



## PROJECT FUNDING REQUEST

**BOARD DATE:** May 8, 2025

**Team Manager:** David Firgens

### ACTION REQUESTED

Consider approving by resolution a request from the City of San Marcos (Hays County) for \$1,000,000 in financial assistance from the Texas Water Development Fund for planning of a wastewater system improvements project.

### STAFF RECOMMENDATION

☒ Approve ☐ No Action

### BACKGROUND

The City of San Marcos (City) is located 30 miles southwest of Austin. The City provides water and wastewater services to a population of approximately 130,953 residents and approximately 42,096 water and wastewater connections.

### PROJECT NEED AND DESCRIPTION

The City needs additional wastewater treatment capacity for anticipated developments southeast of the City that are projected to add approximately 7,000 connections to the collection system. The City's existing treatment plant was constructed in 1969, upgraded multiple times to 9 million gallons per day (MGD) treatment capacity, and has limited area for expansion.

The City requests planning phase funding for the construction of a new 2 MGD treatment plant, expandable to 8 MGD, on 25 acres of land owned by the City near Fleming Pass and Farm-to-Market Road 1978. The proposed site is near anticipated developments southeast of the City. The City will develop environmental and geotechnical assessments, surveying, and engineering planning to produce an engineering feasibility report for the project.

### PROJECT SCHEDULE

Task	Schedule Date
Closing	September 1, 2025
Engineering Feasibility Report Completion (End of Planning Phase)	October 31, 2025
Design Phase Completion	February 1, 2026
Start of Construction	September 30, 2026
Construction Completion	December 31, 2028

**COMMITMENT PERIOD:** SIX (6) MONTHS TO EXPIRE NOVEMBER 30, 2025

Attachments:

1. Financial Review
2. Project Budget
3. Resolution (25- )
4. Water Conservation Review
5. Location

# Financial Review

## City of San Marcos

Attachment 1

Risk Score: 2A

Audit Reviewed: FY 2024

### Key Indicators

Indicator	Result	Benchmark
Population Growth, Average Annual 2010-2020	City: 4.17%	State: 1.49%
Top 10 Customers % of Total Revenue	12%	10-15%
Median Household Income as % of State	65%	100%
Days of Cash on Hand (3-year Average)	1,417 days	30-149 days
Net Fixed Assets/ Annual Depreciation	8 years	12-24 years
Debt Service Coverage Ratio	3.41x	1.0x
Debt-to-Operating Revenues	4.56x	4.00-5.99x
Unemployment Rate (January 2025)	City: 3.70%	State: 4.10%
Working Capital Ratio	7.54	> 1.0

### Key Risk Score Strengths

- Between 2019 and 2023, the number of water connections increased from 14,121 to 42,096 or 198 percent.
- The City's debt service coverage ratio of 3.41x far exceeds the required 1.0x coverage and indicates it has strong financial health.
- The City's three-year average days of cash on hand of 1,417 days indicates the City has a strong financial cushion, ensuring stability and the ability to cover expenses without relying on additional revenue.

### Key Risk Score Concerns

- The City's household cost factor exceeds the benchmark at 2.75 percent; however, no rate increases are projected, and the system's cash flow has remained stable over the last three years.

### PLEDGE

Legal Pledge Name	First Lien 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 checked="" type="checkbox"/> First <input 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	4,800	\$53.33	\$53.33	2.75	2.75
Wastewater	4,788	\$55.41	\$55.41		

**TAXES**

	2024 Tax Year Rate	Max Projected Tax Rate (2024)	Maximum Allowable Rate	3-Year Avg Current Tax Collections	Assessed Valuation
Maintenance & Operation	\$0.447	\$0.447	\$1.50	99%	\$9,692,172,199
Interest & Sinking	\$0.1583	\$0.1583			
Total Tax Rate	\$0.6030	\$0.6030			

## Project Data Summary

<b>Responsible Authority</b>	City of San Marcos
<b>Program</b>	WDF
<b>Commitment Number</b>	L1002083
<b>Project Number</b>	21874
<b>List Year</b>	2024
<b>Type of Pledge</b>	Revenue Pledge
<b>Pledge Level (if applicable)</b>	First Lien
<b>Legal Description</b>	\$1,000,000 City of San Marcos, Texas, Waterworks and Wastewater System Revenue Bonds, Series 2025
<b>Tax-exempt or Taxable</b>	Tax-Exempt
<b>Refinance</b>	No
<b>Outlay Requirement</b>	Nos
<b>Disbursement Method</b>	Escrow
<b>Outlay Type</b>	Outlay < > Escrow Release
<b>Qualifies as Disadvantaged</b>	No
<b>Financial Managerial &amp; Technical Complete</b>	N/A
<b>Phases Funded</b>	Planning
<b>Pre-Design</b>	No
<b>Project Consistent with State Water Plan</b>	N/A
<b>Water Conservation Plan</b>	Adopted
<b>Overall Risk Score</b>	2A

