

# Texas Water Development Board

## PROJECT FUNDING REQUEST

**BOARD DATE:** July 27, 2022

**Team Manager:** Joe Koen

### ACTION REQUESTED

Approve by resolution a request from the City of Dallas (Dallas, Denton, Collin, Ellis, Tarrant, and Kaufman Counties) for \$170,000,000 in multi-year financing from the State Water Implementation Revenue Fund for Texas for planning, design, and construction of a water conservation project.

### STAFF RECOMMENDATION

☒ Approve      ☐ No Action

### BACKGROUND

The City of Dallas (City) is in Dallas County, the second-most populous county in Texas. The City provides water service to a population of 2,460,490 and wholesale water supply to a population of 1,084,010. The City also provides retail wastewater services to a population of 1,345,990 and wholesale wastewater services to a population 106,916. The City currently has 251,319 retail connections and 42,145 commercial connections.

### PROJECT NEED AND DESCRIPTION

The City maintains over 5,000 miles of waterlines with a service area over 700 square miles. The City has experienced water main leaks and breaks, causing significant water loss throughout the system. The City's water main replacement program is a significant water management strategy needed to meet the City's water conservation goals.

The City is requesting financing for planning, design and construction for the implementation of the water main replacement program. Approximately 40 miles of small diameter water main pipeline will be replaced or rehabilitated annually.

### COMMITMENT PERIOD

Multi-year Commitment	Expiration date
\$34,000,000 Proposed Series 2022	December 31, 2022
\$34,000,000 Proposed Series 2023	December 31, 2023
\$34,000,000 Proposed Series 2024	December 31, 2024
\$34,000,000 Proposed Series 2025	December 31, 2025
\$34,000,000 Proposed Series 2026	December 31, 2026

## PROJECT SCHEDULE

Task	Schedule Date
Closing	December 8, 2022
Engineering Feasibility Report Completion (End of Planning Phase)	February 16, 2023
Design Phase Completion	June 14, 2023
Start of Construction	October 1, 2023
Construction Completion	October 1, 2030

## KEY ISSUES

The financial analysis presented in Attachment 1 includes the City's three funding requests on today's agenda as well as the Tarrant Regional Water District's request (District). The District's request is included since the proposed debt would be paid by the City through a contract with the District.

## LEGAL

### Special Conditions

- None

### Attachments:

1. Financial Review
2. Project Budget
3. Resolution (22- )
4. Water Conservation Review
5. Location Map

# Financial Review

## City of Dallas

Attachment 1

Risk Score: 2A

Audit Reviewed: FY 2021

### Key Indicators

Indicator	Result	Benchmark
Population Growth, Average Annual 2010-2020	City: 0.86%	State: 1.49%
Top 10 Customers % of Total Revenue	4.29%	10-15%
Median Household Income as % of State	85%	100%
Days of Cash on Hand (3-year Average)	223 days	30-149 days
Net Fixed Assets/ Annual Depreciation	39 years	12-24 years
Debt Service Coverage Ratio	1.33x	1.0x
Debt-to-Operating Revenues	4.37	4.00-5.99x
Unemployment Rate (April 2022)	City: 3.40%	State: 3.70%
Working Capital Ratio	21.97	> 1.0

### Key Risk Score Strengths

- Water system revenues are adequate to maintain coverage of all existing and proposed debt.
- A high working capital ratio provides the City with ample resources to cover short-term liabilities and shows a strong liquidity position.
- The City's days of cash on hand is above the benchmark, indicating the City can pay its operating expenses with the cash it has available.
- The City's top ten customers of the water system are below five percent indicating that it does not rely on one customer to generate most of its revenue.

### Key Risk Score Concerns

- The population growth of the City is below the benchmark over the past ten years; however, regional water plan projections expect the City to grow by approximately 10 percent over the next 10 years.

### PLEDGE

Legal Pledge Name	Utility System Revenues
Type of Pledge	<input type="checkbox"/> Tax <input checked="" type="checkbox"/> Revenue <input type="checkbox"/> Tax & Revenue <input type="checkbox"/> Contract <input type="checkbox"/> Other
Revenue Pledge Level	<input 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	8,300	\$30.73	\$30.73	1.47	1.47
WASTEWATER	5,300	\$33.50	\$33.50		

### Cost Savings

Based on a 25-year maturity schedule and current interest rates, the City could save approximately \$1,868,270 over the life of the financing.

## Project Data Summary

<b>Responsible Authority</b>	Dallas
<b>Program</b>	SWIFT
<b>Commitment Number</b>	LM221535, LM231535, LM241535, LM251535, LM261535
<b>Project Number</b>	51075
<b>List Year</b>	2022
<b>Type of Pledge</b>	Revenue Pledge
<b>Pledge Level (if applicable)</b>	First Lien
<b>Legal Description</b>	\$34,000,000 City of Dallas, Tx Waterworks and Sewer System Revenue Bonds, Proposed Series 2022C, \$34,000,000 City of Dallas, Tx Waterworks and Sewer System Revenue Bonds, Proposed Series 2023C, \$34,000,000 City of Dallas, Tx Waterworks and Sewer System Revenue Bonds, Proposed Series 2024C, \$34,000,000 City of Dallas, Tx Waterworks and Sewer System Revenue Bonds, Proposed Series 2025C, \$34,000,000 City of Dallas, Tx Waterworks and Sewer System Revenue Bonds, Proposed Series 2026C
<b>Tax-exempt or Taxable</b>	Tax-Exempt
<b>Refinance</b>	No
<b>Outlay Requirement</b>	No
<b>Disbursement Method</b>	Escrow
<b>Outlay Type</b>	Outlay <> Escrow Release
<b>Qualifies as Disadvantaged</b>	No
<b>SWIFT Financing Type</b>	Low-Interest
<b>Financial Managerial &amp; Technical Complete</b>	N/A
<b>Phases Funded</b>	Planning, Design, and Construction
<b>Pre-Design</b>	Yes
<b>Project Consistent with State Water Plan</b>	Yes
<b>Water Conservation Plan</b>	Adopted
<b>Overall Risk Score</b>	2A

### PROJECT TEAM

Team Manager	Financial Analyst	Engineering Reviewer	Environmental Reviewer	Attorney
Joe Koen	Arnoldo Rubio	Jeannine Amos	Kylie Beard	Breann Hunter

ISSUE BEING EVALUATED  
FOR ILLUSTRATION PURPOSES ONLY  
City of Dallas

**\*\$114,800,000 City of Dallas, Tx Waterworks and Sewer System Revenue Bonds, Proposed Series 2022**

<b>Dated Date:</b>	<b>12/8/2022</b>	<b>Source:</b>	<b>SWIFT-LOW-25YR</b>
<b>Delivery Date:</b>	<b>12/8/2022</b>	<b>Rate:</b>	<b>3.01%</b>
<b>First Interest:</b>	<b>4/1/2023</b>	<b>IUP Year:</b>	<b>2022</b>
<b>First Principal:</b>	<b>10/1/2023</b>	<b>Case:</b>	<b>System Revenue</b>
<b>Last Principal:</b>	<b>10/1/2047</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	\$114,800,000 ISSUE				**PROPOSED SWIFT MULTIYEAR COMMITMENT AND PROJECT 51078	TOTAL DEBT SERVICE	COVERAGE
			PRINCIPAL PAYMENT	INTEREST RATE	INTEREST PAYMENT	TOTAL PAYMENT			
2023	\$288,551,000	\$209,081,297	-	-	\$996,785	\$996,785	\$11,265,914	\$221,343,996	1.30
2024	288,551,000	196,718,460	\$3,375,000	1.56%	3,149,274	6,524,274	13,972,975	\$217,215,709	1.33
2025	288,551,000	184,486,880	3,430,000	1.78%	3,092,422	6,522,422	15,836,224	\$206,845,525	1.40
2026	288,551,000	170,345,034	3,495,000	1.90%	3,028,692	6,523,692	17,729,379	\$194,598,105	1.48
2027	288,551,000	170,578,043	3,565,000	1.96%	2,960,553	6,525,553	19,639,822	\$196,743,417	1.47
2028	288,551,000	170,566,262	3,630,000	2.03%	2,888,771	6,518,771	21,133,888	\$198,218,921	1.46
2029	288,551,000	170,558,618	3,710,000	2.13%	2,812,415	6,522,415	21,161,219	\$198,242,252	1.46
2030	288,551,000	162,948,632	3,795,000	2.24%	2,730,400	6,525,400	21,186,456	\$190,660,488	1.51
2031	288,551,000	148,320,284	3,885,000	2.31%	2,643,024	6,528,024	21,212,559	\$176,060,866	1.64
2032	288,551,000	148,322,320	3,970,000	2.38%	2,550,909	6,520,909	21,234,556	\$176,077,784	1.64
2033	288,551,000	148,855,563	4,070,000	2.42%	2,454,419	6,524,419	21,258,825	\$176,638,807	1.63
2034	288,551,000	148,845,280	4,170,000	2.59%	2,351,171	6,521,171	21,283,943	\$176,650,394	1.63
2035	288,551,000	148,863,268	4,285,000	2.73%	2,238,679	6,523,679	21,307,672	\$176,694,619	1.63
2036	288,551,000	148,851,307	4,410,000	2.83%	2,117,787	6,527,787	21,327,804	\$176,706,898	1.63
2037	288,551,000	134,106,556	4,535,000	2.92%	1,989,175	6,524,175	21,349,884	\$161,980,615	1.78
2038	288,551,000	122,111,355	4,670,000	3.00%	1,852,914	6,522,914	21,380,195	\$150,014,463	1.92
2039	288,551,000	112,767,341	4,815,000	3.07%	1,708,953	6,523,953	21,411,885	\$140,703,179	2.05
2040	288,551,000	112,770,398	4,965,000	3.13%	1,557,341	6,522,341	21,450,698	\$140,743,437	2.05
2041	288,551,000	100,238,967	5,130,000	3.19%	1,397,815	6,527,815	21,495,364	\$128,262,146	2.25
2042	288,551,000	91,073,666	5,295,000	3.22%	1,230,742	6,525,742	21,542,064	\$119,141,472	2.42
2043	288,551,000	81,735,258	5,465,000	3.26%	1,056,413	6,521,413	21,590,102	\$109,846,772	2.63
2044	288,551,000	75,226,079	5,645,000	3.21%	876,731	6,521,731	21,634,425	\$103,382,235	2.79
2045	288,551,000	75,226,319	5,830,000	3.21%	692,558	6,522,558	21,686,311	\$103,435,188	2.79
2046	288,551,000	63,389,196	6,025,000	3.21%	502,285	6,527,285	21,748,240	\$91,664,720	3.15
2047	288,551,000	51,856,649	6,215,000	3.21%	305,833	6,520,833	21,824,233	\$80,201,715	3.60
2048	288,551,000	41,062,855	6,420,000	3.21%	103,041	6,523,041	21,898,224	\$69,484,120	4.15
2049	288,551,000	29,229,116	-	-	-	-	21,979,103	\$51,208,218	5.63
2050	288,551,000	26,610,035	-	-	-	-	19,897,777	\$46,507,813	6.20
2051	288,551,000	11,687,930	-	-	-	-	17,799,466	\$29,487,396	9.79
2052	288,551,000	2,640,656	-	-	-	-	15,693,844	\$18,334,501	15.74
		\$3,459,073,621	\$114,800,000		\$49,289,097	\$164,089,097		\$4,227,095,767	

