

Texas Water Development Board

PROJECT FUNDING REQUEST

BOARD DATE: April 6, 2023

Team Manager: Joe Koen

ACTION REQUESTED

Consider approving by resolution a request from Greater Texoma Utility Authority on behalf of White Shed Water Supply Corporation (Fannin County) for \$3,520,000 in financing from the Texas Water Development Fund for planning, acquisition, design, and construction of a water system improvement project.

STAFF RECOMMENDATION

Approve No Action

BACKGROUND

The Greater Texoma Utility Authority (Authority) provides its member cities with assistance in financing and construction of water and wastewater facilities. The Authority may also be requested to provide operations services for water and wastewater facilities by member cities and others.

The White Shed Water Supply Corporation (Corporation) is a member-owned, non-profit corporation. White Shed WSC serves 1,178 connections as of January 2023.

PROJECT NEED AND DESCRIPTION

The Corporation's water system has exceeded Texas Commission on Environmental Quality (TCEQ) 85% production and storage capacity limits and needs additional production and storage capacity to meet projected needs.

The Corporation proposes to construct a new well and elevated storage tank with associated disinfection equipment to provide sufficient production and storage capacity.

PROJECT SCHEDULE

Task	Schedule Date
Closing	August 1, 2023
Engineering Feasibility Report Completion (End of Planning Phase)	May 26, 2023
Design Phase Completion	September 1, 2023
Start of Construction	December 1, 2023
Construction Completion	February 1, 2025

KEY ISSUES

The Authority, on behalf of the Corporation, is requesting to fund the bond reserve fund with bond proceeds.

COMMITMENT PERIOD: SIX (6) MONTHS TO EXPIRE OCTOBER 31, 2023

LEGAL/SPECIAL CONDITIONS

- Water conservation plan
- Water rights certification

Attachments

1. Financial Review
2. Project Budget
3. Resolution (23-)
4. Water Conservation Review
5. Location Map

Financial Review

GTUA/White Shed Water Supply Corporation

Risk Score: 2B

Audit Reviewed: FY 2021

Key Indicators

Indicator	Result	Benchmark
Population Growth, Average Annual 2010-2020	County: 0.50%	State: 1.49%
Top 10 Customers % of Total Revenue	7%	10-15%
Median Household Income as % of State	73%	100%
Days of Cash on Hand (3-year Average)	422 days	30-149 days
Net Fixed Assets/ Annual Depreciation	22 years	12-24 years
Debt Service Coverage Ratio	0.78x	1.0x
Debt-to-Operating Revenues	6.04	4.00-5.99x
Unemployment Rate (December 2022)	{Fannin County}: 3.70%	State: 3.60%
Working Capital Ratio	18.927	> 1.0

Key Risk Score Strengths

- The Corporation's days of cash on hand is above the benchmark, indicating that they can pay operating expenses with the cash available.
- A high working capital ratio provides the Corporation with ample resources to cover short-term liabilities and shows a strong liquidity position.

Key Risk Score Concerns

- Debt-to-operating revenues ratio is above benchmark due to system revenues supporting all outstanding debt. The Corporation does not have taxing authority.
- Based on the 2021 audited financials, the Corporation is projected to need a \$5.43 rate increase in 2025 to meet debt service coverage requirement throughout the life of the financing. However, the Corporation instituted a \$10 rate increase in January 2023 which will be sufficient to pay for the proposed loan obligation.

PLEDGE

Legal Pledge Name	Contract revenues
Type of Pledge	<input type="checkbox"/> Tax <input type="checkbox"/> Revenue <input type="checkbox"/> Tax & Revenue <input checked="" 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	5,372	\$55.29	\$55.29	2.46	2.46

Cost Savings

Based on a 30-year maturity schedule and current interest rates, the Authority could save approximately \$168,968 over the life of the financing.

Project Data Summary

Responsible Authority	Greater Texoma UA
Program	WDF
Commitment Number	L1001619
Project Number	21814
List Year	2023
Type of Pledge	Contract Revenue Pledge
Pledge Level (if applicable)	First Lien
Legal Description	\$3,520,000 Greater Texoma Utility Authority Contract Revenue Bonds, Proposed Series 2023 (White Shed WSC Project)
Tax-exempt or Taxable	Taxable
Refinance	No
Outlay Requirement	No
Disbursement Method	Escrow
Outlay Type	Outlay <> Escrow Release
Qualifies as Disadvantaged	No
Financial Managerial & Technical Complete	N/A
Phases Funded	Planning, Acquisition, Design, and Construction
Pre-Design	Yes
Project Consistent with State Water Plan	Yes
Water Conservation Plan	Approvable
Overall Risk Score	2B

