



PROJECT FUNDING REQUEST

BOARD DATE: July 24, 2025

Team Manager: David Firgens

ACTION REQUESTED

Consider approving by resolution a request from the City of San Antonio, acting by and through the San Antonio Water System (Bexar County), for a) \$27,635,000 in financial assistance from the State Water Implementation Fund for Texas program for design of water system improvements; and b) a waiver from the requirement to include funds to mitigate water loss as part of this project.

STAFF RECOMMENDATION

☒ Approve ☐ No Action

BACKGROUND

The City of San Antonio (City), located in Bexar County, is the seventh most populous city in the United States with a population of approximately 2.3 million. The San Antonio Water System (SAWS) is a public utility owned by the City of San Antonio and serves approximately 2 million people in Bexar County and parts of Medina and Atascosa counties. SAWS provides water and wastewater service to approximately 511,000 connections, including services to military bases and suburban communities, and wholesale water supplies to smaller utility systems in the region.

PROJECT NEED AND DESCRIPTION

SAWS has been working for several years to address customer demands for water during frequent periods of drought and decrease reliance on the Edwards Aquifer. Increased customer demand due to a robust population growth and several years of drought have contributed to the need for additional water sources.

To increase diversification of water sources, decrease reliance on the Edwards Aquifer, and better prepare San Antonio for future water demands, SAWS constructed and opened the H2Oaks facility in 2004. This is a three-in-one facility that is located atop the Carrizo-Wilcox Aquifer and consists of the Aquifer Storage and Recovery (ASR) wellfield and treatment facility, Local Carrizo Aquifer production wells, and Brackish Groundwater Desalination facility.

SAWS is requesting design funds necessary to complete the technical design work required to prepare for the expansion of the ASR treatment plant from 30 million gallons per day (MGD) to 60 MGD. The additional ASR treatment capacity will ensure SAWS is able to consistently recover at least 45 MGD of stored ASR water in the worst years of drought. Construction is anticipated to start in 2028.

COMMITMENT PERIOD: FIVE (5) MONTHS TO EXPIRE DECEMBER 31, 2025

PROJECT SCHEDULE

Task	Schedule Date
Closing	October 9, 2025
Engineering Feasibility Report Completion (End of Planning Phase)	May 30, 2027
Design Phase Completion	August 30, 2027
Start of Construction	January 31, 2028
Construction Completion	July 31, 2030

KEY ISSUES

SAWS is above their threshold for real water loss and is requesting a waiver. While the project does not address water loss, SAWS is requesting a waiver and stated that they have budgeted \$108 million in 2025 for water main replacement with a forecast of \$105 million from 2026 to 2029. As part of their water management plan, they added 102 new positions to the Distributions Department in 2023 for infrastructure repair to address water loss, with a goal of 3,000 acre-feet of anticipated savings from detection and repair.

The construction budget for this project that will be funded at a later date, is estimated to be \$135 million.

The City of San Antonio's (City) pledge is on parity with its previous financial assistance from the Texas Water Development Board. The City's existing ordinances require that it maintain rates and charges to produce net revenues at least equal to 1.25 times the interest and principal of the senior lien obligations, and to produce net revenues at least equal to 1.0 times the interest and principal of the junior and subordinate lien obligations. SAWS currently generates approximately \$420 million in net revenues available for debt service, which provides 1.79 times coverage of the annual existing and proposed debt service during the first year of principal repayment on the proposed loan.

Attachments:

1. Financial Review
2. Project Budget
3. Resolution (25-)
4. Water Conservation Review
5. Water Loss Waiver Request Letter
6. Location Map

Financial Review

San Antonio Water System

Attachment 1

Risk Score: 2A

Audit Reviewed: FY 2024

Key Indicators

Indicator	Result	Benchmark
Population Growth, Average Annual 2010-2020	County: 1.60%	State: 1.49%
Top 10 Customers % of Total Revenue	6%	10-15%
Median Household Income as % of State	92%	100%
Days of Cash on Hand (3-year Average)	619 days	30 -149 days
Net Fixed Assets/ Annual Depreciation	31 years	12 - 24 years
Debt Service Coverage Ratio	1.78x	1.20x
Debt-to-Operating Revenues	3.74x	4.00 - 5.99x
Unemployment Rate (April 2025)	City: 3.40%	State: 3.70%
Working Capital Ratio	7.12	> 1.00

Key Risk Score Strengths

- Water system revenues are sufficient to cover existing debt as well as providing good coverage for the proposed debt.
- A history of very strong liquidity over the past three audited fiscal years, which allows the system to address its capital needs.
- A high working capital ratio provides the San Antonio Water System with ample resources to cover short-term liabilities.
- A very diverse revenue base with no concentration among their top ten customers, which means the system can afford to lose its top ten customers without impacting its revenues.

