



PROJECT FUNDING REQUEST

BOARD DATE: October 17, 2024

Team Manager: Joe Koen

ACTION REQUESTED

Consider approving by resolution a request from the City of Arlington (Tarrant County) for \$16,585,000 in financing from the Clean Water State Revolving Fund for construction of a wastewater collection system realignment project.

STAFF RECOMMENDATION

☒ Approve ☐ No Action

BACKGROUND

The City of Arlington (City) is located in Tarrant County approximately 15 miles west of Dallas. The City provides water and wastewater services to a population of approximately 394,266 residents and 149,325 connections.

PROJECT NEED AND DESCRIPTION

The City identified two wastewater pipelines near major waterways (Kee Branch and the Trinity River) that are being undermined by soil erosion. The City must mitigate the risk the pipeline breaking causing discharge of untreated wastewater into the major waterways.

The City has evaluated the undermining of the pipelines and has planned and designed the relocation the pipelines out of the major waterways. The proposed construction will add two new lift stations, approximate 11,000 linear feet of force main, and 1,100 of new gravity sewer mains of various sizes.

PROJECT SCHEDULE

Task	Schedule Date
Closing	January 15, 2025
Engineering Feasibility Report Completion (End of Planning Phase)	October 31, 2024
Design Phase Completion	December 16, 2024
Start of Construction	June 18 2025
Construction Completion	June 29, 2027

Attachments:

1. Financial Review
2. Project Budget
3. Resolution (24-)
4. Water Conservation Review
5. Location Map

COMMITMENT PERIOD: TWELVE (12) MONTHS TO EXPIRE OCTOBER 31, 2025

Financial Review City of Arlington

Attachment 1

Risk Score: 2A

Audit Reviewed: FY 2023

Key Indicators

Indicator	Result	Benchmark
Population Growth, Average Annual 2010-2020	County: 0.76%	State: 1.49%
Top 10 Customers % of Total Revenue	9%	10-15%
Median Household Income as % of State	97%	100%
Days of Cash on Hand (3-year Average)	132 days	30-149 days
Net Fixed Assets/ Annual Depreciation	40 years	12-24 years
Debt Service Coverage Ratio	2.61x	1.0x
Debt-to-Operating Revenues	1.81	4.00-5.99x
Unemployment Rate (July 2024)	City: 4.10%	State: 4.40%
Net Direct Debt/Total Assessed Valuation	1.77%	2.00-4.99%
Working Capital Ratio	5.74	> 1.0

Key Risk Score Strengths

- Water system revenues are sufficient to cover the existing and proposed debt. System revenues have grown by approximately 23 percent over the past 5 years.
- The City's working capital ratio is above the benchmark, indicating it has high liquidity and ample resources to cover its short-term liabilities.
- The City maintains a low debt to operating revenues ratio, indicating that the City has the capacity to take on new system debt.

Key Risk Score Concerns

- The population growth of the City over the past ten years is below the benchmark. However, regional water plan projections expect the region to grow by approximately 16 percent over the next 10 years.
- While the City maintains a high total debt per capita, this is offset by the low self-supporting debt to operating revenues and tax debt to assessed valuation ratios.

PLEDGE

Legal Pledge Name	Utility System Revenues
Type of Pledge	☐ Tax ☒ Revenue ☐ Tax & Revenue ☐ Contract ☐ Other
Revenue Pledge Level	☒ First ☐ Second ☐ Third ☐ N/A

RATES AND CHARGES

Average Residential Use	Gallons/Month	Current Rates	Projected Rates	Current Household Cost Factor	Projected Household Cost Factor
WATER	8,000	\$33.30	\$33.30	1.29	1.29
WASTEWATER	4,000	\$37.26	\$37.26		

TAXES

	2023 Tax Year Rate	Max Projected Tax Rate	Maximum Allowable Rate	3-Year Avg Current Tax Collections	Assessed Valuation
Maintenance & Operation	\$0.4080	\$0.4080	\$2.50	99%	\$41,022,804,076
Interest & Sinking	\$0.1818	\$0.1818			
Total Tax Rate	\$0.5898	\$0.5898			

Cost Savings

Based on a 20-year maturity schedule and current interest rates, the City could save approximately \$2,430,307 over the life of the financing.

