p>Program highlights from the first half of 2021 include:</p> <ul style="list-style-type: none"> • Continuing WaterSmart Software Pilot, which is open to all residential customers. Sending nearly 110,000 personalized reports per month helping customers identify and participate in conservation opportunities. About one-third of customers enrolled in the program are customers designated as low-income customers receiving an affordability discount • 227 Plumbers to People and Conservation Makeover visits in the first half of 2021, with ongoing efforts to enroll more customers through collaboration with the Uplift Team • Over 1,080 customers served through emergency plumbing assistance provided through the Community Pipe Repair program in the months following Winter Storm Uri • 1,038 Irrigation Consultations completed at homes in the first half of 2021, averaging over 1,100 gallons per month in savings at each home • 149 households and 3 businesses used Irrigation Efficiency rebates in 2021 so far • 432 WaterSaver Landscape and 32 WaterSaver PatioScape Coupons redeemed in the first half of 2021 to replace grass with drought-tolerant plants and patioscapes • Over 6,900 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 • Over 2,400 required accounts are in compliance with the Irrigation Check-Up regulation as of mid-2021, resulting in 64% overall compliance • Over 1,800 flow sensor rebates have been approved and 126 smart irrigation controller coupons have been redeemed in the first half of 2021, helping customers better understand and control their water consumption • 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.

2022 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 in order to incorporate changes in population, water demand patterns, regulations, and water supply options.

During the first half of 2021, staff is reviewing the following components in preparation of plan development:

- 2020 U.S. census data
- Climate change data
- Gallons per Capita per Day (GPCD) goals
- Regional partnerships.

2022 WMP development including community engagement is expected to commence during the second quarter of 2022.



Winter Storm Uri

Starting Sunday February 14 during Winter Storm Uri, SAWS lost access to much its diversified water supply due to cascading power outages throughout the city and state along with prolonged freezing temperatures.

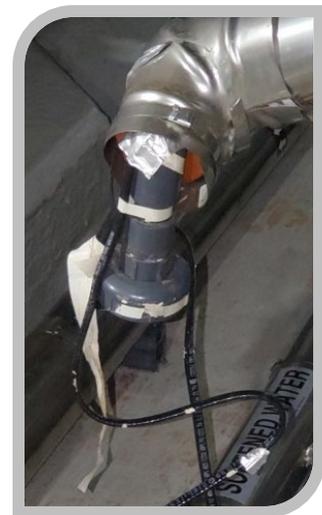
Edwards aquifer water accounted for 54% of delivered water during February 1 through February 13 prior to the storm. During the height of Winter Storm Uri and as repairs to regional supplies were starting, Edwards Aquifer water accounted for 79% of SAWS delivered water peaking February 16 at 94%.



During the winter storm, SAWS total Edwards aquifer production to distribution peaked at 373.7 million gallons on February 18. On this same day, SAWS total production achieved an all-time high of 442.2 million gallons as SAWS infrastructure was refilled.

In the aftermath of the record-breaking February 2021 winter storm, San Antonio Water System remains steadfast in our commitment to keep our community informed about our storm response, recovery assistance options and planning efforts for the future. While the Community Pipeline Repair program has ended, the program was created to assist those who may not have been able to afford a plumber to repair freeze-damaged pipes.

The Independent Emergency Performance Assessment, researched and compiled by Black & Veatch, was conducted to assess SAWS planning efforts in advance of and the actions taken during and in response to the February 2021 winter storm event.