Key Risk Score Concerns

- A significant amount of outstanding debt - over \$3.2 billion with additional debt planned, which results in a leveraged system, despite maintaining sufficient debt service coverage.

PLEDGE

Legal Pledge Name	Junior Lien Utility System Revenues
Type of Pledge	<input type="checkbox"/> Tax <input checked="" type="checkbox"/> Revenue <input type="checkbox"/> Tax & Revenue <input type="checkbox"/> Contract <input type="checkbox"/> Other
Revenue Pledge Level	<input type="checkbox"/> First <input checked="" type="checkbox"/> Second <input type="checkbox"/> Third <input type="checkbox"/> N/A

RATES AND CHARGES

Average Residential Use	Gallons/Month	Current Rates	Projected Rates	Current Household Cost Factor	Projected Household Cost Factor
Water	6,275	\$34.93	\$34.93	1.17	1.17
Wastewater	5,052	\$25.66	\$25.66		

Cost Savings

Based on a 20-year maturity schedule and current interest rates, the San Antonio Water System could save approximately \$6,768,240 over the life of the financing.

Project Data Summary

Responsible Authority	San Antonio Water System
Program	SWIFT
Commitment Number	L1002217
Project Number	51095
List Year	2025
Type of Pledge	Revenue Pledge
Pledge Level (if applicable)	Second Lien
Legal Description	\$27,635,000 San Antonio, Texas Water System Junior Lien Revenue Bonds, Proposed Series 2025
Tax-exempt or Taxable	Tax-Exempt
Refinance	No
Outlay Requirement	No
Disbursement Method	Escrow
Outlay Type	Outlay <> Escrow Release
Qualifies as Disadvantaged	No
SWIFT Financing Type	Low-Interest
Financial Managerial & Technical Complete	N/A
Phases Funded	Design
Pre-Design	No
Project Consistent with State Water Plan	Yes
Water Conservation Plan	Yes
Overall Risk Score	2A

PROJECT TEAM

Team Manager	Financial Analyst	Engineering Reviewer	Environmental Reviewer	Attorney
David Firgens	Sarah Smaardyk	Barry Ekstrand	Stephannie Resendez	Marshall Walters

ISSUE BEING EVALUATED
FOR ILLUSTRATION PURPOSES ONLY
San Antonio Water System

\$27,635,000 San Antonio, Texas Water System Junior Lien Revenue Bonds, Proposed Series 2025

Dated Date:	10/9/2025	Source:	SWIFT-LOW-20YR
Delivery Date:	10/9/2025	Rate:	3.34%
First Interest:	5/15/2026	IUP Year:	2025
First Principal:	5/15/2026	Case:	Revenue
Last Principal:	5/15/2045	Admin.Fee:	\$0
Fiscal Year End:	12/31	Admin. Fee Payment Date:	N/A
Required Coverage:	1.2		