\*This total includes SWIFT applications 51075, 51076, and 51077 that will be closing in 2022

\*\*This repayment schedule includes total payments for project 51075 multiyear 2023 to 2026 closing and Tarrant RWD project 51078 being paid by the City of Dallas

<b>AVERAGE (MATURITY) LIFE</b>	<b>14.24 YEARS</b>
<b>NET INTEREST RATE</b>	<b>3.015%</b>
<b>COST SAVINGS</b>	<b>\$6,283,149</b>
<b>AVERAGE ANNUAL REQUIREMENT</b>	<b>\$5,469,637</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.*



Last Update: 6/15/2022

## Current Budget Summary Attachment 2

51075 - City of Dallas

Infrastructure to Treat and Deliver to  
Customers: Water Main Replacement Program

Budget Items	TWDB Funds	Total
<b>Construction</b>		
Construction	\$150,000,000.00	\$150,000,000.00
<b>Subtotal for Construction</b>	<b>\$150,000,000.00</b>	<b>\$150,000,000.00</b>
<b>Basic Engineering Services</b>		
Design	\$17,000,000.00	\$17,000,000.00
Planning	\$3,000,000.00	\$3,000,000.00
<b>Subtotal for Basic Engineering Services</b>	<b>\$20,000,000.00</b>	<b>\$20,000,000.00</b>
<b>Total</b>	<b>\$170,000,000.00</b>	<b>\$170,000,000.00</b>

A RESOLUTION OF THE TEXAS WATER DEVELOPMENT BOARD  
APPROVING THE PROPOSED PURCHASE IN ONE OR MORE SERIES OF CITY OF DALLAS,  
TEXAS WATERWORKS AND SEWER SYSTEM REVENUE BONDS  
FROM THE STATE WATER IMPLEMENTATION REVENUE FUND FOR TEXAS

(22- )

WHEREAS, the City of Dallas (City) has filed an application for financial assistance from the State Water Implementation Revenue Fund for Texas (SWIRFT), in accordance with 31 Texas Administrative Code (TAC) 10 Chapter 363, Subchapter M; and

WHEREAS, the City seeks financial assistance in the amount of \$170,000,000 from the Texas Water Development Board (TWDB) for Project No. 51075 to finance the planning, design, and construction of a water main replacement project; and

WHEREAS, the City seeks financial assistance in the amount of \$7,500,000 from the TWDB for Project No. 51076 to finance the planning and design of a lake pump station replacement project; and

WHEREAS, the City seeks financial assistance in the amount of \$73,300,000 from the TWDB for Project No. 51077 to finance the construction of a treated water pipeline project; and

WHEREAS, Projects No. 51075, 51076, and 51077 are collectively referred to in this Resolution as “the Projects”; and

WHEREAS, the aggregate principal amount of financing the City seeks for the Projects is \$250,800,000; and

WHEREAS, the TWDB proposes to purchase in one or more series City of Dallas, Texas Waterworks and Sewer System Revenue Bonds (together with all authorizing documents (Obligations)), all as is more specifically set forth in the application and in recommendations of the Executive Administrator’s staff; and

WHEREAS, the City has offered a pledge of the net revenues of the waterworks and sewer system 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 § 363.1307;

WHEREAS, subject to the City’s use of an approved debt service structure, interest rate subsidies are available to the City for State Fiscal Year 2022 at up to the following levels: 25% for financial assistance for a term of 20 years, 18% for financial assistance for a term of 21 to 25 years, and 14% for financial assistance for a term of 26 to 30 years. The interest rate subsidy applicable to each subsequent proposed series may be different than

the interest rate subsidy available for State Fiscal Year 2022 and will be set through each financing agreement executed between the TWDB and the City; and

WHEREAS, the interest rate subsidies provided above are based on assumptions necessary to generate an optimum debt service structure for the anticipated TWDB SWIRFT bond issuance and are subject to modification as necessary to preserve and maintain the integrity of the SWIRFT Program; and

WHEREAS, the City is requesting a waiver of the requirement that a portion of the financial assistance received from the TWDB be used to mitigate the City's system water loss for Projects No. 51076 and 51077 because Project No. 51075 addresses this loss; and

WHEREAS, the TWDB hereby finds:

1. that the application and assistance applied for meet the requirements of Texas Water Code, Chapter 15, Subchapters G and H and 31 TAC Chapter 363, Subchapters A and M;
2. that the Project is a recommended water management strategy project in the State Water Plan adopted pursuant to Texas Water Code § 16.051, in accordance with Texas Water Code § 15.474(a);
3. that a water conservation plan has been submitted and implemented in accordance with Texas Water Code § 16.4021 and 31 TAC § 363.1309(b)(1);
4. that the current water audit has been completed by the City and filed with the TWDB in accordance with Texas Water Code § 16.0121 and 31 TAC § 358.6;
5. that, based on the conditions as described above, the City is satisfactorily addressing the City's system water loss, which supports a waiver of the requirement that a portion of the financial assistance received from the TWDB be used to mitigate the City's system water loss in accordance with Texas Water Code § 16.0121(g);
6. that the City has acknowledged its legal obligation to comply with any applicable requirements of federal law relating to contracting with disadvantaged business enterprises and any applicable state law relating to contracting with historically underutilized businesses, in accordance with Texas Water Code § 15.435(h) and 31 TAC § 363.1309(b)(3).

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

1. for the reasons stated above, the TWDB hereby waives the requirements of Texas Water Code § 16.0121(g); and
2. a commitment is made by the TWDB to the City of Dallas for financial assistance in the amount of \$170,000,000 from the State Water Implementation Revenue Fund for



Texas, Project No. 51075, to be evidenced by the TWDB's proposed purchase of City of Dallas Texas Waterworks and Sewer System Revenue Bonds as follows:

\$34,000,000 Proposed Series 2022C, to expire on December 31, 2022;  
\$34,000,000 Proposed Series 2023C, to expire on December 31, 2023;  
\$34,000,000 Proposed Series 2024C, to expire on December 31, 2024;  
\$34,000,000 Proposed Series 2025C, to expire on December 31, 2025;  
\$34,000,000 Proposed Series 2026C, to expire on December 31, 2026; and

3. a commitment is made by the TWDB to the City of Dallas for financing for Project No. 51076 through the proposed purchase of \$7,500,000 City of Dallas, Texas Waterworks and Sewer System Revenue Bonds, Proposed Series 2022 from the State Water Implementation Revenue Fund; and
4. a commitment is made by the TWDB to the City of Dallas for financing for Project No. 51077 in the amount of \$73,300,000 City of Dallas, Texas Waterworks and Sewer System Revenue Bonds, Proposed Series 2022 from the State Water Implementation Revenue Fund; and
5. the aggregate principal amount of funds committed from the State Water Implementation Revenue Fund for Texas to the City for Projects No. 51075, 51076 and 51077 to be purchased in one or more series of City of Dallas, Texas Waterworks and Sewer System Revenue Bonds is \$250,800,000.
6. The commitments of financial assistance made to the City of Dallas for Projects No. 51076 and 51077 will expire on December 31, 2022.

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 City 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 City;
3. this commitment is contingent upon the City's continued compliance with all applicable laws, rules, policies, and guidance as these may be amended from time to time to adapt to a change in law, in circumstances, or any other legal requirement;
4. this commitment is contingent upon the City executing a separate financing agreement for each project, approved as to form and substance by the Executive

Administrator, and submitting that executed agreement to the TWDB consistent with the terms and conditions described in the financing agreement;

5. interest rate subsidies for non-level debt service structure are subject to adjustment by the Executive Administrator;
6. the City shall use a paying agent/registrar in accordance with 31 TAC § 363.42(c)(2), and shall require the paying agent/registrar to provide a copy of all receipts documenting debt service payments to the TWDB and to the TWDB's designated Trustee;

The Following Conditions Must Be Included in the Obligations:

7. the Obligations must provide that the Obligations can be called for early redemption on any date beginning on or after the first interest payment date that is 10 years from the dated date of the Obligations, at a redemption price of par, together with accrued interest to the date fixed for redemption;
8. the Obligations must provide that the City will comply with all applicable TWDB laws and rules related to the use of the financial assistance;
9. the Obligations must provide that the City must comply with all conditions as specified in the final environmental finding of the Executive Administrator when issued, including the standard emergency discovery conditions for threatened and endangered species and cultural resources;
10. the Obligations must contain a provision requiring the City to maintain insurance coverage sufficient to protect the TWDB's interest in the project;
11. the Obligations must include a provision wherein the City, or an obligated person for whom financial or operating data is presented to the TWDB in the application for financial assistance either individually or in combination with other issuers of the City's Obligations or obligated persons, will, at a minimum, regardless of the amount of the Obligations, covenant to comply with requirements for continuing disclosure on an ongoing basis substantially in the manner required by 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 such bonds under SEC Rule 15c2-12;
12. the Obligations must contain a provision requiring the City to levy a tax and/or maintain and collect sufficient rates and charges to produce system revenues in an amount necessary to meet the debt service requirements of all outstanding obligations and to maintain the funds established and required by the Obligations;