PROJECT TEAM

Team Manager	Financial Analyst	Engineering Reviewer	Environmental Reviewer	Attorney
Joe Koen	Thomas Quick	Jason Asbury	Kylie Beard	Breann Hunter

ISSUE BEING EVALUATED
FOR ILLUSTRATION PURPOSES ONLY
Greater Texoma Utility Authority/White Shed WSC

\$3,520,000 Greater Texoma Utility Authority Contract Revenue Bonds, Proposed Series 2023 (White Shed WSC Project)

Dated Date: 8/1/2023	Source: WDF
Delivery Date: 8/1/2023	Rate: 5.29%
First Interest: 12/1/2023	IUP Year: 2023
First Principal: 6/1/2024	Case: Contract Revenues
Last Principal: 6/1/2053	Admin.Fee: \$0
Fiscal Year End: 09/30	Admin. Fee Payment Date: N/A
Required Coverage: 1.0	

FISCAL YEAR	PROJECTED	CURRENT	\$3,520,000 ISSUE				TOTAL DEBT	
	NET SYSTEM REVENUES	DEBT SERVICE	PRINCIPAL PAYMENT	INTEREST RATE	INTEREST PAYMENT	TOTAL PAYMENT	SERVICE	COVERAGE
2024	\$232,060	\$26,826	\$55,000	4.44%	\$150,234	\$205,234	\$232,060	1.00
2025	\$259,181	21,342	60,000	4.44%	177,839	237,839	259,181	1.00
2026	\$259,181	-	60,000	4.30%	175,175	235,175	235,175	1.10
2027	\$259,181	-	65,000	4.33%	172,595	237,595	237,595	1.09
2028	\$259,181	-	65,000	4.38%	169,781	234,781	234,781	1.10
2029	\$259,181	-	70,000	4.43%	166,934	236,934	236,934	1.09
2030	\$259,181	-	70,000	4.48%	163,833	233,833	233,833	1.11
2031	\$259,181	-	75,000	4.54%	160,697	235,697	235,697	1.10
2032	\$259,181	-	80,000	4.59%	157,292	237,292	237,292	1.09
2033	\$259,181	-	80,000	4.64%	153,620	233,620	233,620	1.11
2034	\$259,181	-	85,000	4.74%	149,908	234,908	234,908	1.10
2035	\$259,181	-	90,000	4.79%	145,879	235,879	235,879	1.10
2036	\$259,181	-	95,000	4.84%	141,568	236,568	236,568	1.10
2037	\$259,181	-	100,000	4.89%	136,970	236,970	236,970	1.09
2038	\$259,181	-	105,000	4.94%	132,080	237,080	237,080	1.09
2039	\$259,181	-	110,000	4.99%	126,893	236,893	236,893	1.09
2040	\$259,181	-	115,000	5.04%	121,404	236,404	236,404	1.10
2041	\$259,181	-	120,000	5.25%	115,608	235,608	235,608	1.10
2042	\$259,181	-	125,000	5.25%	109,308	234,308	234,308	1.11
2043	\$259,181	-	130,000	5.25%	102,745	232,745	232,745	1.11
2044	\$259,181	-	140,000	5.35%	95,920	235,920	235,920	1.10
2045	\$259,181	-	145,000	5.35%	88,430	233,430	233,430	1.11
2046	\$259,181	-	155,000	5.35%	80,673	235,673	235,673	1.10
2047	\$259,181	-	160,000	5.35%	72,380	232,380	232,380	1.12
2048	\$259,181	-	170,000	5.35%	63,820	233,820	233,820	1.11
2049	\$259,181	-	180,000	5.50%	54,725	234,725	234,725	1.10
2050	\$259,181	-	190,000	5.50%	44,825	234,825	234,825	1.10
2051	\$259,181	-	200,000	5.50%	34,375	234,375	234,375	1.11
2052	\$259,181	-	210,000	5.50%	23,375	233,375	233,375	1.11
2053	\$259,181	-	215,000	5.50%	11,825	226,825	226,825	1.14
		\$48,168	\$3,520,000		\$3,500,703	\$7,020,703	\$7,068,871	

AVERAGE (MATURITY) LIFE	18.8 YEARS
NET INTEREST RATE	5.289%
COST SAVINGS	\$168,968
AVERAGE ANNUAL REQUIREMENT	\$234,023

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
Greater Texoma UA
21814 - GTUA/White Shed WSC Water Well
& System Improvements