FISCAL YEAR	PROJECTED NET SYSTEM REVENUES	*CURRENT DEBT SERVICE	PRINCIPAL PAYMENT	<u>\$27,635,000 ISSUE</u>		TOTAL PAYMENT	TOTAL DEBT SERVICE	COVERAGE
				INTEREST RATE	INTEREST PAYMENT			
2026	\$420,048,000	\$234,247,168	\$965,000	2.45%	\$927,873	\$1,892,873	\$236,140,041	1.78
2027	420,048,000	229,888,369	1,080,000	2.42%	817,557	1,897,557	231,785,926	1.81
2028	420,048,000	226,650,260	1,105,000	2.43%	791,063	1,896,063	228,546,323	1.84
2029	420,048,000	247,515,606	1,130,000	2.45%	763,795	1,893,795	249,409,401	1.68
2030	420,048,000	251,565,396	1,160,000	2.49%	735,511	1,895,511	253,460,907	1.66
2031	420,048,000	252,060,635	1,190,000	2.55%	705,896	1,895,896	253,956,531	1.65
2032	420,048,000	252,055,354	1,220,000	2.61%	674,803	1,894,803	253,950,157	1.65
2033	420,048,000	251,700,828	1,255,000	2.66%	642,190	1,897,190	253,598,018	1.66
2034	420,048,000	258,540,460	1,290,000	2.77%	607,632	1,897,632	260,438,092	1.61
2035	420,048,000	262,680,776	1,325,000	2.85%	570,884	1,895,884	264,576,660	1.59
2036	420,048,000	258,971,986	1,365,000	3.02%	531,392	1,896,392	260,868,378	1.61
2037	420,048,000	259,008,854	1,405,000	3.12%	488,862	1,893,862	260,902,716	1.61
2038	420,048,000	248,287,202	1,450,000	3.22%	443,599	1,893,599	250,180,801	1.68
2039	420,048,000	245,755,927	1,500,000	3.32%	395,354	1,895,354	247,651,281	1.70
2040	420,048,000	220,363,833	1,550,000	3.41%	344,027	1,894,027	222,257,860	1.89
2041	420,048,000	160,861,866	1,605,000	3.50%	289,512	1,894,512	162,756,378	2.58
2042	420,048,000	160,038,267	1,665,000	3.59%	231,537	1,896,537	161,934,804	2.59
2043	420,048,000	151,572,387	1,725,000	3.69%	169,824	1,894,824	153,467,211	2.74
2044	420,048,000	139,275,464	1,790,000	3.74%	104,525	1,894,525	141,169,989	2.98
2045	420,048,000	129,760,436	1,860,000	3.82%	35,526	1,895,526	131,655,962	3.19
		\$4,440,801,074	\$27,635,000		\$10,271,361	\$37,906,361	\$4,478,707,435	

*Current debt service includes the DWSRF LSLR of \$5,760,000

AVERAGE (MATURITY) LIFE	11.13 YEARS
NET INTEREST RATE	3.340%
COST SAVINGS	\$6,768,240
AVERAGE ANNUAL REQUIREMENT	\$1,895,318

Disclaimer: This is a working document and is provided as a courtesy. All information contained herein, including the proposed interest rate, is subject to change upon further review of the TWDB in accordance with 31 Texas Administrative Code Chapters 363, 371, 375, or 384, as applicable. The TWDB does not function as a financial advisor to anyone in connection with this financing. The information contained in this document is used by TWDB staff to analyze the application for financing is illustrative only and does not constitute any guaranty of future rates. The TWDB makes no claim regarding the applicability of the information at closing, at which time actual rates will be set.



Project Budget Summary
 San Antonio Water System
 51095 San Antonio Water System ASR
 Treatment Plant Expansion

Budget Items	TWDB Funds	Total
Construction		
Construction	\$0	\$0
Subtotal for Construction	\$0	\$0
Basic Engineering Services		
Design	\$25,515,486	\$25,515,486
Subtotal for Basic Engineering Services	\$25,515,486	\$25,515,486
Special Services		
Subtotal for Special Services	\$0	\$0
Fiscal Services		
Bond Counsel	\$52,500	\$52,500
Financial Advisor	\$40,600	\$40,600
Issuance Costs	\$106,900	\$106,900
Bond Reserve Fund	\$1,919,514	\$1,919,514
Subtotal for Fiscal Services	\$2,119,514	\$2,119,514
Other		
Subtotal for Other	\$0	\$0
Contingency		
Subtotal for Contingency	\$0	\$0
Total	\$27,635,000	\$27,635,000

A RESOLUTION OF THE TEXAS WATER DEVELOPMENT BOARD
APPROVING AN APPLICATION FOR FINANCIAL ASSISTANCE IN THE AMOUNT OF
\$27,635,000 TO THE CITY OF SAN ANTONIO
ACTING BY AND THROUGH
THE SAN ANTONIO WATER SYSTEM
THROUGH THE PROPOSED PURCHASE OF
\$27,635,000 CITY OF SAN ANTONIO, TEXAS
WATER SYSTEM JUNIOR LIEN REVENUE BONDS,
PROPOSED SERIES 2025

(25-)

Recitals:

The City of San Antonio (City), acting by and through the San Antonio Water System (System), located in Bexar County, has filed an application for financial assistance in the amount of \$27,635,000 to finance the design of water supply project identified as Project No. 51095 (Project).