13. the Obligations must include a provision requiring the City to use any proceeds from the Obligations that are determined to be surplus proceeds remaining after completion of the Project and completion of a final accounting in a manner approved by the Executive Administrator;
14. 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;
15. 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;
16. financial assistance proceeds shall not be used by the City 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 City 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, recycling and disposition of any contaminated sewage sludge, contaminated sediments and/or contaminated media that may be generated by the City, its contractors, consultants, agents, officials and employees as a result of activities relating to the Project to the extent permitted by law;
17. the Obligations must include a provision stating that the City shall report to the TWDB the amounts of Project funds, if any, that were used to compensate historically underutilized businesses that worked on the Project, in accordance with 31 TAC § 363.1312;
18. the Obligations must contain a provision that the TWDB will purchase the Obligations, acting through the TWDB's designated Trustee, and the Obligations shall be registered in the name of Cede & Co. and closed in book-entry-only form in accordance with 31 TAC § 363.42(c)(1);
19. the Obligations must contain a provision stating that the City 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 G and Texas Water Code § 17.183;
20. 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 as

amended (Code) and the Treasury Regulations promulgated thereunder (Regulations);

21. 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 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 financing for 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;
22. the Obligations must include a provision requiring the City 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 thereof) on its books of account separately and apart from all other funds (and receipts, expenditures and investments thereof) 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 therewith;
  - 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 thereunder. The City shall maintain a copy of such calculations for at least six years after the final Computation Date;

- c. as additional consideration for providing financial assistance, and in order to induce providing financial assistance by measures designed to ensure the excludability of the interest on the TWDB's Source Series Bonds from the gross income of the owners thereof for federal income tax purposes, pay to the United States the amount described in paragraph (b) above within 30 days after each Computation Date;
  - d. exercise reasonable diligence to assure that no errors are made in the calculations required by paragraph (b) and, if such error is made, to discover and promptly to correct such error within a reasonable amount of time thereafter, including payment to the United States of any interest and any penalty required by the Regulations;
23. 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;
  24. 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;
  25. 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 § 149(d) of the Code (related to "advance refundings");
  26. the Obligations must provide that neither the City nor a related party thereto 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. the Obligations shall be on parity with any existing obligations that are secured with the same pledge of security as the proposed Obligations; and
  28. the Obligations shall be governed by the additional debt test and reserve requirement as provided in the outstanding City of Dallas, Texas Waterworks and Sewer System Revenue Bonds, Series 2021B; and

Conditions to Close or for Release of Funds:

29. prior to closing, the City 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;
30. prior to closing, if not previously provided with the application, the City shall submit executed contracts for engineering and, if applicable, financial advisor and bond counsel, for the Project that are satisfactory to the Executive Administrator. Fees to

be reimbursed under the contracts must be reasonable in relation to the services performed, reflected in the contract, and acceptable to the Executive Administrator;

31. prior to closing, when any portion of financial assistance is to be held in escrow or in trust, the City shall execute an escrow agreement or trust agreement, approved as to form and substance by the Executive Administrator, and shall submit that executed agreement to the TWDB;
32. prior to closing, the City's bond counsel must prepare a written opinion that states that the interest on the Obligations is excludable from gross income or is exempt from federal income taxation. Bond counsel may rely on covenants and representations of the City when rendering this opinion;
33. prior to closing, the City's bond counsel must prepare a written opinion that states that the Obligations are not "private activity bonds." Bond counsel may rely on covenants and representations of the City when rendering this opinion;
34. 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;
35. the transcript must include evidence that the information reporting requirements of § 149(e) of the Internal Revenue Code will be satisfied. This requirement may be satisfied by filing an IRS Form 8038 with the Internal Revenue Service. In addition, the applicable completed IRS Form 8038 or other evidence that the information reporting requirements of § 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;

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

Special Condition:

36. for Project No. 51076 the Obligations must contain a provision requiring the City to submit quarterly status reports on the progress of the Project that detail information requested by the Executive Administrator. The Executive Administrator may withhold authorization to release funds from escrow or adjust the amount of funds to be released from escrow based on the receipt of the quarterly status reports and the projected quarterly needs for the Project.

APPROVED and ordered of record this, the 27th day of July 2022.

TEXAS WATER DEVELOPMENT BOARD

\_\_\_\_\_  
Brooke T. Paup, Chairwoman

DATE SIGNED: \_\_\_\_\_

ATTEST:

\_\_\_\_\_  
Jeff Walker, Executive Administrator

Water

Wastewater

Other

**WATER CONSERVATION REVIEW**

Review Date:

Project ID:

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:**

Service connections:

Length of main lines (miles):

Water Loss

Retail population:

Connections per mile:

(gal/connection/day):

Water Loss GPCD:

ILI<sup>1</sup>:*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.

**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.

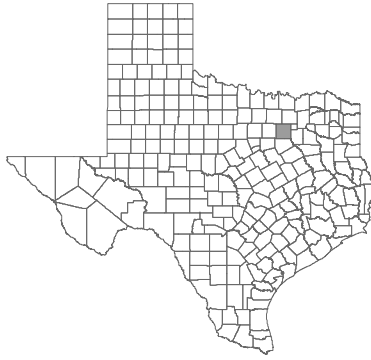
**Water loss** is the difference between the input volume and the authorized consumption within a water system. Water Loss consists of real losses and apparent losses.

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

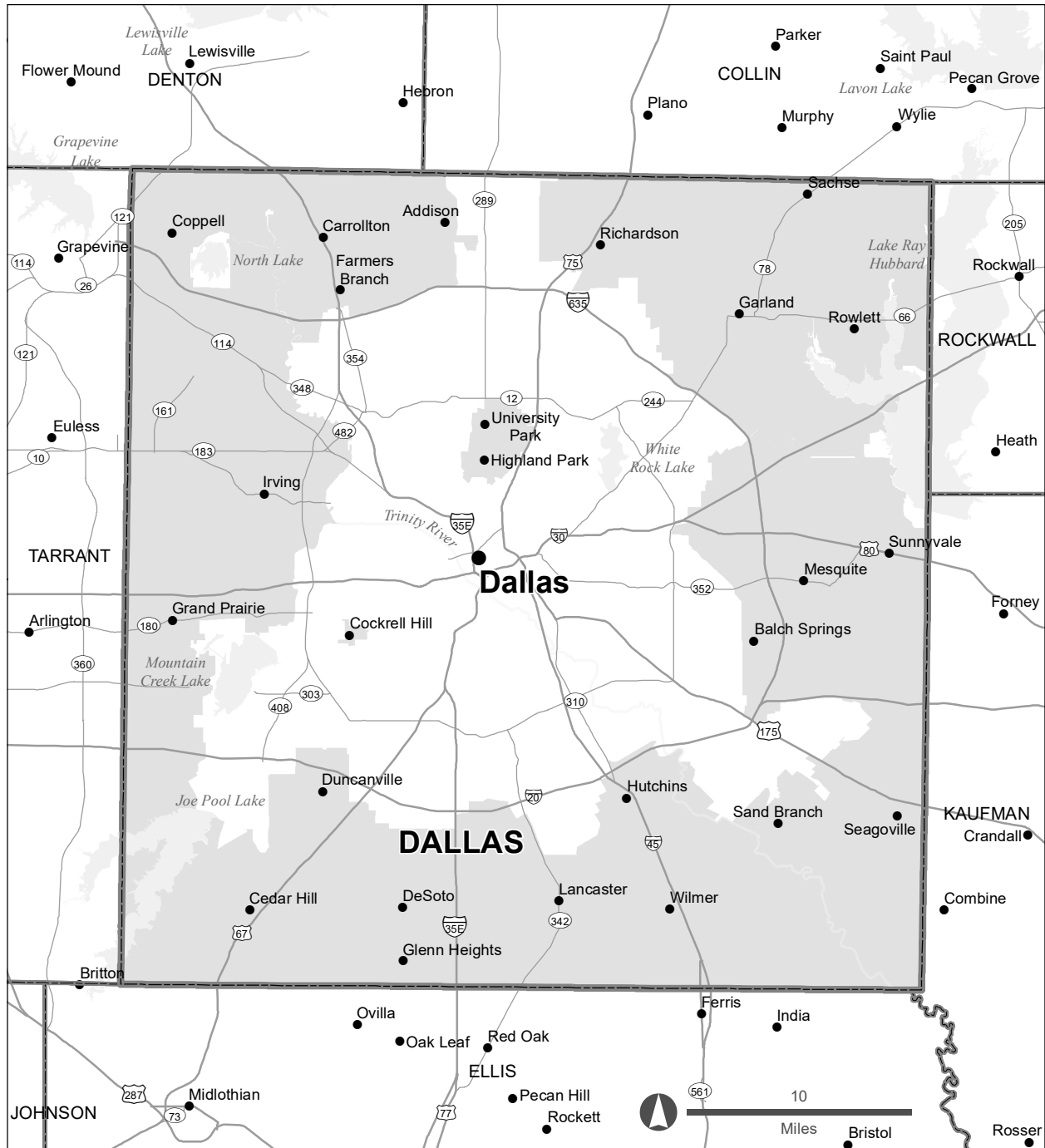
**Water Loss per Connection per Day** Calculated as the water loss volume divided by the number service connections divided by 365. This indicator allows for reliable performance tracking in the water utility's efforts to reduce water losses. It replaces water loss percentage.

**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.



## City of Dallas Dallas County



# Texas Water Development Board

## PROJECT FUNDING REQUEST

**BOARD DATE:** July 27, 2022

**Team Manager:** Joe Koen

### ACTION REQUESTED

Approve by resolution a request from the City of Dallas (Dallas, Denton, Collin, Ellis, Tarrant, and Kaufman Counties) for \$73,300,000 in financing from the State Water Implementation Revenue Fund for Texas for construction of a treated water pipeline project and a waiver of the requirement to include funds to mitigate water loss as part of this project.

### STAFF RECOMMENDATION

☒ Approve ☐ No Action

### BACKGROUND

The City of Dallas (City) is located in Dallas, Denton, Collin, Ellis, Tarrant, and Kaufman Counties approximately 35 miles east of Fort Worth, Texas. The City provides water and wastewater services to a population of 2,460,490 and wholesale water supply to a population of 1,084,010. The City also provides retail wastewater services to a population 1,345,990 and wholesale wastewater services to a population 106,916. The City currently has 251,319 retail connections and 42,145 commercial connections.

### PROJECT NEED AND DESCRIPTION

The City has conducted a comprehensive assessment of the City's water delivery system to address the current and projected water needs. As part of this assessment, the City has identified a need to increase capacity to meet future demands and provide reliability and resiliency to the existing system.

The City is requesting funding for the construction of the Southwest Pipeline project to upgrade the transmission system between the East Side Water Treatment Plant and the Summit Ground Storage Tanks in Cedar Hill, consisting of approximately 6 miles of a 96-inch transmission main, a pressure reducing valve and vault, and connection to an existing 66-inch pipeline.