Project Data Summary

Responsible Authority	City of Arlington
Program	CWSRF
Commitment Number	L1001934
Project Number	73960
List Year	2024
Type of Pledge	Revenue Pledge
Pledge Level (if applicable)	First Lien
Legal Description	\$16,585,000 City of Arlington, Texas Water & Wastewater System Revenue Bonds, Proposed Series 2025
Tax-exempt or Taxable	Tax-Exempt
Refinance	No
Outlay Requirement	Yes
Disbursement Method	Escrow
Outlay Type	Outlay <> Escrow Release
Qualifies as Disadvantaged	No
State Revolving Fund Type	Non-Equivalency
Financial Managerial & Technical Complete	N/A
Phases Funded	Construction
Pre-Design	No
Project Consistent with State Water Plan	N/A
Water Conservation Plan	Adopted
Overall Risk Score	2A

PROJECT TEAM				
Team Manager	Financial Analyst	Engineering Reviewer	Environmental Reviewer	Attorney
Joe Koen	Arnoldo Rubio	Jason Asbury	Kylie Beard	Marshall Walters

ISSUE BEING EVALUATED
FOR ILLUSTRATION PURPOSES ONLY
City of Arlington

\$16,585,000 City of Arlington, Texas Water & Wastewater System Revenue Bonds, Proposed Series 2025

Dated Date:	1/15/2025	Source:	CWSRF-NON-EQUIVALENCY
Delivery Date:	1/15/2025	Rate:	2.23%
First Interest:	6/1/2025	IUP Year:	2024
First Principal:	6/1/2025	Case:	System Revenue
Last Principal:	6/1/2044	Admin. Fee:	\$285,246
Fiscal Year End:	09/30	Admin. Fee Payment Date:	1/15/2025
Required Coverage:	1.0		

FISCAL YEAR	PROJECTED NET SYSTEM REVENUES	CURRENT DEBT SERVICE	\$16,585,000 ISSUE				TOTAL DEBT SERVICE	COVERAGE
			PRINCIPAL PAYMENT	INTEREST RATE	INTEREST PAYMENT	TOTAL PAYMENT		
2025	\$89,538,000	\$33,511,018	\$690,000	1.84%	\$129,784	\$819,784	\$34,330,802	2.61
2026	89,538,000	32,724,095	705,000	1.83%	330,851	1,035,851	33,759,946	2.65
2027	89,538,000	31,893,812	715,000	1.77%	317,949	1,032,949	32,926,761	2.72
2028	89,538,000	29,911,381	730,000	1.77%	305,294	1,035,294	30,946,675	2.89
2029	89,538,000	27,368,962	740,000	1.75%	292,373	1,032,373	28,401,335	3.15
2030	89,538,000	26,670,718	755,000	1.75%	279,423	1,034,423	27,705,140	3.23
2031	89,538,000	24,912,561	770,000	1.75%	266,210	1,036,210	25,948,771	3.45
2032	89,538,000	24,299,552	780,000	1.76%	252,735	1,032,735	25,332,287	3.53
2033	89,538,000	22,826,307	795,000	1.78%	239,007	1,034,007	23,860,314	3.75
2034	89,538,000	21,879,229	810,000	1.79%	224,856	1,034,856	22,914,085	3.91
2035	89,538,000	20,584,324	825,000	1.92%	210,357	1,035,357	21,619,681	4.14
2036	89,538,000	19,190,181	840,000	2.02%	194,517	1,034,517	20,224,698	4.43
2037	89,538,000	16,454,667	855,000	2.12%	177,549	1,032,549	17,487,216	5.12
2038	89,538,000	13,245,080	875,000	2.20%	159,423	1,034,423	14,279,503	6.27
2039	89,538,000	11,323,135	895,000	2.29%	140,173	1,035,173	12,358,308	7.25
2040	89,538,000	5,586,738	915,000	2.37%	119,678	1,034,678	6,621,415	13.52
2041	89,538,000	5,410,738	935,000	2.44%	97,992	1,032,992	6,443,730	13.90
2042	89,538,000	3,053,069	960,000	2.50%	75,178	1,035,178	4,088,247	21.90
2043	89,538,000	1,924,400	985,000	2.54%	51,178	1,036,178	2,960,578	30.24
2044	89,538,000	1,497,600	1,010,000	2.59%	26,159	1,036,159	2,533,759	35.34
			\$374,267,563	\$16,585,000	\$3,890,684	\$20,475,684	\$394,743,247	