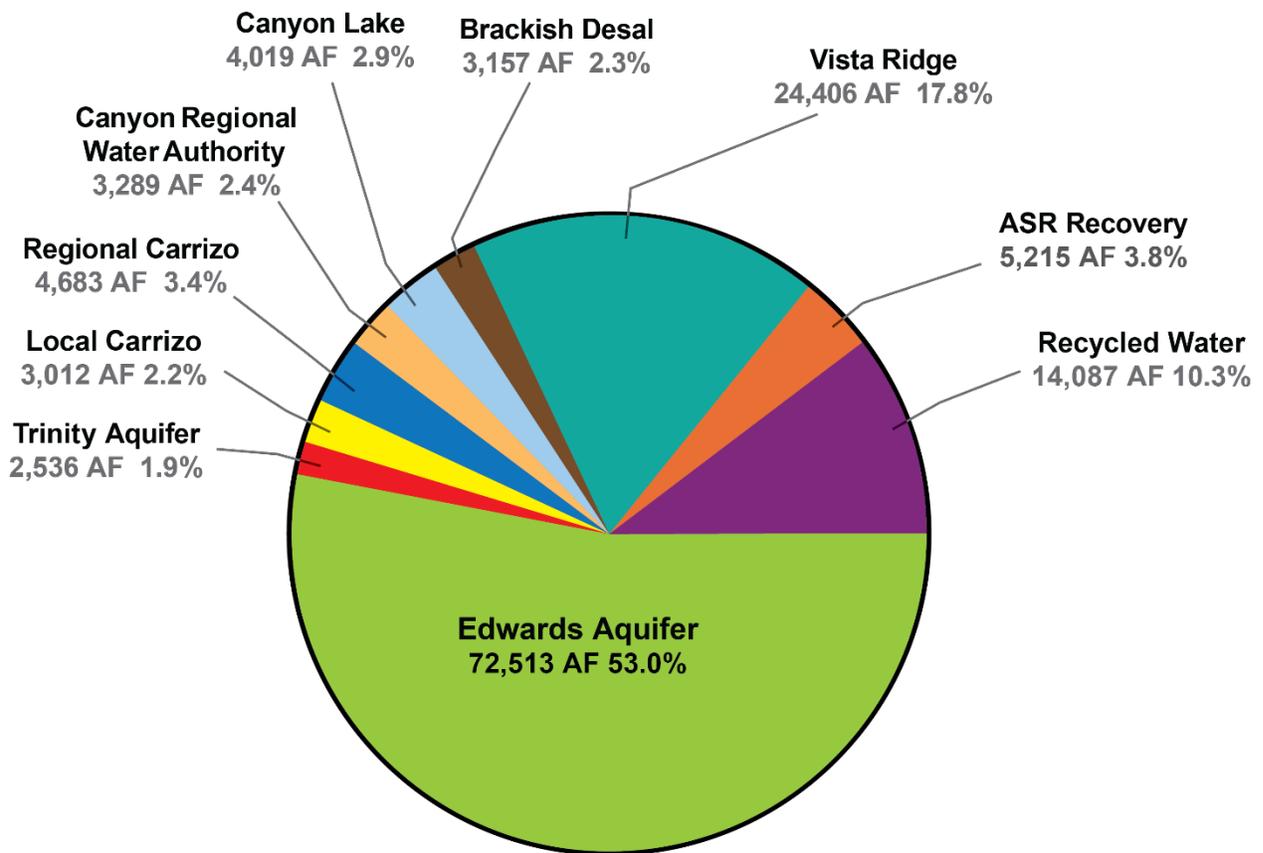


As part of advanced storm preparation, SAWS utilizes heat tracing which is to insulate critical small diameter piping subject to freeze impacts with electric heat tapes.

Distribution to Customers

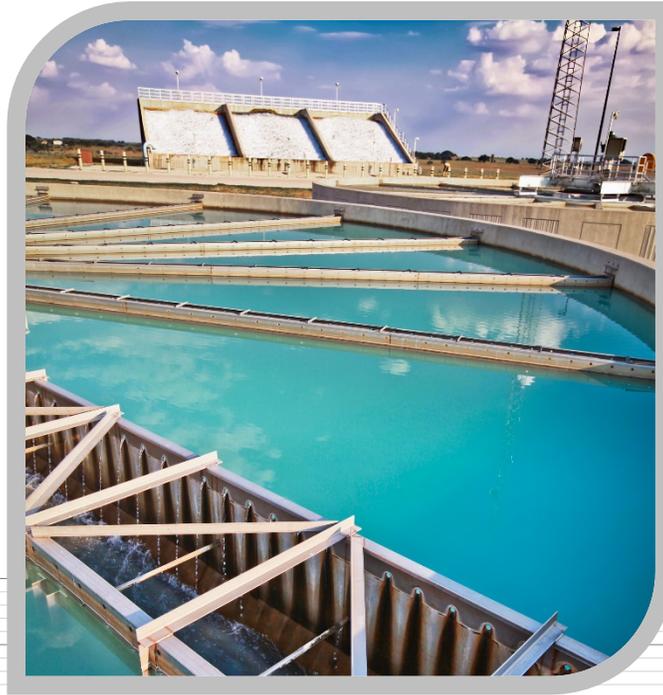
2021 Distribution of Potable and Non-Potable Water to Customers

Through June, San Antonio Water System (SAWS) distributed a total potable water volume of 122,831 acre-feet (AF). This does not include the 5,577 AF of Edwards Aquifer water that was stored in the H₂Oaks Aquifer Storage & Recovery facility. In addition, 14,087 AF of recycled water was supplied to our customers; 8,074 AF to CPS Energy and 6,013 AF to the remaining customers. The total water demand was supplied by the following sources in the pie chart.*



*The volumes in the above pie chart represent the volume distributed to SAWS customers and may differ from volumes in the water supply summary activity which are based on produced volumes for SAWS owned supplies.