### PROJECT SCHEDULE

Task	Schedule Date
Closing	December 8, 2022
Engineering Feasibility Report Completion (End of Planning Phase)	January 20, 2023
Design Phase Completion	June 16, 2023
Start of Construction	November 20, 2023
Construction Completion	November 21, 2025

**COMMITMENT PERIOD:** FIVE (5) MONTHS TO EXPIRE DECEMBER 31, 2022

## **KEY ISSUES**

The City is above its water loss threshold for real loss. The City is requesting a waiver of the requirement that a portion of the funds be used to mitigate the City's water loss. Texas Water Development Board (TWDB) conservation staff believes that the City's planned water main replacement program (Project No. 51075) and the City's current Drinking Water State Revolving Fund water main replacement (Project No. 62741) will assist the City in mitigating its real water loss.

The financial analysis presented in Attachment 1 includes the City's three funding requests on today's agenda as well as the Tarrant Regional Water District's request (District). The District's request is included since the proposed debt would be paid by the City through a contract with the District.

## **LEGAL**

### **Special Conditions**

- None

### **Attachments:**

1. Financial Review
2. Project Budget
3. Resolution (22- )
4. Water Conservation Review
5. Location Map

# Financial Review

## City of Dallas

Attachment 1

Risk Score: 2A

Audit Reviewed: FY 2021

### Key Indicators

Indicator	Result	Benchmark
Population Growth, Average Annual 2010-2020	City: 0.86%	State: 1.49%
Top 10 Customers % of Total Revenue	4.29%	10-15%
Median Household Income as % of State	85%	100%
Days of Cash on Hand (3-year Average)	223 days	30-149 days
Net Fixed Assets/ Annual Depreciation	39 years	12-24 years
Debt Service Coverage Ratio	1.33x	1.0x
Debt-to-Operating Revenues	4.37	4.00-5.99x
Unemployment Rate (April 2022)	City: 3.40%	State: 3.70%
Working Capital Ratio	21.97	> 1.0

### Key Risk Score Strengths

- Water system revenues are adequate to maintain coverage of all existing and proposed debt.
- A high working capital ratio provides the City with ample resources to cover short-term liabilities and shows a strong liquidity position.
- The City's days of cash on hand is above the benchmark, indicating the City can pay its operating expenses with the cash it has available.
- The City's top ten customers of the water system are below five percent indicating that it does not rely on one customer to generate most of its revenue.

### Key Risk Score Concerns

- The population growth of the City is below the benchmark over the past ten years; however, regional water plan projections expect the City to grow by approximately 10 percent over the next 10 years.

### PLEDGE

Legal Pledge Name	Utility System Revenues
Type of Pledge	<input type="checkbox"/> Tax <input checked="" type="checkbox"/> Revenue <input type="checkbox"/> Tax & Revenue <input type="checkbox"/> Contract <input type="checkbox"/> Other
Revenue Pledge Level	<input 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	8,300	\$30.73	\$30.73	1.47	1.47
WASTEWATER	5,300	\$33.50	\$33.50		

### Cost Savings

Based on a 25-year maturity schedule and current interest rates, the City could save approximately \$4,011,254 over the life of the financing.

## Project Data Summary

<b>Responsible Authority</b>	Dallas
<b>Program</b>	SWIFT
<b>Commitment Number</b>	L1001532
<b>Project Number</b>	51077
<b>List Year</b>	2022
<b>Type of Pledge</b>	Revenue Pledge
<b>Pledge Level (if applicable)</b>	First Lien
<b>Legal Description</b>	\$73,300,000 City of Dallas, Tx Waterworks and Sewer System Revenue Bonds, Proposed Series 2022
<b>Tax-exempt or Taxable</b>	Tax-Exempt
<b>Refinance</b>	No
<b>Outlay Requirement</b>	No
<b>Disbursement Method</b>	Escrow
<b>Outlay Type</b>	Outlay <> Escrow Release
<b>Qualifies as Disadvantaged</b>	No
<b>SWIFT Financing Type</b>	Low-Interest
<b>Financial Managerial &amp; Technical Complete</b>	N/A
<b>Phases Funded</b>	Construction
<b>Pre-Design</b>	No
<b>Project Consistent with State Water Plan</b>	Yes
<b>Water Conservation Plan</b>	Adopted
<b>Overall Risk Score</b>	2A

### PROJECT TEAM

<b>Team Manager</b>	<b>Financial Analyst</b>	<b>Engineering Reviewer</b>	<b>Environmental Reviewer</b>	<b>Attorney</b>
Joe Koen	Arnoldo Rubio	Michael Brooks	Kylie Beard	Breann Hunter

ISSUE BEING EVALUATED  
FOR ILLUSTRATION PURPOSES ONLY  
City of Dallas

**\*\$114,800,000 City of Dallas, Tx Waterworks and Sewer System Revenue Bonds, Proposed Series 2022**

<b>Dated Date:</b>	<b>12/8/2022</b>	<b>Source:</b>	<b>SWIFT-LOW-25YR</b>
<b>Delivery Date:</b>	<b>12/8/2022</b>	<b>Rate:</b>	<b>3.01%</b>
<b>First Interest:</b>	<b>4/1/2023</b>	<b>IUP Year:</b>	<b>2022</b>
<b>First Principal:</b>	<b>10/1/2023</b>	<b>Case:</b>	<b>System Revenue</b>
<b>Last Principal:</b>	<b>10/1/2047</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	\$114,800,000 ISSUE				**PROPOSED SWIFT MULTIYEAR COMMITMENT AND PROJECT 51078	TOTAL DEBT SERVICE	COVERAGE
			PRINCIPAL PAYMENT	INTEREST RATE	INTEREST PAYMENT	TOTAL PAYMENT			
2023	\$288,551,000	\$209,081,297	-	-	\$996,785	\$996,785	\$11,265,914	\$221,343,996	1.30
2024	288,551,000	196,718,460	\$3,375,000	1.56%	3,149,274	6,524,274	13,972,975	\$217,215,709	1.33
2025	288,551,000	184,486,880	3,430,000	1.78%	3,092,422	6,522,422	15,836,224	\$206,845,525	1.40
2026	288,551,000	170,345,034	3,495,000	1.90%	3,028,692	6,523,692	17,729,379	\$194,598,105	1.48
2027	288,551,000	170,578,043	3,565,000	1.96%	2,960,553	6,525,553	19,639,822	\$196,743,417	1.47
2028	288,551,000	170,566,262	3,630,000	2.03%	2,888,771	6,518,771	21,133,888	\$198,218,921	1.46
2029	288,551,000	170,558,618	3,710,000	2.13%	2,812,415	6,522,415	21,161,219	\$198,242,252	1.46
2030	288,551,000	162,948,632	3,795,000	2.24%	2,730,400	6,525,400	21,186,456	\$190,660,488	1.51
2031	288,551,000	148,320,284	3,885,000	2.31%	2,643,024	6,528,024	21,212,559	\$176,060,866	1.64
2032	288,551,000	148,322,320	3,970,000	2.38%	2,550,909	6,520,909	21,234,556	\$176,077,784	1.64
2033	288,551,000	148,855,563	4,070,000	2.42%	2,454,419	6,524,419	21,258,825	\$176,638,807	1.63
2034	288,551,000	148,845,280	4,170,000	2.59%	2,351,171	6,521,171	21,283,943	\$176,650,394	1.63
2035	288,551,000	148,863,268	4,285,000	2.73%	2,238,679	6,523,679	21,307,672	\$176,694,619	1.63
2036	288,551,000	148,851,307	4,410,000	2.83%	2,117,787	6,527,787	21,327,804	\$176,706,898	1.63
2037	288,551,000	134,106,556	4,535,000	2.92%	1,989,175	6,524,175	21,349,884	\$161,980,615	1.78
2038	288,551,000	122,111,355	4,670,000	3.00%	1,852,914	6,522,914	21,380,195	\$150,014,463	1.92
2039	288,551,000	112,767,341	4,815,000	3.07%	1,708,953	6,523,953	21,411,885	\$140,703,179	2.05
2040	288,551,000	112,770,398	4,965,000	3.13%	1,557,341	6,522,341	21,450,698	\$140,743,437	2.05
2041	288,551,000	100,238,967	5,130,000	3.19%	1,397,815	6,527,815	21,495,364	\$128,262,146	2.25
2042	288,551,000	91,073,666	5,295,000	3.22%	1,230,742	6,525,742	21,542,064	\$119,141,472	2.42
2043	288,551,000	81,735,258	5,465,000	3.26%	1,056,413	6,521,413	21,590,102	\$109,846,772	2.63
2044	288,551,000	75,226,079	5,645,000	3.21%	876,731	6,521,731	21,634,425	\$103,382,235	2.79
2045	288,551,000	75,226,319	5,830,000	3.21%	692,558	6,522,558	21,686,311	\$103,435,188	2.79
2046	288,551,000	63,389,196	6,025,000	3.21%	502,285	6,527,285	21,748,240	\$91,664,720	3.15
2047	288,551,000	51,856,649	6,215,000	3.21%	305,833	6,520,833	21,824,233	\$80,201,715	3.60
2048	288,551,000	41,062,855	6,420,000	3.21%	103,041	6,523,041	21,898,224	\$69,484,120	4.15
2049	288,551,000	29,229,116	-	-	-	-	21,979,103	\$51,208,218	5.63
2050	288,551,000	26,610,035	-	-	-	-	19,897,777	\$46,507,813	6.20
2051	288,551,000	11,687,930	-	-	-	-	17,799,466	\$29,487,396	9.79
2052	288,551,000	2,640,656	-	-	-	-	15,693,844	\$18,334,501	15.74
		\$3,459,073,621	\$114,800,000		\$49,289,097	\$164,089,097		\$4,227,095,767	

\*This total includes SWIFT applications 51075, 51076, and 51077 that will be closing in 2022

\*\*This repayment schedule includes total payments for project 51075 multiyear 2023 to 2026 closing and Tarrant RWD project 51078 being paid by the City of Dallas

<b>AVERAGE (MATURITY) LIFE</b>	<b>14.24 YEARS</b>
<b>NET INTEREST RATE</b>	<b>3.015%</b>
<b>COST SAVINGS</b>	<b>\$6,283,149</b>
<b>AVERAGE ANNUAL REQUIREMENT</b>	<b>\$5,469,637</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**  
**Dallas**  
**51077 - Southwest Pipeline Phase 1**