AVERAGE (MATURITY) LIFE	10.53 YEARS
NET INTEREST RATE	2.228%
COST SAVINGS	\$2,430,307
AVERAGE ANNUAL REQUIREMENT	\$1,023,784

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 Arlington

73960 - Kee Branch and Shadow Drive Collection System
Improvements

Budget Items	TWDB Funds	Local and Other Funds	Total
Construction			
Construction	\$16,299,754.00	\$0.00	\$16,299,754.00
Subtotal for Construction	\$16,299,754.00	\$0.00	\$16,299,754.00
Basic Engineering Services			
Construction Engineering	\$0.00	\$1,000,000.00	\$1,000,000.00
Design	\$0.00	\$1,877,421.46	\$1,877,421.46
Planning	\$0.00	\$106,129.00	\$106,129.00
Subtotal for Basic Engineering Services	\$0.00	\$2,983,550.46	\$2,983,550.46
Special Services			
Environmental	\$0.00	\$209,363.00	\$209,363.00
Geotechnical	\$0.00	\$167,067.00	\$167,067.00
Inspection	\$0.00	\$250,000.00	\$250,000.00
Project Management (by engineer)	\$0.00	\$243,074.00	\$243,074.00
Surveying	\$0.00	\$461,587.00	\$461,587.00
Testing	\$0.00	\$150,000.00	\$150,000.00
Subtotal for Special Services	\$0.00	\$1,481,091.00	\$1,481,091.00
Fiscal Services			
Bond Counsel	\$0.00	\$27,836.00	\$27,836.00
Financial Advisor	\$0.00	\$54,269.00	\$54,269.00
Issuance Costs	\$0.00	\$38,990.00	\$38,990.00
Loan Origination Fee	\$285,246.00	\$0.00	\$285,246.00
Subtotal for Fiscal Services	\$285,246.00	\$121,095.00	\$406,341.00
Other			
Land/Easements Acquisition	\$0.00	\$60,000.00	\$60,000.00
Subtotal for Other	\$0.00	\$60,000.00	\$60,000.00
Total	\$16,585,000.00	\$4,645,736.46	\$21,230,736.46

A RESOLUTION OF THE TEXAS WATER DEVELOPMENT BOARD
APPROVING AN APPLICATION FOR FINANCIAL ASSISTANCE IN THE AMOUNT OF
\$16,585,000 TO THE CITY OF ARLINGTON
FROM THE CLEAN WATER STATE REVOLVING FUND
THROUGH THE PROPOSED PURCHASE OF
\$16,585,000 CITY OF ARLINGTON, TEXAS
WATER AND WASTEWATER SYSTEM REVENUE BONDS,
PROPOSED SERIES 2025

(24 -)

Recitals:

The City of Arlington (City), located in Tarrant County, has filed an application for financial assistance in the amount of \$16,585,000 from the Clean Water State Revolving Fund (CWSRF) to finance construction of wastewater system improvements identified as Project No. 73960.