The City qualifies for financial assistance from the Texas Water Development Board (TWDB) through the TWDB's proposed purchase of \$27,635,000 City of San Antonio, Texas Water System Junior Lien Revenue Bonds, Proposed Series 2025 (Obligations), together with all authorizing documents, all as is more specifically set forth in the application and in recommendations of the Executive Administrator's staff.

The City has offered a pledge of a junior lien on its system's net revenues, on parity with other junior lien pledges, as sufficient security for the repayment of the Obligations.

The interest rate subsidies as approved by the Board at its April 10, 2025 meeting, are based on assumptions necessary to generate an optimum debt service structure for the anticipated TWDB SWIFT bond issuance and are subject to modification as necessary to preserve and maintain the integrity of the SWIFT Program.

The City requests a waiver of the requirement that a portion of the financial assistance received from the TWDB be used to mitigate the City's system water loss because the City has already set aside funds to address the water loss.

In accordance with Texas Water Code § 17.124, the TWDB has considered all matters required by law and in particular the following:

1. The needs of the area to be served by the water supply project, the benefit of the water supply project to the area, the relationship of the water supply project to the overall, statewide water needs, and the relationship of the water supply project to the approved regional and state water plans.
2. And the availability of revenue to the City, from all sources, for the ultimate repayment of the cost of the water supply project, including interest.

Findings:

1. The application and assistance applied for meet the requirements of Texas Water Code, Chapter 15, Subchapters G and H and 31 TAC Chapter 363, Subchapters A and M; or the requirements of Chapter 17, Subchapters D, E, and L, and the TWDB's rules set forth in 31 TAC Chapter 363, Subchapter A.
2. The Project is a recommended water management strategy project in the State Water Plan adopted pursuant to Texas Water Code § 16.051, in accordance with Texas Water Code § 15.474(a).
3. The public interest requires state assistance in the financing of this project, in accordance with Texas Water Code § 17.125(a)(1).
4. The City has adopted and implemented a water conservation plan in accordance with Texas Water Code § 16.4021 and 31 TAC § 363.1309(b)(1).
5. The City has completed its current water audit and filed it with the TWDB in accordance with Texas Water Code §§ 16.0121 and 16.053(j) and 31 TAC § 358.6.
6. Based on the conditions described above, the City is satisfactorily addressing the City's system water loss, which supports a waiver of the requirement that a portion of the financial assistance received from the TWDB be used to mitigate the City's system water loss in accordance with Texas Water Code § 16.0121(g).
7. The City acknowledges its legal obligation to comply with any applicable requirements of federal law related to contracting with disadvantaged business enterprises and any applicable state law related to contracting with historically underutilized businesses, in accordance with Texas Water Code § 15.435(h) and 31 TAC § 363.1309(b)(3).

NOW THEREFORE, based on these findings, the TWDB commits to the following:

1. For the reasons stated above, the TWDB waives the requirements of Texas Water Code § 16.0121(g).
2. A commitment is made by the TWDB to the City of San Antonio for financial assistance in the amount of \$27,635,000 from the State Water Implementation Revenue Fund for Texas to be evidenced by the TWDB's proposed purchase of \$27,635,000 City of San Antonio, Texas Water System Junior Lien Revenue Bonds, Proposed Series 2025. This commitment will expire on December 31, 2025.

The commitment is subject to the following:

Standard Conditions:

1. This commitment is contingent on a future sale of bonds by the TWDB or on the availability of funds on hand as determined by the TWDB.

2. This commitment is contingent upon the issuance of a written approving opinion of the Attorney General of the State of Texas stating that the City has complied with all of the requirements of the laws under which the Obligations were issued; that the Obligations were issued in conformance with the Constitution and laws of the State of Texas; and that the Obligations are valid and binding obligations of the City.
3. This commitment is contingent upon the City's continued compliance with all applicable laws, rules, policies, and guidance as these may be amended from time to time to adapt to a change in law, in circumstances, or any other legal requirement.
4. This commitment is contingent upon the City executing a separate financing agreement, approved as to form and substance by the Executive Administrator, and submitting the executed agreement to the TWDB consistent with the terms and conditions described in it.
5. Interest rate subsidies for non-level debt service structure are subject to adjustment by the Executive Administrator.
6. The City shall use a paying agent/registrar in accordance with 31 TAC § 363.42(c)(2) and shall require the paying agent/registrar to provide a copy of all receipts documenting debt service payments to the TWDB and to the TWDB's designated Trustee.