Attachment 2

Budget Items	TWDB Funds	Total
<b>Construction</b>		
Construction	\$73,300,000.00	\$73,300,000.00
<b>Subtotal for Construction</b>	<b>\$73,300,000.00</b>	<b>\$73,300,000.00</b>
<b>Total</b>	<b>\$73,300,000.00</b>	<b>\$73,300,000.00</b>



A RESOLUTION OF THE TEXAS WATER DEVELOPMENT BOARD  
APPROVING THE PROPOSED PURCHASE IN ONE OR MORE SERIES OF CITY OF DALLAS,  
TEXAS WATERWORKS AND SEWER SYSTEM REVENUE BONDS  
FROM THE STATE WATER IMPLEMENTATION REVENUE FUND FOR TEXAS

(22- )

WHEREAS, the City of Dallas (City) has filed an application for financial assistance from the State Water Implementation Revenue Fund for Texas (SWIRFT), in accordance with 31 Texas Administrative Code (TAC) 10 Chapter 363, Subchapter M; and

WHEREAS, the City seeks financial assistance in the amount of \$170,000,000 from the Texas Water Development Board (TWDB) for Project No. 51075 to finance the planning, design, and construction of a water main replacement project; and

WHEREAS, the City seeks financial assistance in the amount of \$7,500,000 from the TWDB for Project No. 51076 to finance the planning and design of a lake pump station replacement project; and

WHEREAS, the City seeks financial assistance in the amount of \$73,300,000 from the TWDB for Project No. 51077 to finance the construction of a treated water pipeline project; and

WHEREAS, Projects No. 51075, 51076, and 51077 are collectively referred to in this Resolution as “the Projects”; and

WHEREAS, the aggregate principal amount of financing the City seeks for the Projects is \$250,800,000; and

WHEREAS, the TWDB proposes to purchase in one or more series City of Dallas, Texas Waterworks and Sewer System Revenue Bonds (together with all authorizing documents (Obligations)), all as is more specifically set forth in the application and in recommendations of the Executive Administrator’s staff; and

WHEREAS, the City has offered a pledge of the net revenues of the waterworks and sewer system 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 § 363.1307;

WHEREAS, subject to the City’s use of an approved debt service structure, interest rate subsidies are available to the City for State Fiscal Year 2022 at up to the following levels: 25% for financial assistance for a term of 20 years, 18% for financial assistance for a term of 21 to 25 years, and 14% for financial assistance for a term of 26 to 30 years. The interest rate subsidy applicable to each subsequent proposed series may be different than

the interest rate subsidy available for State Fiscal Year 2022 and will be set through each financing agreement executed between the TWDB and the City; and

WHEREAS, the interest rate subsidies provided above are based on assumptions necessary to generate an optimum debt service structure for the anticipated TWDB SWIRFT bond issuance and are subject to modification as necessary to preserve and maintain the integrity of the SWIRFT Program; and

WHEREAS, the City is requesting a waiver of the requirement that a portion of the financial assistance received from the TWDB be used to mitigate the City's system water loss for Projects No. 51076 and 51077 because Project No. 51075 addresses this loss; and

WHEREAS, the TWDB hereby finds:

1. that the application and assistance applied for meet the requirements of Texas Water Code, Chapter 15, Subchapters G and H and 31 TAC Chapter 363, Subchapters A and M;
2. that the Project is a recommended water management strategy project in the State Water Plan adopted pursuant to Texas Water Code § 16.051, in accordance with Texas Water Code § 15.474(a);
3. that a water conservation plan has been submitted and implemented in accordance with Texas Water Code § 16.4021 and 31 TAC § 363.1309(b)(1);
4. that the current water audit has been completed by the City and filed with the TWDB in accordance with Texas Water Code § 16.0121 and 31 TAC § 358.6;
5. that, based on the conditions as described above, the City is satisfactorily addressing the City's system water loss, which supports a waiver of the requirement that a portion of the financial assistance received from the TWDB be used to mitigate the City's system water loss in accordance with Texas Water Code § 16.0121(g);
6. that the City has acknowledged its legal obligation to comply with any applicable requirements of federal law relating to contracting with disadvantaged business enterprises and any applicable state law relating to contracting with historically underutilized businesses, in accordance with Texas Water Code § 15.435(h) and 31 TAC § 363.1309(b)(3).

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

1. for the reasons stated above, the TWDB hereby waives the requirements of Texas Water Code § 16.0121(g); and
2. a commitment is made by the TWDB to the City of Dallas for financial assistance in the amount of \$170,000,000 from the State Water Implementation Revenue Fund for

Texas, Project No. 51075, to be evidenced by the TWDB's proposed purchase of City of Dallas Texas Waterworks and Sewer System Revenue Bonds as follows:

\$34,000,000 Proposed Series 2022C, to expire on December 31, 2022;  
\$34,000,000 Proposed Series 2023C, to expire on December 31, 2023;  
\$34,000,000 Proposed Series 2024C, to expire on December 31, 2024;  
\$34,000,000 Proposed Series 2025C, to expire on December 31, 2025;  
\$34,000,000 Proposed Series 2026C, to expire on December 31, 2026; and

3. a commitment is made by the TWDB to the City of Dallas for financing for Project No. 51076 through the proposed purchase of \$7,500,000 City of Dallas, Texas Waterworks and Sewer System Revenue Bonds, Proposed Series 2022 from the State Water Implementation Revenue Fund; and
4. a commitment is made by the TWDB to the City of Dallas for financing for Project No. 51077 in the amount of \$73,300,000 City of Dallas, Texas Waterworks and Sewer System Revenue Bonds, Proposed Series 2022 from the State Water Implementation Revenue Fund; and
5. the aggregate principal amount of funds committed from the State Water Implementation Revenue Fund for Texas to the City for Projects No. 51075, 51076 and 51077 to be purchased in one or more series of City of Dallas, Texas Waterworks and Sewer System Revenue Bonds is \$250,800,000.
6. The commitments of financial assistance made to the City of Dallas for Projects No. 51076 and 51077 will expire on December 31, 2022.

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 City 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 City;
3. this commitment is contingent upon the City's continued compliance with all applicable laws, rules, policies, and guidance as these may be amended from time to time to adapt to a change in law, in circumstances, or any other legal requirement;
4. this commitment is contingent upon the City executing a separate financing agreement for each project, approved as to form and substance by the Executive

Administrator, and submitting that executed agreement to the TWDB consistent with the terms and conditions described in the financing agreement;

5. interest rate subsidies for non-level debt service structure are subject to adjustment by the Executive Administrator;
6. the City shall use a paying agent/registrar in accordance with 31 TAC § 363.42(c)(2), and shall require the paying agent/registrar to provide a copy of all receipts documenting debt service payments to the TWDB and to the TWDB's designated Trustee;

The Following Conditions Must Be Included in the Obligations:

7. the Obligations must provide that the Obligations can be called for early redemption on any date beginning on or after the first interest payment date that is 10 years from the dated date of the Obligations, at a redemption price of par, together with accrued interest to the date fixed for redemption;
8. the Obligations must provide that the City will comply with all applicable TWDB laws and rules related to the use of the financial assistance;
9. the Obligations must provide that the City must comply with all conditions as specified in the final environmental finding of the Executive Administrator when issued, including the standard emergency discovery conditions for threatened and endangered species and cultural resources;
10. the Obligations must contain a provision requiring the City to maintain insurance coverage sufficient to protect the TWDB's interest in the project;
11. the Obligations must include a provision wherein the City, or an obligated person for whom financial or operating data is presented to the TWDB in the application for financial assistance either individually or in combination with other issuers of the City's Obligations or obligated persons, will, at a minimum, regardless of the amount of the Obligations, covenant to comply with requirements for continuing disclosure on an ongoing basis substantially in the manner required by 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 such bonds under SEC Rule 15c2-12;
12. the Obligations must contain a provision requiring the City to levy a tax and/or maintain and collect sufficient rates and charges to produce system revenues in an amount necessary to meet the debt service requirements of all outstanding obligations and to maintain the funds established and required by the Obligations;

13. the Obligations must include a provision requiring the City to use any proceeds from the Obligations that are determined to be surplus proceeds remaining after completion of the Project and completion of a final accounting in a manner approved by the Executive Administrator;
14. 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;
15. 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;
16. financial assistance proceeds shall not be used by the City 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 City 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, recycling and disposition of any contaminated sewage sludge, contaminated sediments and/or contaminated media that may be generated by the City, its contractors, consultants, agents, officials and employees as a result of activities relating to the Project to the extent permitted by law;
17. the Obligations must include a provision stating that the City shall report to the TWDB the amounts of Project funds, if any, that were used to compensate historically underutilized businesses that worked on the Project, in accordance with 31 TAC § 363.1312;
18. the Obligations must contain a provision that the TWDB will purchase the Obligations, acting through the TWDB's designated Trustee, and the Obligations shall be registered in the name of Cede & Co. and closed in book-entry-only form in accordance with 31 TAC § 363.42(c)(1);
19. the Obligations must contain a provision stating that the City 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 G and Texas Water Code § 17.183;
20. 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 as

amended (Code) and the Treasury Regulations promulgated thereunder (Regulations);

21. 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 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 financing for 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;
22. the Obligations must include a provision requiring the City 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 thereof) on its books of account separately and apart from all other funds (and receipts, expenditures and investments thereof) 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 therewith;
  - 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 thereunder. The City shall maintain a copy of such calculations for at least six years after the final Computation Date;

- c. as additional consideration for providing financial assistance, and in order to induce providing financial assistance by measures designed to ensure the excludability of the interest on the TWDB's Source Series Bonds from the gross income of the owners thereof for federal income tax purposes, pay to the United States the amount described in paragraph (b) above within 30 days after each Computation Date;
  - d. exercise reasonable diligence to assure that no errors are made in the calculations required by paragraph (b) and, if such error is made, to discover and promptly to correct such error within a reasonable amount of time thereafter, including payment to the United States of any interest and any penalty required by the Regulations;
23. 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;
  24. 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;
  25. 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 § 149(d) of the Code (related to "advance refundings");
  26. the Obligations must provide that neither the City nor a related party thereto 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. the Obligations shall be on parity with any existing obligations that are secured with the same pledge of security as the proposed Obligations; and
  28. the Obligations shall be governed by the additional debt test and reserve requirement as provided in the outstanding City of Dallas, Texas Waterworks and Sewer System Revenue Bonds, Series 2021B; and

Conditions to Close or for Release of Funds:

29. prior to closing, the City 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;
30. prior to closing, if not previously provided with the application, the City shall submit executed contracts for engineering and, if applicable, financial advisor and bond counsel, for the Project that are satisfactory to the Executive Administrator. Fees to

be reimbursed under the contracts must be reasonable in relation to the services performed, reflected in the contract, and acceptable to the Executive Administrator;

31. prior to closing, when any portion of financial assistance is to be held in escrow or in trust, the City shall execute an escrow agreement or trust agreement, approved as to form and substance by the Executive Administrator, and shall submit that executed agreement to the TWDB;
32. prior to closing, the City's bond counsel must prepare a written opinion that states that the interest on the Obligations is excludable from gross income or is exempt from federal income taxation. Bond counsel may rely on covenants and representations of the City when rendering this opinion;
33. prior to closing, the City's bond counsel must prepare a written opinion that states that the Obligations are not "private activity bonds." Bond counsel may rely on covenants and representations of the City when rendering this opinion;
34. 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;
35. the transcript must include evidence that the information reporting requirements of § 149(e) of the Internal Revenue Code will be satisfied. This requirement may be satisfied by filing an IRS Form 8038 with the Internal Revenue Service. In addition, the applicable completed IRS Form 8038 or other evidence that the information reporting requirements of § 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;

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

Special Condition:

36. for Project No. 51076 the Obligations must contain a provision requiring the City to submit quarterly status reports on the progress of the Project that detail information requested by the Executive Administrator. The Executive Administrator may withhold authorization to release funds from escrow or adjust the amount of funds to be released from escrow based on the receipt of the quarterly status reports and the projected quarterly needs for the Project.