The City seeks financial assistance from the Texas Water Development Board (TWDB) through the TWDB's proposed purchase of \$16,585,000 City of Arlington, Texas Water and Wastewater System 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 TWDB's staff.

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

Findings:

1. The revenue or taxes pledged by the City will be sufficient to meet all the Obligations assumed by the City, in accordance with Texas Water Code § 15.607.
2. The application and assistance applied for meet the requirements of the Federal Water Pollution Control Act, 33 U.S.C. §§ 1251 *et seq.*
3. The term of the Obligations does not exceed the expected useful life of the project proposed by the City.
4. 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.

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

A commitment is made by the TWDB to the City of Arlington for financial assistance in the amount of \$16,585,000 from the Clean Water State Revolving Fund through the TWDB's proposed purchase of \$16,585,000 City of Arlington, Texas Water and

Wastewater System Revenue Bonds, Proposed Series 2025. This commitment will expire on October 31, 2025.

The commitment is conditioned as follows.

Standard Conditions:

1. The 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. If the financial assistance is funded with available cash-on-hand, the TWDB reserves the right to change the designated source of funds to bond proceeds issued for the purpose of reimbursing funds used to provide the financial assistance approved in this Resolution.
2. The commitment is contingent upon the issuance of a written approving opinion of the Attorney General of the State of Texas stating that all the requirements of the laws under which the Obligations are issued have been complied with; that the Obligations were issued in conformity with the Constitution and laws of the State of Texas; and that the Obligations are valid and binding obligations of the City.
3. The commitment is contingent upon the City's compliance with all applicable requirements contained in 31 TAC Chapter 375.
4. The Obligations must provide that the City agrees to comply with all the conditions set forth in the TWDB Resolution.
5. 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 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.
6. 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, at a minimum and regardless of the amount of the Obligations, must agree 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 the rule, 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.
7. The Obligations must require the City to levy a tax or maintain and collect sufficient rates and charges, as applicable, to produce system funds 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.
8. The Obligations must require the City to use any proceeds from the Obligations that are determined to be remaining unused funds for enhancements to the original

project that are explicitly approved by the Executive Administrator or, if no enhancements are authorized by the Executive Administrator, requiring the City to submit a final accounting and disposition of any unused funds. Remaining unused funds are those funds unspent after the original approved project is completed.

9. The Obligations must require the City to use any proceeds from the Obligations that are determined to be surplus funds in a manner approved by the Executive Administrator. Surplus funds are funds remaining after completion of the project and completion of a final accounting.
10. 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.
11. Proceeds of this commitment are public funds. Therefore, the Obligations must require 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.
12. 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 except for an EC project to address PFAs or any contaminant listed on EPA's Contaminant Candidate Lists. 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.
13. Before closing, the City must submit documentation evidencing the adoption and implementation of sufficient system rates and charges or the levy of an interest and sinking tax rate sufficient for the repayment of all system debt service requirements.
14. Before closing, and if not previously provided with the application, the City must submit executed contracts for engineering, and, if applicable, financial advisor and bond counsel contracts, 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.
15. Before closing, when any portion of the financial assistance is to be held in escrow or in trust, the City must execute an escrow or trust agreement, approved as to form and substance by the Executive Administrator and shall submit that executed agreement to the TWDB.
16. The Executive Administrator may require the City to execute a separate financing agreement in form and substance acceptable to the Executive Administrator.

17. The Obligations must provide that the City must comply with all applicable federal laws and TWDB laws and rules related to the use of the financial assistance.
18. 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.
19. The Obligations must require the City to maintain insurance coverage sufficient to protect the TWDB's interest in the project.
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 provide that the City must submit annually an audit prepared by a certified public accountant in accordance with generally accepted auditing standards.