Required Obligation Conditions:

7. The Obligations must provide that the Obligations can be called for early redemption on any date beginning on or after the first interest payment date that is 10 years from the dated date of the Obligations, at a redemption price of par, together with accrued interest to the date fixed for redemption.
8. The Obligations must provide that the City will comply with all applicable TWDB laws and rules related to the use of the financial assistance.
9. The Obligations must provide that the City must comply with all conditions as specified in the final environmental finding of the Executive Administrator when issued, including the standard emergency discovery conditions for threatened and endangered species and cultural resources.
10. The Obligations must contain a provision requiring the City to maintain insurance coverage sufficient to protect the TWDB's interest in the project.
11. The Obligations must include a provision wherein the City, or an obligated person for whom financial or operating data is presented to the TWDB in the application for financial assistance either individually or in combination with other issuers of the City's Obligations or obligated persons, will, at a minimum, regardless of the amount of the Obligations, covenant to comply with requirements for continuing disclosure on an ongoing basis substantially in the manner required by the Securities and Exchange Commission (SEC) in 17 CFR § 240.15c2-12 (Rule 15c2-12) and

determined as if the TWDB were a Participating Underwriter within the meaning of SEC rule 15c2-12, the continuing disclosure undertaking being for the benefit of the TWDB and the beneficial owners of the City's Obligations, if the TWDB sells or otherwise transfers the Obligations, and the beneficial owners of the TWDB's bonds if the City is an obligated person with respect to the bonds under SEC Rule 15c2-12.

12. The Obligations must require the City to levy a tax or maintain and collect sufficient rates and charges to produce system revenues in an amount necessary to meet the debt service requirements of all outstanding obligations and to maintain the funds established and required by the Obligations.
13. The Obligations must require the City to use any surplus financial assistance proceeds from the Obligations remaining after completion of the Project and completion of a final accounting in a manner approved by the Executive Administrator.
14. The Obligations must provide that the TWDB may exercise all remedies available to it in law or equity, and any provision of the Obligations that restricts or limits the TWDB's full exercise of these remedies shall be of no force and effect.
15. Financial assistance proceeds are public funds. Therefore, the Obligations must require that these proceeds be held at a designated state depository institution or other properly chartered and authorized institution in accordance with the Public Funds Investment Act, Government Code, Chapter 2256, and the Public Funds Collateral Act, Government Code, Chapter 2257.
16. Financial assistance proceeds shall not be used by the City when sampling, testing, removing, or disposing of contaminated soils or media at the Project site. The Obligations must provide that the City is solely responsible for liability resulting from acts or omissions of the City, its employees, contractors, or agents arising from the sampling, analysis, transport, storage, treatment, recycling, and disposition of any contaminated sewage sludge, contaminated sediments or contaminated media that may be generated by the City, its contractors, consultants, agents, officials, and employees as a result of activities relating to the Project to the extent permitted by law.
17. The Obligations must require the City to report to the TWDB the amounts of Project funds, if any, that were used to compensate historically underutilized businesses that worked on the Project, in accordance with 31 TAC § 363.1312.
18. The Obligations must contain a provision that the TWDB will purchase the Obligations, acting through the TWDB's designated Trustee, and the Obligations shall be registered in the name of Cede & Co. and closed in book-entry-only form in accordance with 31 TAC § 363.42(c)(1).
19. The City must abide by all applicable construction contract requirements related to the use of iron and steel products produced in the United States, as required by

Texas Government Code, Chapter 2252, Subchapter G and Texas Water Code § 17.183.

20. The City must immediately notify TWDB in writing of any suit against it by the Attorney General of Texas under Texas Government Code § 2.103 and Texas Penal Code § 1.10(f), related to federal laws regulating firearms, firearm accessories, and firearm ammunition.
21. The Obligations must require the City to submit annually an audit prepared by a certified public accountant in accordance with generally accepted auditing standards.
22. The Obligations must include a provision that, if the collateral or credit pledged by the City securing the Obligations is rated by a nationally-recognized statistical rating agency, the City, or other obligated person, will not discontinue the rating issued by a nationally-recognized statistical rating agency until the underlying Obligations are retired or no longer held by TWDB.