APPROVED and ordered of record this, the 21st day of July 2022.

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**

	<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:**

Service connections:

Length of main lines (miles):

Water Loss

Retail population:

Connections per mile:

(gal/connection/day):

Water Loss GPCD:

ILI<sup>1</sup>:*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.

**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.

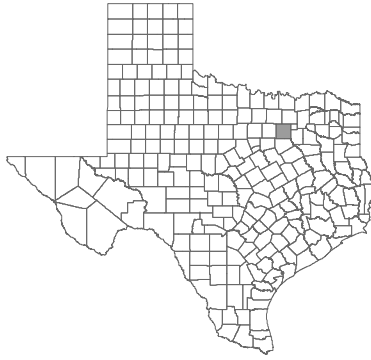
**Water loss** is the difference between the input volume and the authorized consumption within a water system. Water Loss consists of real losses and apparent losses.

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

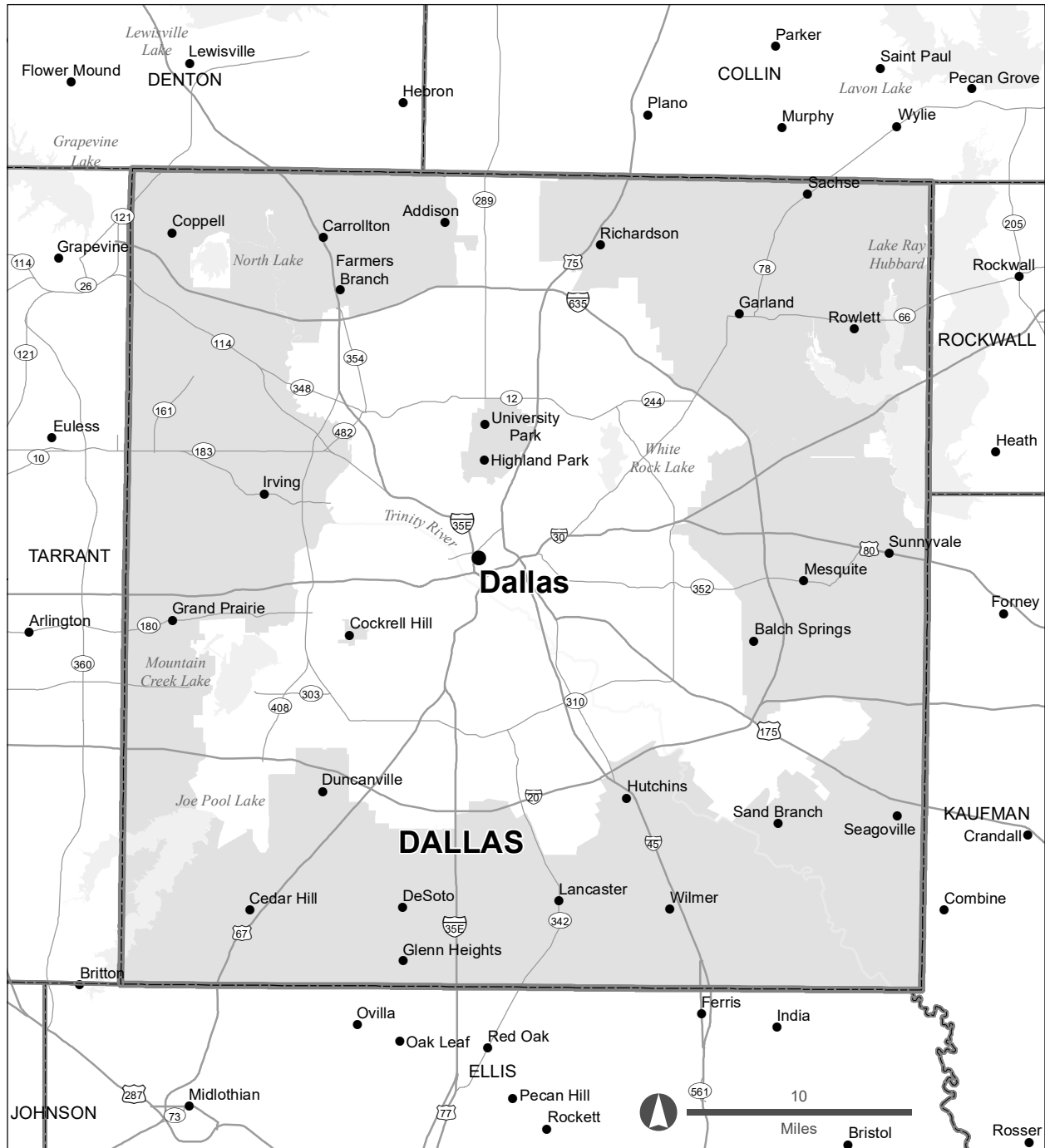
**Water Loss per Connection per Day** Calculated as the water loss volume divided by the number service connections divided by 365. This indicator allows for reliable performance tracking in the water utility's efforts to reduce water losses. It replaces water loss percentage.

**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.



## City of Dallas Dallas County



# Texas Water Development Board

## PROJECT FUNDING REQUEST

**BOARD DATE:** July 27, 2022

**Team Manager:** Joe Koen

### ACTION REQUESTED

Approve by resolution a request from the City of Dallas (City) (Dallas, Denton, Collin, Ellis, Tarrant, and Kaufman Counties) for \$7,500,000.00 financing from the State Water Implementation Revenue Fund for Texas for planning and design of a water system improvements project and a waiver of the requirement to include funds to mitigate water loss as part of this project.

### STAFF RECOMMENDATION

☒ Approve      ☐ No Action

### BACKGROUND

The City of Dallas (City) is located in Dallas, Denton, Collin, Ellis, Tarrant, and Kaufman Counties approximately 35 miles east of Fort Worth, Texas. The City provides water and wastewater services to a population of 2,460,490 and wholesale water supply to a population of 1,084,010. The City also provides retail wastewater services to a population 1,345,990 and wholesale wastewater services to a population 106,916. The City currently has 251,319 retail connections and 42,145 commercial connections.

### PROJECT NEED AND DESCRIPTION

The City's Lake June Pump Station and reservoirs were installed over 60 years ago and now require replacement. Conditional assessment of the pump station facilities indicates the station is operating beyond its useful life.

The Lake June Pump Station is critical to the City's ability to deliver potable water to south Dallas and represents the only supply source for the Cedardale Pressure Plane, and a crucial component of the City's water delivery system. This project is the highest ranked facility and project need on the City's Pump Station Criticality List.

The City is requesting funding for planning and design of a replacement of the Lake June Pump Station and reservoirs. The station design intends to continue providing reliable water service to the customers on the City's south side. The City intends to request construction financing from the State Water Implementation Revenue Fund in 2023.

<b>COMMITMENT PERIOD:</b> FIVE (5) MONTHS TO EXPIRE DECEMBER 31, 2022
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## PROJECT SCHEDULE

Task	Schedule Date
Closing	December 8, 2022
Engineering Feasibility Report Completion (End of Planning Phase)	April 19, 2024
Design Phase Completion	July 19, 2024
Start of Construction	November 15, 2024
Construction Completion	April 28, 2028

## KEY ISSUES

The City is above its water loss threshold for real loss. The City is requesting a waiver of the requirement that a portion of the funds be used to mitigate the City's water loss. Texas Water Development Board conservation staff believes that the City's planned water main replacement program (Project No. 51075), as well as the City's current Drinking Water State Revolving Fund water main replacement (Project No. 62741), will assist the City in mitigating its real water loss.

The City is requesting funding for planning and design. Resolution special condition 36 requires quarterly status reports to monitor progress of planning and design activities and to be used as a basis to release funds.

The financial analysis presented in Attachment 1 includes the City's three funding requests on today's agenda as well as the Tarrant Regional Water District's request (District). The District's request is included since the proposed debt would be paid by the City through a contract with the District.

## LEGAL

### Special Conditions

- Quarterly status reports

### Attachments:

1. Financial Review
2. Project Budget
3. Resolution (22- )
4. Water Conservation Review
5. Location Map

# Financial Review

## City of Dallas

Attachment 1

Risk Score: 2A

Audit Reviewed: FY 2021

### Key Indicators

Indicator	Result	Benchmark
Population Growth, Average Annual 2010-2020	City: 0.86%	State: 1.49%
Top 10 Customers % of Total Revenue	4.29%	10-15%
Median Household Income as % of State	85%	100%
Days of Cash on Hand (3-year Average)	223 days	30-149 days
Net Fixed Assets/ Annual Depreciation	39 years	12-24 years
Debt Service Coverage Ratio	1.33x	1.0x
Debt-to-Operating Revenues	4.37	4.00-5.99x
Unemployment Rate (April 2022)	City: 3.40%	State: 3.70%
Working Capital Ratio	21.97	> 1.0

### Key Risk Score Strengths

- Water system revenues are adequate to maintain coverage of all existing and proposed debt.
- A high working capital ratio provides the City with ample resources to cover short-term liabilities and shows a strong liquidity position.
- The City's days of cash on hand is above the benchmark, indicating the City can pay its operating expenses with the cash it has available.
- The City's top ten customers of the water system are below five percent indicating that it does not rely on one customer to generate most of its revenue.