Tax-Exempt Conditions:

22. 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.
23. The City's bond counsel opinion must state that the Obligations are not "private activity bonds." Bond counsel may rely on covenants and representations of the City when rendering this opinion.
24. The Obligations must prohibit the City from using the 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 of 1986, as amended (Code) and the Treasury Regulations promulgated under section 141 (Regulations).
25. The Obligations must provide that no portion of the proceeds of this 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 that are 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 deposited 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.
26. 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 to satisfy the requirements of section 148 of the Code. The Obligations must provide that the City must:
- 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, including receipts, expenditures, and investments, 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 this 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 those proceeds;
 - b. calculate the Rebate Amount, as defined in the Code and Regulations, with respect to this 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 related rulings. The City must maintain a copy of the calculations for at least six years after the final Computation Date;
 - c. as additional consideration for the making of this commitment, and to induce 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 to correct the error within a reasonable amount of time after including payment to the United States of any interest and any penalty required by the Regulations.
27. The Obligations must prohibit 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.

28. 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.
29. 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.
30. The Obligations must provide that the City will refrain from using the proceeds provided by this TWDB commitment or the proceeds of any prior bonds to pay debt service on another issue more than 90 days after the date of issue of the Obligations in contravention of the requirements of section 149(d) of the Code, relating to advance refundings.
31. The transcript must include evidence that the information reporting requirements of section 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 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.
32. 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.
33. Before closing, the City must 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.

State Revolving Fund Conditions:

34. The City must submit outlay reports on a quarterly or monthly basis with sufficient documentation on costs in accordance with TWDB outlay report guidelines.
35. The Obligations must provide that all laborers and mechanics employed by contractors and subcontractors for projects be paid wages at rates not less than those prevailing on projects of a similar character in the locality in accordance with the Davis-Bacon Act, and the U.S. Department of Labor’s implementing regulations. The City, all contractors, and all sub-contractors must ensure that all project contracts mandate compliance with Davis-Bacon. All contracts and subcontracts for the construction of the project carried out in whole or in part with financial assistance made available as provided must insert in full in any contract in excess of \$2,000 the contract clauses as provided by the TWDB.
36. The Obligations must provide that the City shall provide the TWDB with all information required to be reported in accordance with the Federal Funding Accountability and Transparency Act of 2006, Pub. L. 109-282, as amended by Pub. L. 110-252. The City shall obtain a Unique Entity Identification Number and shall

register with System for Award Management (SAM) and maintain current registration at all times during which the Obligations are outstanding.

37. The Obligations must provide that all proceeds of this financial assistance will be timely and expeditiously used, as required by 40 CFR § 35.3135(d), and must provide that the City will adhere to the approved project schedule.
38. The Obligations must provide that the City will abide by all applicable construction contract requirements related to the use of iron and steel products produced in the United States, as required by 31 TAC § 375.3, 33 U.S.C. § 1388, and related State Revolving Fund Policy Guidelines.
39. The Obligations must provide that the City must comply with the requirements set forth in 33 U.S.C. § 1382 *et seq.* related to maintaining project accounts containing financial assistance for planning, design, acquisition, or construction in accordance with generally accepted accounting principles (GAAP). These standards and principles also apply to the reporting of underlying infrastructure assets.
40. The Obligations must provide that the City shall abide by the prohibition on certain telecommunications and video surveillance services or equipment as required by 2 CFR § 200.216.

Clean Water State Revolving Fund Conditions:

41. The City must pay at closing an origination fee approved by the Executive Administrator of the TWDB pursuant 31 TAC Chapter 375.

Pledge Conditions:

42. The Obligations must be on parity with any existing obligations that are secured with the same pledge of security as the proposed Obligations.
43. The Obligations must be governed by the additional debt test and reserve requirement as provided in the outstanding City of Arlington, Texas Water and Wastewater System Revenue Bonds, Series 2019D.

APPROVED and ordered of record this 17th day of October 2024.

TEXAS WATER DEVELOPMENT BOARD

Brooke T. Paup, 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:

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.



City of Arlington Tarrant County