### PROJECT TEAM

Team Manager	Financial Analyst	Engineering Reviewer	Environmental Reviewer	Attorney
David Firgens	Rand Zeolla	Grace Davila	Stephannie Resendez	Marshall Walters

ISSUE BEING EVALUATED  
FOR ILLUSTRATION PURPOSES ONLY  
City of San Marcos

**\$1,000,000 City of San Marcos, Texas, Waterworks and Wastewater System Revenue Bonds, Series 2025**

<b>Dated Date:</b>	<b>9/1/2025</b>	<b>Source:</b>	<b>WDF</b>
<b>Delivery Date:</b>	<b>9/1/2025</b>	<b>Rate:</b>	<b>4.32%</b>
<b>First Interest:</b>	<b>2/15/2026</b>	<b>IUP Year:</b>	<b>2024</b>
<b>First Principal:</b>	<b>8/15/2026</b>	<b>Case:</b>	<b>Revenue</b>
<b>Last Principal:</b>	<b>8/15/2045</b>	<b>Admin.Fee:</b>	<b>\$0</b>
<b>Fiscal Year End:</b>	<b>09/30</b>	<b>Admin. Fee Payment Date:</b>	<b>N/A</b>
<b>Required Coverage:</b>	<b>1.0</b>		

FISCAL YEAR	PROJECTED NET SYSTEM REVENUES	CURRENT DEBT SERVICE	\$1,000,000 ISSUE				TOTAL DEBT	
			PRINCIPAL PAYMENT	INTEREST RATE	INTEREST PAYMENT	TOTAL PAYMENT	SERVICE	COVERAGE
2026	\$26,423,491	\$7,683,058	\$30,000	2.98%	\$38,345	\$68,345	\$7,751,403	3.41
2027	26,423,491	10,103,232	35,000	3.03%	39,234	74,234	10,177,466	2.60
2028	26,423,491	10,093,523	40,000	3.08%	38,174	78,174	10,171,697	2.60
2029	26,423,491	10,098,729	40,000	3.15%	36,942	76,942	10,175,670	2.60
2030	26,423,491	10,088,199	40,000	3.24%	35,682	75,682	10,163,880	2.60
2031	26,423,491	10,081,423	40,000	3.33%	34,386	74,386	10,155,808	2.60
2032	26,423,491	10,081,396	45,000	3.41%	33,054	78,054	10,159,449	2.60
2033	26,423,491	10,077,978	45,000	3.52%	31,519	76,519	10,154,497	2.60
2034	26,423,491	10,068,442	45,000	3.61%	29,935	74,935	10,143,377	2.60
2035	26,423,491	10,071,629	45,000	3.71%	28,311	73,311	10,144,940	2.60
2036	26,423,491	10,071,517	50,000	3.88%	26,641	76,641	10,148,158	2.60
2037	26,423,491	10,071,026	50,000	4.04%	24,701	74,701	10,145,727	2.60
2038	26,423,491	10,072,300	55,000	4.16%	22,681	77,681	10,149,981	2.60
2039	26,423,491	9,018,957	55,000	4.29%	20,393	75,393	9,094,350	2.91
2040	26,423,491	9,024,171	55,000	4.42%	18,034	73,034	9,097,204	2.90
2041	26,423,491	7,173,075	60,000	4.55%	15,603	75,603	7,248,678	3.65
2042	26,423,491	4,552,735	65,000	4.65%	12,873	77,873	4,630,607	5.71
2043	26,423,491	4,546,731	65,000	4.74%	9,850	74,850	4,621,581	5.72
2044	26,423,491	3,375,480	70,000	4.81%	6,769	76,769	3,452,249	7.65
2045	26,423,491	3,381,352	70,000	4.86%	3,402	73,402	3,454,754	7.65
		\$169,734,947	\$1,000,000		\$506,524	\$1,506,524	\$171,241,471	

<b>AVERAGE (MATURITY) LIFE</b>	<b>11.73 YEARS</b>
<b>NET INTEREST RATE</b>	<b>4.318%</b>
<b>COST SAVINGS</b>	<b>\$0</b>
<b>AVERAGE ANNUAL REQUIREMENT</b>	<b>\$75,326</b>

*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**  
**City of San Marcos**  
**21874 - FM 1978 Water Reclamation**  
**Facility**