Tax-Exempt Conditions:

23. The Obligations must prohibit the City from using the proceeds of this financial assistance in a manner that would cause the Obligations to become “private activity bonds” within the meaning of section 141 of the Internal Revenue Code as amended (Code) and the Treasury Regulations promulgated under it (Regulations).
24. The Obligations must provide that no portion of the proceeds of the financial assistance will be used, directly or indirectly, in a manner that would cause the Obligations to be “arbitrage bonds” within the meaning of section 148(a) of the Code and Regulations, including to acquire or to replace funds that were used, directly or indirectly, to acquire Nonpurpose Investments, as defined in the Code and Regulations, that produce a yield materially higher than the yield on the TWDB’s bonds issued to provide the financial assistance (Source Series Bonds), other than Nonpurpose Investments acquired with;
 - a. proceeds of the TWDB’s Source Series Bonds invested for a reasonable temporary period of up to three (3) years after the issue date of the Source Series Bonds until the proceeds are needed for the facilities to be financed;
 - b. amounts invested in a bona fide debt service fund within the meaning of section 1.148-1(b) of the Regulations; and
 - c. amounts deposited in any reasonably required reserve or replacement fund to the extent the amounts do not exceed the lesser of maximum annual debt service on the Obligations, 125% of average annual debt service on the Obligations, or 10 percent of the stated principal amount (or, in the case of a discount, the issue price) of the Obligations.
25. The Obligations must require the City to take all necessary steps to comply with the requirement that amounts earned on the investment of gross proceeds of the

Obligations be rebated to the federal government in order to satisfy the requirements of section 148 of the Code. The Obligations must provide that the City will:

- a. account for all Gross Proceeds, as defined in the Code and Regulations, (including all receipts, expenditures, and investments thereof) on its books of account separately and apart from all other funds (and receipts, expenditures, and investments thereof) and retain all records of the accounting for at least six years after the final Computation Date. The City may, however, to the extent permitted by law, commingle Gross Proceeds of its financial assistance with other money of the City, provided that the City separately accounts for each receipt and expenditure of the Gross Proceeds and the obligations acquired with the Gross Proceeds;
 - b. calculate the Rebate Amount, as defined in the Code and Regulations, with respect to its financial assistance, not less frequently than each Computation Date, in accordance with rules set forth in section 148(f) of the Code, section 1.148-3 of the Regulations, and the associated rulings. The City shall maintain a copy of the calculations for at least six years after the final Computation Date;
 - c. pay to the United States the amount described in paragraph (b) above within 30 days after each Computation Date as additional consideration for providing financial assistance and in order to induce providing financial assistance by measures designed to ensure the excludability of the interest on the TWDB's Source Series Bonds from the gross income of the owners of TWDB's Bonds for federal income tax purposes;
 - d. exercise reasonable diligence to ensure that no errors are made in the calculations required by paragraph (b) and, if an error is made, to discover and promptly correct the error within a reasonable amount of time, including payment to the United States of any interest and any penalty required by the Regulations.
26. The Obligations must include a provision prohibiting the City from taking any action that would cause the interest on the Obligations to be includable in gross income for federal income tax purposes.
 27. The Obligations must provide that the City will not cause or permit the Obligations to be treated as "federally guaranteed" obligations within the meaning of section 149(b) of the Code.
 28. The Obligations must contain a covenant that the City will refrain from using the proceeds of the Obligations to pay debt service on another issue of the borrower's obligations in contravention of section 149(d) of the Code (related to "advance refundings").

29. The Obligations must provide that neither the City nor a party related to it will acquire any of the TWDB's Source Series Bonds in an amount related to the amount of the Obligations to be acquired from the City by the TWDB.

Pledge Conditions:

30. The Obligations shall be on parity with any existing obligations that are secured with the same pledge of security as the proposed Obligations.
31. The Obligations shall be governed by the additional debt test and reserve requirement as provided in the outstanding City of San Antonio, Texas Water System Junior Lien Revenue Bonds, Series 2020B.

Conditions To Close or for Release of Funds:

32. Before closing, the City must submit documentation evidencing the adoption and implementation of sufficient system rates and charges or, if applicable, the levy of an interest and sinking tax rate sufficient for the repayment of all system debt service requirements.
33. Before closing, if not previously provided with the application, the City shall submit executed contracts for engineering and, if applicable, financial advisor and bond counsel for the Project that are satisfactory to the Executive Administrator. Fees to be reimbursed under the contracts must be reasonable in relation to the services performed, reflected in the contract, and acceptable to the Executive Administrator.
34. Before closing, when any portion of financial assistance is to be held in escrow or in trust, the City shall execute an escrow agreement or trust agreement, approved as to form and substance by the Executive Administrator, and shall submit that executed agreement to the TWDB.
35. Before closing, the City shall provide certification that the average weighted maturity of the Obligations purchased by the TWDB does not exceed 120% of the average reasonably expected economic life of the Project.
36. Before closing, the City's bond counsel must prepare a written opinion that states that the interest on the Obligations is excludable from gross income or is exempt from federal income taxation. Bond counsel may rely on covenants and representations of the City when rendering this opinion.
37. Before closing, the City's bond counsel must prepare a written opinion that states that the Obligations are not "private activity bonds." Bond counsel may rely on covenants and representations of the City when rendering this opinion.
38. The transcript must include a No Arbitrage Certificate or similar Federal Tax Certificate setting forth the City's reasonable expectations regarding the use, expenditure, and investment of the proceeds of the Obligations.

39. The transcript must include evidence that the information reporting requirements of section 149(e) of the Internal Revenue Code will be satisfied. This requirement may be satisfied by filing an IRS Form 8038 with the Internal Revenue Service. In addition, the applicable completed IRS Form 8038 or other evidence that the information reporting requirements of section 149(e) have been satisfied must be provided to the Executive Administrator within fourteen (14) days of closing. The Executive Administrator may withhold the release of funds for failure to comply.
40. Before closing, the City shall submit to the escrow agent a closing memo signed by the executive administrator.

APPROVED and ordered of record this, the 24th day of July 2025.

TEXAS WATER DEVELOPMENT BOARD

L'Oreal Stepney, P.E., Chairwoman

DATE SIGNED: _____

ATTEST:

Bryan McMath, Executive Administrator

Review Date:

Project ID:

Water

Wastewater

Other

WATER CONSERVATION REVIEW

Entity:

Other entity:

WATER CONSERVATION PLAN DATE:**Approvable****Adopted**

	Total GPCD	Residential GPCD	Water Loss GPCD
Baseline			
5-year Goal			
10-year Goal			

WATER LOSS AUDIT YEAR:

Validation Required:

Validation Performed:

Service connections:

Length of main lines (miles):

Water Loss GCD:

Retail population:

Connections per mile:

Water Loss GPCD:

ILI:

Real Loss GMD:

WATER LOSS THRESHOLDS

Water Loss Project:

Waiver Requested:

Wholesale Adjusted:

Threshold Type:

Apparent Loss GCD		Real Loss GCD	
Reported	Threshold	Reported	Threshold

Does the applicant meet Water Loss Threshold Requirements?

Yes**No****NA****ADDITIONAL INFORMATION****STAFF NOTES AND RECOMMENDATIONS**

DEFINITIONS

Adopted refers to a water conservation plan that meets the minimum requirements of the water conservation plan rules and has been formally approved and adopted by the applicant's governing body.

Apparent losses are paper losses that occur when the water reaches a customer, but the volume is not accurately measured and/or recorded due to unauthorized consumption, customer meter inaccuracy, or billing system and collection data errors.

Approvable refers to a water conservation plan that substantially meets the minimum requirements of the water conservation plan rules but has not yet been adopted by the applicant's governing body.

Best Management Practices are voluntary efficiency measures that save a quantifiable amount of water, either directly or indirectly, and that can be implemented within a specific time frame.

GPCD means gallons per capita per day.

GCD means gallons per connection per day.

GMD means gallons per mile per day.

Infrastructure Leakage Index (ILI) is the current annual real loss divided by the unavoidable annual real loss (theoretical minimum real loss) and only applies to utilities with more than 3,000 connections and a connection density of more than 16 connections per mile. The **ILI** is recommended to be less than 3 if water resources are greatly limited and difficult to develop, between 3 and 5 if water resources are adequate to meet long-term needs but water conservation is included in long-term water planning, and between 5 and 8 if water resources are plentiful, reliable, and easily extracted. The **ILI** is recommended as a bench marking tool, but until there is increased data validity of the variables used in the calculation, the **ILI** should be viewed with care.

NA means not applicable.

Real losses are the physical losses, largely leakage, from the infrastructure: mains, valves, and storage tank overflows. Real loss constitutes background leakage (unreported and difficult to detect), unreported leakage (leaks that do not surface but could be detected), and reported leakage (leaks that often surface and those that are detected by the utility through leak detection).

Residential GPCD is the amount of residential water use (single and multi-family customer use) divided by the residential population divided by 365.