Budget Items	This Commitment	Total
Construction		
Construction	\$2,546,250.00	\$2,546,250.00
Subtotal for Construction	\$2,546,250.00	\$2,546,250.00
Basic Engineering Services		
Construction Engineering	\$50,600.00	\$50,600.00
Design	\$233,400.00	\$233,400.00
Planning	\$15,000.00	\$15,000.00
Subtotal for Basic Engineering Services	\$299,000.00	\$299,000.00
Special Services		
Application	\$10,000.00	\$10,000.00
Environmental	\$15,000.00	\$15,000.00
Inspection	\$75,900.00	\$75,900.00
Water Conservation Plan	\$5,000.00	\$5,000.00
Subtotal for Special Services	\$105,900.00	\$105,900.00
Fiscal Services		
Bond Counsel	\$28,150.00	\$28,150.00
Bond Reserve Fund	\$167,200.00	\$167,200.00
Financial Advisor	\$24,620.00	\$24,620.00
Fiscal/Legal	\$4,500.00	\$4,500.00
Issuance Costs	\$2,000.00	\$2,000.00
Subtotal for Fiscal Services	\$226,470.00	\$226,470.00
Other		
Administration	\$12,000.00	\$12,000.00
Land/Easements Acquisition	\$70,000.00	\$70,000.00
Project Legal Expenses	\$3,520.00	\$3,520.00
Subtotal for Other	\$85,520.00	\$85,520.00
Contingency		
Contingency	\$256,860.00	\$256,860.00
Subtotal for Contingency	\$256,860.00	\$256,860.00
Total	\$3,520,000.00	\$3,520,000.00

A RESOLUTION OF THE TEXAS WATER DEVELOPMENT BOARD
APPROVING AN APPLICATION FOR FINANCIAL ASSISTANCE IN THE AMOUNT OF
\$3,520,000 TO GREATER TEXOMA UTILITY AUTHORITY
FROM THE FINANCIAL ASSISTANCE ACCOUNT OF
THE TEXAS WATER DEVELOPMENT FUND II
THROUGH THE PROPOSED PURCHASE OF
\$3,520,000 GREATER TEXOMA UTILITY AUTHORITY CONTRACT REVENUE BONDS
PROPOSED SERIES 2023 (WHITE SHED WSC PROJECT)

(23 -)

WHEREAS, the Greater Texoma Utility Authority, located in Fannin County, Texas (Authority), has filed an application for financial assistance in the amount of \$3,520,000 from the Financial Assistance Account of the Texas Water Development Fund II, established by Texas Water Code § 17.959, to finance water system improvements, identified as Project No. 21814; and

WHEREAS, the Authority seeks financial assistance from the Texas Water Development Board (TWDB) in the amount of \$3,520,000 through the TWDB's purchase of \$3,520,000 Greater Texoma Utility Authority Contract Revenue Bonds, Proposed Series 2023 (White Shed WSC Project) (together with all authorizing documents (Obligations)), all as is more specifically set forth in the application and in recommendations of the TWDB's staff; and

WHEREAS, the Authority has offered a pledge of contract revenue as sufficient security for the repayment of the Obligations; and

WHEREAS, the commitment is approved for funding under the TWDB's pre-design funding option, and initial and future releases of funds are subject to 31 TAC § 363.16; and

WHEREAS, 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 Authority, from all sources, for the ultimate repayment of the cost of the water supply project, including interest.

WHEREAS, the TWDB hereby finds:

1. that the public interest requires state assistance in the water supply project, in accordance with Texas Water Code § 17.125(a)(1);

2. that in its opinion the tax and/or revenue pledged by the Authority will be sufficient to meet all the Obligations assumed by the Authority during the succeeding period of not more than 50 years, in accordance with Texas Water Code § 17.125(a)(2);
3. that the Authority, a wholesale supplier of water, has adopted a resolution affirming that it will cooperate and coordinate with its retail providers to implement a water conservation program that will result in the more efficient use of water, that will meet reasonably anticipated local needs and conditions and that will incorporate those practices, techniques or technologies prescribed by the Texas Water Code and TWDB's rules;
4. that 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. that 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); and
6. that the current water audit required by Texas Water Code § 16.0121 has been completed by the White Shed Water Supply Corporation and filed with the TWDB, in accordance with Texas Water Code § 16.053(j).