Budget Items	TWDB Funds	Total
<b>Basic Engineering Services</b>		
Planning	\$525,000.00	\$525,000.00
<b>Subtotal for Basic Engineering Services</b>	<b>\$525,000.00</b>	<b>\$525,000.00</b>
<b>Special Services</b>		
Environmental	\$75,000.00	\$75,000.00
Geotechnical	\$75,000.00	\$75,000.00
Permits	\$50,000.00	\$50,000.00
Surveying	\$75,000.00	\$75,000.00
<b>Subtotal for Special Services</b>	<b>\$275,000.00</b>	<b>\$275,000.00</b>
<b>Fiscal Services</b>		
Bond Counsel	\$75,000.00	\$75,000.00
Financial Advisor	\$75,000.00	\$75,000.00
<b>Subtotal for Fiscal Services</b>	<b>\$150,000.00</b>	<b>\$150,000.00</b>
<b>Contingency</b>		
Contingency	\$50,000.00	\$50,000.00
<b>Subtotal for Contingency</b>	<b>\$50,000.00</b>	<b>\$50,000.00</b>
<b>Total</b>	<b>\$1,000,000.00</b>	<b>\$1,000,000.00</b>

A RESOLUTION OF THE TEXAS WATER DEVELOPMENT BOARD  
APPROVING AN APPLICATION FOR FINANCIAL ASSISTANCE  
IN THE AMOUNT OF  
\$1,000,000 TO THE CITY OF SAN MARCOS  
FROM THE FINANCIAL ASSISTANCE ACCOUNT OF  
THE TEXAS WATER DEVELOPMENT FUND II  
THROUGH THE PROPOSED PURCHASE OF  
\$1,000,000 CITY OF SAN MARCOS, TEXAS  
WATERWORKS AND WASTEWATER SYSTEM REVENUE BONDS,  
PROPOSED SERIES 2025

(25- )

Recitals:

The City of San Marcos (City), located in Hays County, Texas, filed an application for financial assistance in the amount of \$1,000,000 from the Financial Assistance Account of the Texas Water Development Fund II, established by Texas Water Code § 17.959, to finance wastewater system improvements, identified as Project No. 21874.

The City seeks financial assistance from the Texas Water Development Board (TWDB) in the amount of \$1,000,000 through the TWDB's purchase of \$1,000,000 City of San Marcos, Texas Waterworks and Wastewater System Revenue Bonds, Proposed Series 2025 (together with all authorizing documents (Obligations)), all as is more specifically set forth in the application and in recommendations of the TWDB's staff.

The City has offered a pledge of revenue of the City's waterworks and wastewater system as sufficient security for the repayment of the Obligations.

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; and
2. 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 public interest requires state assistance in the water supply project, in accordance with Texas Water Code § 17.125(a)(1).
2. In its opinion the tax or revenue pledged by the City will be sufficient to meet all the Obligations assumed by the City during the succeeding period of not more than 50 years, in accordance with Texas Water Code § 17.125(a)(2).



3. The City has adopted and implemented a water conservation program for the more efficient use of water that will meet reasonably anticipated local needs and conditions and that incorporates practices, techniques or technology prescribed by the Texas Water Code and TWDB's rules.
4. The application and financial assistance requested meet the requirements of Chapter 17, Subchapters D, E, and L, Water Code, and the TWDB's rules set forth in 31 TAC Chapter 363, Subchapter A.
5. The TWDB has approved a regional water plan for the region of the state that includes the area benefiting from the project and the needs to be addressed by the project will be addressed in a manner that is consistent with the approved regional and state water plans, as required by Texas Water Code § 16.053(j).
6. The current water audit required by Texas Water Code § 16.0121 has been completed by the City and filed with the TWDB, in accordance with Texas Water Code § 16.053(j).

NOW THEREFORE, based on these findings, the TWDB resolves:

A commitment is made by the TWDB to the City of San Marcos for financial assistance in the amount of \$1,000,000 from the Financial Assistance Account of the Texas Water Development Fund II, to be evidenced by the TWDB's purchase of \$1,000,000 City of San Marcos, Texas Waterworks and Wastewater System Revenue Bonds, Proposed Series 2025. This commitment will expire on November 30, 2025.

This commitment is conditioned as follows:

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 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 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), including but not limited to 31 TAC Chapter 363.
4. The Obligations must provide that the Obligations can be called for early redemption only in inverse order of maturity, and 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.

5. The Obligations must provide that 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, covenant to comply with requirements for continuing disclosure on an ongoing basis substantially in the manner required by 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 such rule, such 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 such 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.
6. 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 required by the Obligations.
7. The Obligations must require the City to use any surplus financial assistance proceeds from the Obligations remaining after completion of a final accounting in a manner approved by the Executive Administrator.
8. 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 will be of no force and effect.
9. 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.
10. Proceeds of this commitment must 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.
11. 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.