Total GPCD is the amount of total system input volume divided by the retail population divided by 365.

Total water loss is the sum of the apparent and real water losses.

Water loss is the difference between the input volume and the authorized consumption within a water system. Water Loss consists of real losses and apparent losses.

Water Loss GPCD is the amount of water loss divided by the retail population divided by 365.

Water Loss per Connection per Day Calculated as the water loss volume divided by the number service connections divided by 365. This indicator allows for reliable performance tracking in the water utility's efforts to reduce water losses. It replaces water loss percentage.

Water Loss Thresholds are levels of real and apparent water loss determined by the connection density of a retail public utility, at or above which a utility receiving financial assistance from the Texas Water Development Board must use a portion of that financial assistance to mitigate the utility's system water loss.

Wholesale Adjusted represents that some utilities provide large volumes of wholesale water to other providers that travel through the general distribution system, so a calculation has been established to adjust for that volume of wholesale water. These adjustments are only applicable for use in determining whether a utility meets or exceeds water loss thresholds in review of their application for financial assistance. These adjustments should not be used for performance tracking or benchmarking.



June 4, 2025

Mr. Bryan McMath
Executive Administrator
Texas Water Development Board
1700 N. Congress Avenue
P.O. Box 13231
Austin, Texas 78711-3231

Re: San Antonio Water System Water Loss Waiver

Dear Mr. McMath:

San Antonio Water System (SAWS) is requesting a water loss waiver from the State Water Implementation Fund for Texas (SWIFT) application for design of the Aquifer Storage & Recovery (ASR) Treatment Plant Expansion Project. This project is needed to address meeting customer demand during frequent periods of drought and providing additional treatment capacity for the Expanded Local Carrizo Project. Combined, these projects are needed due to increased customer demand due to robust population growth and a thriving economy.

SAWS has made major focus changes to the Nonrevenue Water (NRW) program which includes increasing proactive leak detection for hidden leaks, and investment in the amount of staff and equipment to respond to leaks. As part of SAWS asset management program, staff is working to determine the condition of water mains in the system and making recommendations for replacement.

A significant objective of SAWS 2025 Water Management Plan is to address and reduce water loss throughout the distribution system referred to as SAWS Water Stewardship Initiative. SAWS Board of Trustees has established key milestones for the Water Stewardship Initiative including:

- Since 2023, SAWS added 102 positions to the Distribution and Collection Department to address water loss including Utility Technicians, Senior Utility Technicians, Equipment Operators, Field Utility Coordinators, and Forepersons integral to infrastructure repair.
- Refine strategy for detection and repair of priority (P3) leaks to achieve the 2025 goal of 3,000 acre-feet anticipated savings from detection and repair.

Mr. Bryan McMath

June 4, 2025

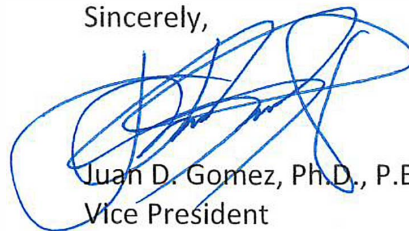
Page 2

- Capital spending of \$108 million on water main replacement in the FY2025 budget representing a 90 percent increase on 2019 to 2023 average.
- Forecasted FY2026 to FY2029 budgets of \$105 million per year and reviewing options for further increased spending for condition based main replacement projects in order to reduce the break rate.
- Upgrading customer meters from mechanical to electronic is an apparent water loss enhancement. All customer meters are scheduled to be replaced with an AMI meter by late 2025.

From 2023 to 2024, SAWS reduced water loss by ten gallons per connection per day (GCD) or 2.1 billion gallons. Due to SAWS Water Stewardship Initiative, the SAWS Board of Trustees has adopted a goal to further reduce water loss an additional 15 gallons per connection per day (GCD) by 2028. The water SAWS is able to maintain in the distribution system from a robust nonrevenue water program, conserves water resources to meet future customer demand.

SAWS appreciates consideration of the water loss waiver request.

Sincerely,

A handwritten signature in blue ink, appearing to read "Juan D. Gomez", is written over the printed name and title.

Juan D. Gomez, Ph.D., P.E.

Vice President

Engineering and Construction

cc: Karen Sanders, Water Loss Specialist, TWDB
Phyllis Garcia, Sr. Director/Treasurer, Financial Services, SAWS



San Antonio Water System Bexar County