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

A commitment is made by the TWDB to the Greater Texoma Utility Authority for financial assistance in the amount of \$3,520,000 from the Financial Assistance Account of the Texas Water Development Fund II, to be evidenced by the TWDB's purchase of \$3,520,000 Greater Texoma Utility Authority Contract Revenue Bonds, Proposed Series 2023 (White Shed WSC Project). This commitment will expire on October 31, 2023.

Such 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;
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 Authority has complied with all of the requirements of the laws under which said Obligations were issued; that said Obligations were issued in conformity with the Constitution

and laws of the State of Texas; and that said Obligations are valid and binding obligations of the Authority;

3. this commitment is contingent upon the Authority'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 (Early Redemption) only in inverse order of maturity, and on any date beginning on or after the first interest payment date which 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 include a provision wherein the Authority, 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 Authority'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 Authority's Obligations, if the TWDB sells or otherwise transfers such Obligations, and the beneficial owners of the TWDB's bonds if the Authority is an obligated person with respect to such bonds under SEC Rule 15c2-12;
6. the Obligations must include a provision requiring the City to use any surplus loan proceeds from the Obligations remaining after completion of a final accounting in a manner as approved by the Executive Administrator; and
7. the Obligations must contain a provision 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;
8. financial assistance proceeds are public funds and, as such, the Obligations must include a provision requiring that these proceeds shall 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;
9. financial assistance proceeds shall not be used by the Authority when sampling, testing, removing or disposing of contaminated soils and/or media at the project site. The Obligations shall include an environmental indemnification provision wherein the Authority agrees to indemnify, hold harmless and protect the TWDB

from any and all claims, causes of action or damages to the person or property of third parties arising from the sampling, analysis, transport, storage, treatment and disposition of any contaminated sewage sludge, contaminated sediments and/or contaminated media that may be generated by the Authority, its contractors, consultants, agents, officials and employees as a result of activities relating to the project to the extent permitted by law;

10. prior to closing, the Authority shall 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;
11. prior to closing, and if required under the TWDB's financial assistance program and not previously provided with the application, the Authority shall 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 that are 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;
12. prior to closing, when any portion of financial assistance proceeds are to be held in escrow or in trust, the Authority 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;
13. the Executive Administrator may require that the Authority execute a separate financing agreement in form and substance acceptable to the Executive Administrator;
14. the Authority shall 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 F and Texas Water Code § 17.183;
15. the Authority 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);
16. The Obligations he Obligations must include a provision stating that the Authority's indebtedness to the TWDB shall be secured by:
 - a. a first or parity lien on the gross revenues of the Authority's water system (System); and

- b. a first or parity lien mortgage on the System;
17. upon closing or within 20 days after closing, the Authority must file a Deed of Trust with the County Clerk of the county in which the property is located, as required by Business and Commerce Code, Chapter 9, or a Utility Security Instrument with the Secretary of State's Office and corresponding notice with the County Clerk, as required by Business and Commerce Code, Chapter 261, as evidence of the TWDB's security interest in the Authority's System. Within thirty (30) days of the date of each filing, the Authority shall submit a copy of the recorded instrument to the TWDB;
 18. upon closing or within 20 days after closing, the Authority must file a security instrument with the Secretary of State's Office, as required by Business and Commerce Code, Chapter 9 or Chapter 261 to evidence the TWDB's security interest in any personal property directly related to water supply and/or sewer service, owned or to be acquired by the Authority. A copy of the recorded security instrument shall be submitted by the Authority to the TWDB within thirty (30) days of its filing with the Secretary of State's Office;
 19. prior to closing, the Authority must obtain a commitment from a title insurance company in accordance with the standards established by the Texas Department of Insurance, resulting in the issuance of a mortgagee title insurance policy on the property owned in fee simple, upon which the TWDB will be given a first or parity lien mortgage. A copy of the mortgagee title insurance policy shall be submitted to the TWDB within thirty (30) days of its execution;
 20. prior to closing, the Authority must cure any defects or liens upon the property listed in Schedule C of the title insurance company commitment that the Executive Administrator deems necessary;
 21. prior to release of funds for construction, the Authority must provide the TWDB with evidence that the necessary acquisitions of land, leases, easements, and rights-of-way have been completed, or that the Authority has the legal authority necessary to complete the acquisitions;
 22. prior to closing, the Authority must submit to the Executive Administrator evidence that the Authority's bylaws have been amended to include the following requirements:
 - a. as long as the Authority is indebted for a loan or loans made by or through the TWDB, the bylaws shall not be altered, amended or repealed without the prior written consent of the Executive Administrator; and
 - b. the Authority is a nonprofit entity; no part of the income of the Authority will be distributed to the Authority's members, directors, or officers;