12. Before closing, and if required under the TWDB's financial assistance program and not previously provided with the application, the City must submit an executed engineering contract as appropriate for the project scope of work, and an executed financial advisor contract and executed bond counsel contract as appropriate for the work to be performed in obtaining the TWDB's financial assistance for the project, in a form and substance satisfactory to the Executive Administrator. Fees to be reimbursed under any consulting contract must be reasonable in relation to the services performed, must be reflected in the contract, and must be acceptable to the Executive Administrator.
13. Before closing, when any portion of financial assistance proceeds are to be held in escrow or in trust, the City must execute an escrow agreement or trust agreement, approved as to form and substance by the Executive Administrator, and must submit that executed agreement to the TWDB.
14. The Executive Administrator may require that the City execute a separate financing agreement in form and substance acceptable to the Executive Administrator.
15. The City must immediately notify TWDB, in writing, of any suit against it by the Attorney General of Texas under Texas Penal Code § 1.10(f) (related to federal laws regulating firearms, firearm accessories, and firearm ammunition).

Conditions Related To Tax-Exempt Status:

16. Before closing, the City's bond counsel must prepare a written opinion that states 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.
17. Before closing, the City's bond counsel must prepare a written opinion that states the Obligations are not "private activity bonds." Bond counsel may rely on covenants and representations of the City when rendering this opinion.
18. The Obligations must include a provision prohibiting 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 § 141 of the Internal Revenue Code of 1986, as amended (Code) and the Treasury Regulations promulgated thereunder (Regulations).
19. 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 § 148(a) of the Code and Regulations, including to acquire or to replace funds 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 such proceeds are needed for the facilities to be financed;
  - b. amounts invested in a bona fide debt service fund, within the meaning of § 1.148-1(b) of the Regulations; and
  - c. amounts deposited in any reasonably required reserve or replacement fund to the extent such amounts do not exceed the least 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.
20. The Obligations must require the City to take all necessary steps to comply with the requirement that certain amounts earned on the investment of gross proceeds of the Obligations be rebated to the federal government in order to satisfy the requirements of § 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 on its books of account) separately and apart from all other funds (and receipts, expenditures, and investments) and retain all records of such 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 such Gross Proceeds and the obligations acquired with those 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 § 148(f) of the Code, § 1.148-3 of the Regulations, and the rulings under the Code. The City must maintain a copy of such calculations for at least six years after the final Computation Date;
  - c. as additional consideration for the making of the financial assistance, and in order to induce the making of the 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 for federal income tax purposes, pay to the United States the amount described in paragraph (b) above within 30 days after each Computation Date; and
  - d. exercise reasonable diligence to assure 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 after discovery, including payment to the United States of any interest and any penalty required by the Regulations.

21. 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.
22. 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 § 149(b) of the Code.
23. 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 obligations of the borrower in contravention of section 149(d) of the Code (related to “advance refundings”).
24. 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.
25. The transcript must include evidence that the information reporting requirements of § 149(e) of the Code will be satisfied. This requirement may be satisfied by filing an IRS Form 8038 with the Internal Revenue Service. In addition, the completed IRS Form 8038, or other evidence that the information reporting requirements of § 149(e) have been satisfied, must be provided to the Executive Administrator within 14 days of closing. The Executive Administrator may withhold the release of funds for failure to comply.
26. The Obligations must provide that neither the City nor a related party 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.
27. Prior to closing, the City must provide certification that the average weighted maturity of the Obligations purchased by the TWDB does not exceed 120 percent of the average reasonably expected economic life of the Project.

Pledge Conditions:

28. The Obligations must require the accumulation of a reserve fund of no less than average annual debt service requirements, to be accumulated in equal monthly installments over the initial 60 months following the issuance of the Obligations.
29. If the City has existing revenue obligations with the same pledge of security as the proposed Obligations that will remain outstanding after any financial assistance provided by the TWDB pursuant to this commitment, the lien or liens securing the Obligations issued to the TWDB must be at least on a parity with lien or liens securing the outstanding obligations.

30. The Obligations must provide that additional revenue obligations may only be incurred if a) net system revenues are at least 1.25 times the average annual debt service requirements after giving effect to the additional obligations when net revenues are determined from the last completed fiscal year or a 12 consecutive calendar month period ending not more than 90 days before the adoption of the additional obligations as certified by a certified public accountant; or b) the City certifies that the City is expected to continue to meet or exceed the net system revenue test with a minimum coverage of 1.25 times the average annual debt service requirement. An authorized representative of the City must provide the calculations identifying reasonable assumptions in a format that is acceptable to the Executive Administrator.

APPROVED and ordered of record this the 8th day of May 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**

	<b>Total GPCD</b>	<b>Residential GPCD</b>	<b>Water Loss GPCD</b>
<b>Baseline</b>			
<b>5-year Goal</b>			
<b>10-year Goal</b>			

**WATER LOSS AUDIT YEAR:****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:

<b>Apparent Loss GCD</b>		<b>Real Loss GCD</b>	
<b>Reported</b>	<b>Threshold</b>	<b>Reported</b>	<b>Threshold</b>

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.





**City of San Marcos  
Hays County**