While SAWS recovered 5,215 AF from the Aquifer Storage and Recovery (ASR) facility, SAWS stored 5,577 AF of Edwards Aquifer water in ASR during this reporting period, which brought the total net volume of water stored to 174,070 AF on June 30, 2021.



Financial Report

Water Supply Fee

On Oct. 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.



Recycled water vent pipes between the zoo entrance and the corner of Tuleta and Stadium Drive are painted with animal patterns: giraffe, jaguar, zebra, snake, and elephant designed in partnership with San Antonio Water System and San Antonio Zoo.

The Water Supply Fee per 100 gallons in 2021 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 – 2021 (\$ in Millions)	
Water Supply Fee	\$1,951.43
Operating Transfer from Water Delivery	299.36
Non-operating income & Other	142.47
Recycle Water Revenues	89.18
Water Supply Impact Fees	285.41
Bond Proceeds	884.35
Water Supply O&M	(1,177.19)
Debt Service ¹	(812.68)
Capital Funding	<u>(1,357.34)</u>
Funds Provided	<u>304.99</u>
Restrictions on Cash	139.72
Designations on Cash	<u>95.37</u>
Unrestricted/Undesignated Funds	<u>\$ 69.90</u>

¹ Includes Principal, Interest and Bond Defeasance Payments.

San Antonio Water System
Operating & Maintenance Expenditures
2001 – 2021
(\$ in Millions)

Operating and Maintenance Costs	
Western Canyon Project - GBRA	\$ 119.85
Oliver Ranch - Lease Payments & Production Costs	33.01
BSR – Lease Payments & Production Costs	6.97
Regional Carrizo - Water Sales Agreements & Other ¹	92.52
Brackish Desalination	16.86
Edwards - Lease Expense & Other	81.36
Aquifer Storage & Recovery Project	55.42
Aquifer Protection & Compliance	50.34
Vista Ridge	129.63
Recycled Water Operations	47.47
Canyon Regional	38.58
Medina Lake	15.91
Trinity Stein/Rogers Ranch	58.21
Conservation Program - net loss/(income)	(11.85)
Stormwater program - net loss	2.81
LCRA - Study Period and Other, Net of Cash Recovery ²	13.77
Lower Guadalupe Water Supply Project	6.26
Simsboro Aquifer	4.41
Recharge Initiative	0.80
Other Water Resources Cost	21.68
Facilities Maintenance	46.76
Communication & Outreach	17.61
Legal - Water Law	9.48
Billing & Collections	72.73
Finance & Information Systems	65.46
Corporate Facilities	15.69
Human Resources, Safety, Other Benefits ³	58.91
Other Support Services ⁴	36.69
Transfer to COSA	69.85
Total Operating & Maintenance	\$1,177.19

¹ Includes a \$12.4 million write-off of pipeline design costs made obsolete with the agreement with Schertz-Seguin Local Government Corporation to transport water from Gonzales County to SAWS.

² Total program cost net of cash recovered from LCRA settlement.

³ Includes workers compensation and dependent and retiree health insurance.

⁴ Includes executive management, Board of Trustees, Internal Audit, Legal (corporate) and other miscellaneous.

San Antonio Water System
Water Supply Capital
Spending 2001 – 2021
(\$ 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	58.93	149.32	208.25
Regional Carrizo	56.00	63.81	119.81
Aquifer Storage & Recovery Project (ASR)	5.85	245.60	251.45
Expanded Carrizo	0.44	0.26	0.70
Recycled Water System	1.51	84.99	86.50
Total Non-Edwards	139.84	568.36	708.20
Edwards Aquifer Water Rights	87.73	153.18	240.91
Total Water Supply Capital Spending	227.57	721.54	949.11
Other Capital Spending:			
Integration	234.58	136.73	371.31
Land, Buildings & Equipment	31.61	5.31	36.92
	266.19	142.03	408.23
Total Capital Spending	\$ 493.76	\$ 863.57	\$ 1,357.34

San Antonio Water System Cash Restrictions/Designations Water Supply 2001 – 2021 (\$ in Millions)	
Restrictions on Cash:	
Operating Reserve	\$ 39.39
Reserve Fund	11.33
Construction Funds:	
Debt Funds ¹	14.04
Impact Fees ²	<u>74.96</u>
	139.72
Designations on Cash:	
PGA Monitoring/WQEE/Conservation	16.21
Interest Mitigation Fund ³	1.60
2021 & Prior CIP program (cash funds)	<u>77.56</u>
	95.37
Unrestricted/Undesignated Funds	<u>69.90</u>
Total Water Supply Funds Available	<u>\$ 304.99</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 2019 & 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
CRWA	Canyon Regional Water Authority
CWIP	Central Water Integration Pipeline
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

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