### Key Risk Score Concerns

- The population growth of the City is below the benchmark over the past ten years; however, regional water plan projections expect the City to grow by approximately 10 percent over the next 10 years.

### PLEDGE

Legal Pledge Name	Utility System Revenues
Type of Pledge	<input type="checkbox"/> Tax <input checked="" type="checkbox"/> Revenue <input type="checkbox"/> Tax & Revenue <input type="checkbox"/> Contract <input type="checkbox"/> Other
Revenue Pledge Level	<input 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	8,300	\$30.73	\$30.73	1.47	1.47
WASTEWATER	5,300	\$33.50	\$33.50		

### Cost Savings

Based on a 25-year maturity schedule and current interest rates, the City could save approximately \$413,987 over the life of the financing.

## Project Data Summary

<b>Responsible Authority</b>	Dallas
<b>Program</b>	SWIFT
<b>Commitment Number</b>	L1001533
<b>Project Number</b>	51076
<b>List Year</b>	2022
<b>Type of Pledge</b>	Revenue Pledge
<b>Pledge Level (if applicable)</b>	First Lien
<b>Legal Description</b>	\$7,500,000 City of Dallas, Tx Waterworks and Sewer System Revenue Bonds, Proposed Series 2022
<b>Tax-exempt or Taxable</b>	Tax-Exempt
<b>Refinance</b>	No
<b>Outlay Requirement</b>	No
<b>Disbursement Method</b>	Escrow
<b>Outlay Type</b>	Outlay <> Escrow Release
<b>Qualifies as Disadvantaged</b>	No
<b>SWIFT Financing Type</b>	Low-Interest
<b>Financial Managerial &amp; Technical Complete</b>	N/A
<b>Phases Funded</b>	Planning and Design
<b>Pre-Design</b>	Yes
<b>Project Consistent with State Water Plan</b>	Yes
<b>Water Conservation Plan</b>	Adopted
<b>Overall Risk Score</b>	2A

### PROJECT TEAM

Team Manager	Financial Analyst	Engineering Reviewer	Environmental Reviewer	Attorney
Joe Koen	Arnoldo Rubio	David Dera	Kylie Beard	Breann Hunter



ISSUE BEING EVALUATED  
FOR ILLUSTRATION PURPOSES ONLY  
City of Dallas

**\*\$114,800,000 City of Dallas, Tx Waterworks and Sewer System Revenue Bonds, Proposed Series 2022**

<b>Dated Date:</b>	<b>12/8/2022</b>	<b>Source:</b>	<b>SWIFT-LOW-25YR</b>
<b>Delivery Date:</b>	<b>12/8/2022</b>	<b>Rate:</b>	<b>3.01%</b>
<b>First Interest:</b>	<b>4/1/2023</b>	<b>IUP Year:</b>	<b>2022</b>
<b>First Principal:</b>	<b>10/1/2023</b>	<b>Case:</b>	<b>System Revenue</b>
<b>Last Principal:</b>	<b>10/1/2047</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	\$114,800,000 ISSUE				**PROPOSED SWIFT MULTIYEAR COMMITMENT AND PROJECT 51078	TOTAL DEBT SERVICE	COVERAGE
			PRINCIPAL PAYMENT	INTEREST RATE	INTEREST PAYMENT	TOTAL PAYMENT			
2023	\$288,551,000	\$209,081,297	-	-	\$996,785	\$996,785	\$11,265,914	\$221,343,996	1.30
2024	288,551,000	196,718,460	\$3,375,000	1.56%	3,149,274	6,524,274	13,972,975	\$217,215,709	1.33
2025	288,551,000	184,486,880	3,430,000	1.78%	3,092,422	6,522,422	15,836,224	\$206,845,525	1.40
2026	288,551,000	170,345,034	3,495,000	1.90%	3,028,692	6,523,692	17,729,379	\$194,598,105	1.48
2027	288,551,000	170,578,043	3,565,000	1.96%	2,960,553	6,525,553	19,639,822	\$196,743,417	1.47
2028	288,551,000	170,566,262	3,630,000	2.03%	2,888,771	6,518,771	21,133,888	\$198,218,921	1.46
2029	288,551,000	170,558,618	3,710,000	2.13%	2,812,415	6,522,415	21,161,219	\$198,242,252	1.46
2030	288,551,000	162,948,632	3,795,000	2.24%	2,730,400	6,525,400	21,186,456	\$190,660,488	1.51
2031	288,551,000	148,320,284	3,885,000	2.31%	2,643,024	6,528,024	21,212,559	\$176,060,866	1.64
2032	288,551,000	148,322,320	3,970,000	2.38%	2,550,909	6,520,909	21,234,556	\$176,077,784	1.64
2033	288,551,000	148,855,563	4,070,000	2.42%	2,454,419	6,524,419	21,258,825	\$176,638,807	1.63
2034	288,551,000	148,845,280	4,170,000	2.59%	2,351,171	6,521,171	21,283,943	\$176,650,394	1.63
2035	288,551,000	148,863,268	4,285,000	2.73%	2,238,679	6,523,679	21,307,672	\$176,694,619	1.63
2036	288,551,000	148,851,307	4,410,000	2.83%	2,117,787	6,527,787	21,327,804	\$176,706,898	1.63
2037	288,551,000	134,106,556	4,535,000	2.92%	1,989,175	6,524,175	21,349,884	\$161,980,615	1.78
2038	288,551,000	122,111,355	4,670,000	3.00%	1,852,914	6,522,914	21,380,195	\$150,014,463	1.92
2039	288,551,000	112,767,341	4,815,000	3.07%	1,708,953	6,523,953	21,411,885	\$140,703,179	2.05
2040	288,551,000	112,770,398	4,965,000	3.13%	1,557,341	6,522,341	21,450,698	\$140,743,437	2.05
2041	288,551,000	100,238,967	5,130,000	3.19%	1,397,815	6,527,815	21,495,364	\$128,262,146	2.25
2042	288,551,000	91,073,666	5,295,000	3.22%	1,230,742	6,525,742	21,542,064	\$119,141,472	2.42
2043	288,551,000	81,735,258	5,465,000	3.26%	1,056,413	6,521,413	21,590,102	\$109,846,772	2.63
2044	288,551,000	75,226,079	5,645,000	3.21%	876,731	6,521,731	21,634,425	\$103,382,235	2.79
2045	288,551,000	75,226,319	5,830,000	3.21%	692,558	6,522,558	21,686,311	\$103,435,188	2.79
2046	288,551,000	63,389,196	6,025,000	3.21%	502,285	6,527,285	21,748,240	\$91,664,720	3.15
2047	288,551,000	51,856,649	6,215,000	3.21%	305,833	6,520,833	21,824,233	\$80,201,715	3.60
2048	288,551,000	41,062,855	6,420,000	3.21%	103,041	6,523,041	21,898,224	\$69,484,120	4.15
2049	288,551,000	29,229,116	-	-	-	-	21,979,103	\$51,208,218	5.63
2050	288,551,000	26,610,035	-	-	-	-	19,897,777	\$46,507,813	6.20
2051	288,551,000	11,687,930	-	-	-	-	17,799,466	\$29,487,396	9.79
2052	288,551,000	2,640,656	-	-	-	-	15,693,844	\$18,334,501	15.74
		\$3,459,073,621	\$114,800,000		\$49,289,097	\$164,089,097		\$4,227,095,767	

\*This total includes SWIFT applications 51075, 51076, and 51077 that will be closing in 2022

\*\*This repayment schedule includes total payments for project 51075 multiyear 2023 to 2026 closing and Tarrant RWD project 51078 being paid by the City of Dallas

<b>AVERAGE (MATURITY) LIFE</b>	<b>14.24 YEARS</b>
<b>NET INTEREST RATE</b>	<b>3.015%</b>
<b>COST SAVINGS</b>	<b>\$6,283,149</b>
<b>AVERAGE ANNUAL REQUIREMENT</b>	<b>\$5,469,637</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.*



51076 - City of Dallas Water Utilities

Infrastructure to Treat and Deliver to Customers: Design of Lake  
June Pump Station Project

Budget Items	TWDB Funds	Total
Basic Engineering Services		
Design	\$7,350,000.00	\$7,350,000.00
Planning	\$150,000.00	\$150,000.00
Subtotal for Basic Engineering Services	\$7,500,000.00	\$7,500,000.00
Total		\$7,500,000.00

A RESOLUTION OF THE TEXAS WATER DEVELOPMENT BOARD  
APPROVING THE PROPOSED PURCHASE IN ONE OR MORE SERIES OF CITY OF DALLAS,  
TEXAS WATERWORKS AND SEWER SYSTEM REVENUE BONDS  
FROM THE STATE WATER IMPLEMENTATION REVENUE FUND FOR TEXAS

(22- )

WHEREAS, the City of Dallas (City) has filed an application for financial assistance from the State Water Implementation Revenue Fund for Texas (SWIRFT), in accordance with 31 Texas Administrative Code (TAC) 10 Chapter 363, Subchapter M; and

WHEREAS, the City seeks financial assistance in the amount of \$170,000,000 from the Texas Water Development Board (TWDB) for Project No. 51075 to finance the planning, design, and construction of a water main replacement project; and

WHEREAS, the City seeks financial assistance in the amount of \$7,500,000 from the TWDB for Project No. 51076 to finance the planning and design of a lake pump station replacement project; and

WHEREAS, the City seeks financial assistance in the amount of \$73,300,000 from the TWDB for Project No. 51077 to finance the construction of a treated water pipeline project; and

WHEREAS, Projects No. 51075, 51076, and 51077 are collectively referred to in this Resolution as “the Projects”; and

WHEREAS, the aggregate principal amount of financing the City seeks for the Projects is \$250,800,000; and

WHEREAS, the TWDB proposes to purchase in one or more series City of Dallas, Texas Waterworks and Sewer System Revenue Bonds (together with all authorizing documents (Obligations)), all as is more specifically set forth in the application and in recommendations of the Executive Administrator’s staff; and

WHEREAS, the City has offered a pledge of the net revenues of the waterworks and sewer system 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 § 363.1307;

WHEREAS, subject to the City’s use of an approved debt service structure, interest rate subsidies are available to the City for State Fiscal Year 2022 at up to the following levels: 25% for financial assistance for a term of 20 years, 18% for financial assistance for a term of 21 to 25 years, and 14% for financial assistance for a term of 26 to 30 years. The interest rate subsidy applicable to each subsequent proposed series may be different than

the interest rate subsidy available for State Fiscal Year 2022 and will be set through each financing agreement executed between the TWDB and the City; and