23. prior to closing, if the Authority is pledging a lien on real property that is to be on parity with a lien or liens on real property securing debt that will remain outstanding after closing the TWDB's loan, then the Authority must execute a Parity Agreement with each entity that holds such debt that is acceptable in form and substance to the Executive Administrator; and
24. the Obligation shall include a special covenant prohibiting the Authority from encumbering, pledging, or otherwise impairing the revenues of the System in any manner with respect to the payment of any Obligations or with respect to any liability, except for the payment of the following: (1) maintenance and operating expenses payable within the current fiscal year with current revenues; and (2) additional debt, and that the Authority shall in no way encumber, pledge or otherwise impair its title to the land used by or for the System or any interests therein, including improvements and facilities of the System, without prior TWDB approval;

Pledge Conditions For The Loan:

25. upon request by the Executive Administrator, the Authority shall submit annual audits of contracting parties for the Executive Administrator's review;
26. the Obligations must contain a provision requiring the Authority to maintain and enforce the contracts with its customers so that the revenues paid to the Authority by its customers are sufficient to meet the revenue requirements of the Authority's obligations arising from the operation of the water and sewer system;
27. the Obligations must contain a provision that the pledged contract revenues from the Authority may not be pledged to the payment of any additional parity obligations of the Authority secured by a pledge of the same contract revenues unless the Authority demonstrates to the Executive Administrator's satisfaction that the pledged contract revenues will be sufficient for the repayment of all Obligations and additional parity obligations; and
28. prior to closing, the Authority must submit executed contracts between the Authority and the contracting parties regarding the contract revenues pledged to the payment of the Authority's Obligations, in form and substance acceptable to the Executive Administrator. Such contracts shall include provisions consistent with the provisions of this Resolution regarding the contracting parties' annual audits, the setting of rates and charges and collection of revenues sufficient to meet the Authority's debt service obligations and additional parity obligations.

PROVIDED, however, the commitment is subject to the following special conditions:

Special Conditions:

29. prior to the release of funds for the costs of planning, engineering, architectural, legal, title, fiscal, or economic investigation, studies, surveys, or designs for that portion of a project that proposes surface water or groundwater development, the Executive Administrator must either issue a written finding that the Authority has the right to use the water that the project financed by the TWDB will provide or a written determination that a reasonable expectation exists that such a finding will be made before the release of funds for construction;
30. prior to the release of construction funds for that portion of a project that proposes surface water or groundwater development, the Executive Administrator must have issued a written finding that the Authority has the right to use the water that the project financed by the TWDB will provide; and
31. prior to closing: (a) the Authority adopt and implement the water conservation program approved by the TWDB; and (b) the Authority must include in its contract with the Contracting Parties a requirement that the Contracting Parties adopt a water conservation plan that complies with TWDB rules and that is approved by the Authority. If this requirement is to be included in an existing water or wastewater service contract, it may be included at the earliest of the renewal or substantial amendment of that contract, or by other appropriate measures.

APPROVED and ordered of record this, the 6th day of April 2023.

TEXAS WATER DEVELOPMENT BOARD

Brooke T. Paup, Chairwoman

DATE SIGNED: _____

ATTEST:

Jeff Walker, 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:

Service connections:

Length of main lines (miles):

Water Loss GCD:

Retail population:

Connections per mile:

Water Loss GPCD:

ILI¹:

1 – Infrastructure Leakage Index only applicable if > 16 connections per mile and > 3,000 service connections

WATER LOSS THRESHOLDS

Water Loss Project:

Wholesale Adjusted:

Threshold Type:

Apparent Loss Gallons per connection per day	Real Loss Gallons per mile per day	Real Loss Gallons per connection per day	Apparent Loss Threshold Gallons per connection per day	Real Loss Threshold Gallons per mile per day	Real Loss Threshold Gallons per connection per day

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.

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.

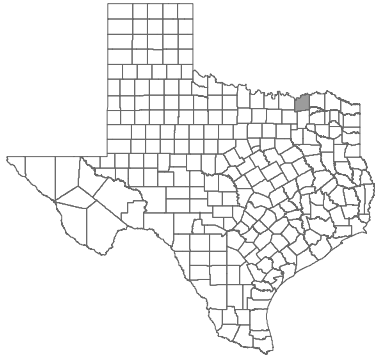
Water loss is the difference between the input volume and the authorized consumption within a water system. Water Loss consists of real losses and apparent losses.

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 size and 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.



Greater Texoma Utility Authority White Shed Water Supply Corporation Fannin County