WHEREAS, the interest rate subsidies provided above are based on assumptions necessary to generate an optimum debt service structure for the anticipated TWDB SWIRFT bond issuance and are subject to modification as necessary to preserve and maintain the integrity of the SWIRFT Program; and

WHEREAS, the City is requesting a waiver of the requirement that a portion of the financial assistance received from the TWDB be used to mitigate the City's system water loss for Projects No. 51076 and 51077 because Project No. 51075 addresses this loss; and

WHEREAS, the TWDB hereby finds:

1. that the application and assistance applied for meet the requirements of Texas Water Code, Chapter 15, Subchapters G and H and 31 TAC Chapter 363, Subchapters A and M;
2. that the Project is a recommended water management strategy project in the State Water Plan adopted pursuant to Texas Water Code § 16.051, in accordance with Texas Water Code § 15.474(a);
3. that a water conservation plan has been submitted and implemented in accordance with Texas Water Code § 16.4021 and 31 TAC § 363.1309(b)(1);
4. that the current water audit has been completed by the City and filed with the TWDB in accordance with Texas Water Code § 16.0121 and 31 TAC § 358.6;
5. that, based on the conditions as described above, the City is satisfactorily addressing the City's system water loss, which supports a waiver of the requirement that a portion of the financial assistance received from the TWDB be used to mitigate the City's system water loss in accordance with Texas Water Code § 16.0121(g);
6. that the City has acknowledged its legal obligation to comply with any applicable requirements of federal law relating to contracting with disadvantaged business enterprises and any applicable state law relating to contracting with historically underutilized businesses, in accordance with Texas Water Code § 15.435(h) and 31 TAC § 363.1309(b)(3).

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

1. for the reasons stated above, the TWDB hereby waives the requirements of Texas Water Code § 16.0121(g); and
2. a commitment is made by the TWDB to the City of Dallas for financial assistance in the amount of \$170,000,000 from the State Water Implementation Revenue Fund for

Texas, Project No. 51075, to be evidenced by the TWDB's proposed purchase of City of Dallas Texas Waterworks and Sewer System Revenue Bonds as follows:

\$34,000,000 Proposed Series 2022C, to expire on December 31, 2022;  
\$34,000,000 Proposed Series 2023C, to expire on December 31, 2023;  
\$34,000,000 Proposed Series 2024C, to expire on December 31, 2024;  
\$34,000,000 Proposed Series 2025C, to expire on December 31, 2025;  
\$34,000,000 Proposed Series 2026C, to expire on December 31, 2026; and

3. a commitment is made by the TWDB to the City of Dallas for financing for Project No. 51076 through the proposed purchase of \$7,500,000 City of Dallas, Texas Waterworks and Sewer System Revenue Bonds, Proposed Series 2022 from the State Water Implementation Revenue Fund; and
4. a commitment is made by the TWDB to the City of Dallas for financing for Project No. 51077 in the amount of \$73,300,000 City of Dallas, Texas Waterworks and Sewer System Revenue Bonds, Proposed Series 2022 from the State Water Implementation Revenue Fund; and
5. the aggregate principal amount of funds committed from the State Water Implementation Revenue Fund for Texas to the City for Projects No. 51075, 51076 and 51077 to be purchased in one or more series of City of Dallas, Texas Waterworks and Sewer System Revenue Bonds is \$250,800,000.
6. The commitments of financial assistance made to the City of Dallas for Projects No. 51076 and 51077 will expire on December 31, 2022.

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 City 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 City;
3. this commitment is contingent upon the City's continued compliance with all applicable laws, rules, policies, and guidance as these may be amended from time to time to adapt to a change in law, in circumstances, or any other legal requirement;
4. this commitment is contingent upon the City executing a separate financing agreement for each project, approved as to form and substance by the Executive

Administrator, and submitting that executed agreement to the TWDB consistent with the terms and conditions described in the financing agreement;

5. interest rate subsidies for non-level debt service structure are subject to adjustment by the Executive Administrator;
6. the City shall use a paying agent/registrar in accordance with 31 TAC § 363.42(c)(2), and shall require the paying agent/registrar to provide a copy of all receipts documenting debt service payments to the TWDB and to the TWDB's designated Trustee;

The Following Conditions Must Be Included in the Obligations:

7. the Obligations must provide that the Obligations can be called for early redemption on any date beginning on or after the first interest payment date that is 10 years from the dated date of the Obligations, at a redemption price of par, together with accrued interest to the date fixed for redemption;
8. the Obligations must provide that the City will comply with all applicable TWDB laws and rules related to the use of the financial assistance;
9. the Obligations must provide that the City must comply with all conditions as specified in the final environmental finding of the Executive Administrator when issued, including the standard emergency discovery conditions for threatened and endangered species and cultural resources;
10. the Obligations must contain a provision requiring the City to maintain insurance coverage sufficient to protect the TWDB's interest in the project;
11. the Obligations must include a provision wherein the City, or an obligated person for whom financial or operating data is presented to the TWDB in the application for financial assistance either individually or in combination with other issuers of the City's Obligations or obligated persons, will, at a minimum, regardless of the amount of the Obligations, covenant to comply with requirements for continuing disclosure on an ongoing basis substantially in the manner required by 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 such bonds under SEC Rule 15c2-12;
12. the Obligations must contain a provision requiring the City to levy a tax and/or maintain and collect sufficient rates and charges to produce system revenues in an amount necessary to meet the debt service requirements of all outstanding obligations and to maintain the funds established and required by the Obligations;

13. the Obligations must include a provision requiring the City to use any proceeds from the Obligations that are determined to be surplus proceeds remaining after completion of the Project and completion of a final accounting in a manner approved by the Executive Administrator;
14. 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;
15. 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;
16. financial assistance proceeds shall not be used by the City 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 City 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, recycling and disposition of any contaminated sewage sludge, contaminated sediments and/or contaminated media that may be generated by the City, its contractors, consultants, agents, officials and employees as a result of activities relating to the Project to the extent permitted by law;
17. the Obligations must include a provision stating that the City shall report to the TWDB the amounts of Project funds, if any, that were used to compensate historically underutilized businesses that worked on the Project, in accordance with 31 TAC § 363.1312;
18. the Obligations must contain a provision that the TWDB will purchase the Obligations, acting through the TWDB's designated Trustee, and the Obligations shall be registered in the name of Cede & Co. and closed in book-entry-only form in accordance with 31 TAC § 363.42(c)(1);
19. the Obligations must contain a provision stating that the City 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 G and Texas Water Code § 17.183;
20. 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 as

amended (Code) and the Treasury Regulations promulgated thereunder (Regulations);

21. 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 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 financing for 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;
22. the Obligations must include a provision requiring the City 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 thereof) on its books of account separately and apart from all other funds (and receipts, expenditures and investments thereof) 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 therewith;
  - 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 thereunder. The City shall maintain a copy of such calculations for at least six years after the final Computation Date;



- c. as additional consideration for providing financial assistance, and in order to induce providing financial assistance by measures designed to ensure the excludability of the interest on the TWDB's Source Series Bonds from the gross income of the owners thereof for federal income tax purposes, pay to the United States the amount described in paragraph (b) above within 30 days after each Computation Date;
  - d. exercise reasonable diligence to assure that no errors are made in the calculations required by paragraph (b) and, if such error is made, to discover and promptly to correct such error within a reasonable amount of time thereafter, including payment to the United States of any interest and any penalty required by the Regulations;
23. 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;
  24. 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;
  25. 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 § 149(d) of the Code (related to "advance refundings");
  26. the Obligations must provide that neither the City nor a related party thereto 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. the Obligations shall be on parity with any existing obligations that are secured with the same pledge of security as the proposed Obligations; and
  28. the Obligations shall be governed by the additional debt test and reserve requirement as provided in the outstanding City of Dallas, Texas Waterworks and Sewer System Revenue Bonds, Series 2021B; and

Conditions to Close or for Release of Funds:

29. prior to closing, the City 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;
30. prior to closing, if not previously provided with the application, the City shall submit executed contracts for engineering and, if applicable, financial advisor and bond counsel, for the Project that are satisfactory to the Executive Administrator. Fees to

be reimbursed under the contracts must be reasonable in relation to the services performed, reflected in the contract, and acceptable to the Executive Administrator;

31. prior to closing, when any portion of financial assistance is to be held in escrow or in trust, the City shall execute an escrow agreement or trust agreement, approved as to form and substance by the Executive Administrator, and shall submit that executed agreement to the TWDB;
32. prior to closing, the City's bond counsel must prepare a written opinion that states that the interest on the Obligations is excludable from gross income or is exempt from federal income taxation. Bond counsel may rely on covenants and representations of the City when rendering this opinion;
33. prior to closing, the City's bond counsel must prepare a written opinion that states that the Obligations are not "private activity bonds." Bond counsel may rely on covenants and representations of the City when rendering this opinion;
34. 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;
35. the transcript must include evidence that the information reporting requirements of § 149(e) of the Internal Revenue Code will be satisfied. This requirement may be satisfied by filing an IRS Form 8038 with the Internal Revenue Service. In addition, the applicable completed IRS Form 8038 or other evidence that the information reporting requirements of § 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;

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

Special Condition:

36. for Project No. 51076 the Obligations must contain a provision requiring the City to submit quarterly status reports on the progress of the Project that detail information requested by the Executive Administrator. The Executive Administrator may withhold authorization to release funds from escrow or adjust the amount of funds to be released from escrow based on the receipt of the quarterly status reports and the projected quarterly needs for the Project.

APPROVED and ordered of record this, the 27th day of July 2022.

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**

	<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:**

Service connections:

Length of main lines (miles):

Water Loss

Retail population:

Connections per mile:

(gal/connection/day):

Water Loss GPCD:

ILI<sup>1</sup>:*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.

**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.

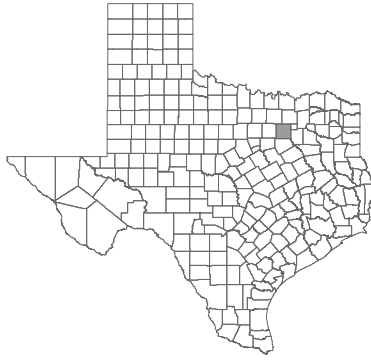
**Water loss** is the difference between the input volume and the authorized consumption within a water system. Water Loss consists of real losses and apparent losses.

**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.



## City of Dallas Dallas County

