



## PROJECT FUNDING REQUEST

**BOARD DATE:** April 11, 2024

**Team Manager:** Nancy Richards

### ACTION REQUESTED

Consider approving by resolution a request from the Harris County Water Control and Improvement District No. 91 (Harris County) for \$5,550,000 in financing from the Texas Water Development Fund for planning, design, and construction of water system improvements.

### STAFF RECOMMENDATION

Approve       No Action

### BACKGROUND

The Harris County Water Control and Improvement District No. 91 (District) is in Harris County about 20 miles north of downtown Houston. The District provides water and wastewater services to a population of approximately 3,000 residents through 730 connections.

### PROJECT NEED AND DESCRIPTION

The District is experiencing water loss due to aging waterlines past their useful life. Major line breaks requiring regular repair have become a financial burden to the District. Rehabilitation of these systems is needed to prevent future failures and ensure serviceability.

The District proposes replacement of over 15,000 linear feet of original waterlines along several streets. The existing pipe material is concrete-lined ductile iron. Line replacement via pipe bursting includes varying diameter sizes of 6- and 8-inches. Work includes abandoning existing service lines in place and replacing with new 2-inch waterlines.

### PROJECT SCHEDULE

Task	Schedule Date
Closing	August 1, 2024
Engineering Feasibility Report Completion (End of Planning Phase)	December 1, 2024
Design Phase Completion	June 1, 2024
Start of Construction	August 1, 2025
Construction Completion	June 1, 2027

**COMMITMENT PERIOD:** FIVE (5) MONTHS TO EXPIRE SEPTEMBER 30, 2024

**LEGAL/SPECIAL CONDITIONS**

- Adopt water conservation plan
- Conversion and conveyance
- Address material weakness in audit
- Financing agreement

## Attachments:

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

# Financial Review

## Harris Co WCID No. 91

Attachment 1

Risk Score: 2B

Audit Reviewed: FY 2022

### Key Indicators

Indicator	Result	Benchmark
Population Growth, Average Annual 2010-2020	County: 1.46%	State: 1.49%
Top 10 Customers % of Total Revenue	2.32%	10-15%
Median Household Income as % of State	127%	100%
Days of Cash on Hand (3-year Average)	1,085 days	30-149 days
Net Fixed Assets/ Annual Depreciation	6 years	12-24 years
Debt Service Coverage Ratio	0.66x	1.0x
Debt-to-Operating Revenues	5.04	4.00-5.99x
Unemployment Rate (December 2023)	County: 3.80%	State: 3.50%
Working Capital Ratio	14.12	> 1.0
Cash Balance Ratio	138.36%	0-9.99%

#### Key Risk Score Strengths

- The District's days of cash on hand exceeds the benchmark, indicating sufficient reserves for operating expenses.
- The District's cash balance has grown from \$2,120,129 in 2017 to \$3,643,379 in 2022. With a cash balance ratio of 138.36 percent, the District demonstrates solid financial health and resilience.
- The top 10 customers make up 2.32 percent of the total water system revenue, indicating the District is not reliant on a few customers to support its water system.

#### Key Risk Score Concerns

- The District has faced a material weakness found in internal control deficiencies. A special condition has been added to the resolution requiring the District to adopt a corrective action plan due forty-five days prior to closing.
- Based on the 2022 audit, the District's water and sanitary sewer system revenues will not be enough to cover the proposed debt. However, the District implemented a \$6.00 rate increase in May 2023. In a no-growth scenario using 2022 audited figures and the \$6.00 implemented rate increase, the District is projected to need a maximum rate increase of \$9.06 by 2045.

#### PLEDGE

Legal Pledge Name	Waterworks and Sanitary Sewer System
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 (Year 2045)	Current Household Cost Factor	Projected Household Cost Factor
Water	7,000	\$12.00	\$21.06	0.93	1.07
Wastewater	7,000	\$25.00	\$25.00		
Garbage		\$24.00	\$24.00		

**Cost Savings**

Based on a 30-year maturity schedule and current interest rates, the District could save approximately \$1,123,182 over the life of the financing.

<b>Responsible Authority</b>	Harris Co WCID # 91
<b>Program</b>	WDF
<b>Commitment Number</b>	L1001741
<b>Project Number</b>	21824
<b>List Year</b>	2023
<b>Type of Pledge</b>	Revenue Pledge
<b>Pledge Level (if applicable)</b>	First Lien
<b>Legal Description</b>	\$5,550,000 Harris County Water Control and Improvement District No. 91 Revenue Bonds, Proposed Series 2024
<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>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>	Approvable
<b>Overall Risk Score</b>	2B

### PROJECT TEAM

<b>Team Manager</b>	<b>Financial Analyst</b>	<b>Engineering Reviewer</b>	<b>Environmental Reviewer</b>	<b>Attorney</b>
Nancy Richards	Chelsea Duran	Will Conte	Britt Paredes	Breann Hunter

ISSUE BEING EVALUATED  
FOR ILLUSTRATION PURPOSES ONLY  
Harris County Water Control and Improvement District No. 91

**\$5,550,000 Harris County Water Control and Improvement District No. 91 Revenue Bonds, Proposed Series 2024**

<b>Dated Date:</b> 8/1/2024	<b>Source:</b> WDF
<b>Delivery Date:</b> 8/1/2024	<b>Rate:</b> 4.46%
<b>First Interest:</b> 3/1/2025	<b>IUP Year:</b> 2023
<b>First Principal:</b> 3/1/2026	<b>Case:</b> Revenues
<b>Last Principal:</b> 3/1/2054	<b>Admin. Fee:</b> \$0
<b>Fiscal Year End:</b> 12/31	<b>Admin. Fee Payment Date:</b> N/A
<b>Required Coverage:</b> 1.0	

FISCAL YEAR	PROJECTED NET SYSTEM REVENUES	CURRENT DEBT SERVICE	\$5,550,000 ISSUE				TOTAL DEBT SERVICE	COVERAGE
			PRINCIPAL PAYMENT	INTEREST RATE	INTEREST PAYMENT	TOTAL PAYMENT		
2025	\$ 253,198.83	\$0	\$0	-	\$253,199	\$253,199	\$253,199	1.00
2026	\$ 327,154.50	-	95,000	3.30%	232,155	327,155	327,155	1.00
2027	\$ 328,982.00	-	100,000	3.21%	228,982	328,982	328,982	1.00
2028	\$ 330,733.75	-	105,000	3.13%	225,734	330,734	330,734	1.00
2029	\$ 332,385.50	-	110,000	3.10%	222,386	332,386	332,386	1.00
2030	\$ 333,898.00	-	115,000	3.10%	218,898	333,898	333,898	1.00
2031	\$ 335,249.50	-	120,000	3.11%	215,250	335,250	335,250	1.00
2032	\$ 336,446.00	-	125,000	3.10%	211,446	336,446	336,446	1.00
2033	\$ 337,487.00	-	130,000	3.11%	207,487	337,487	337,487	1.00
2034	\$ 338,325.75	-	135,000	3.17%	203,326	338,326	338,326	1.00
2035	\$ 338,827.00	-	140,000	3.37%	198,827	338,827	338,827	1.00
2036	\$ 343,768.00	-	150,000	3.60%	193,768	343,768	343,768	1.00
2037	\$ 343,130.75	-	155,000	3.79%	188,131	343,131	343,131	1.00
2038	\$ 346,910.00	-	165,000	3.98%	181,910	346,910	346,910	1.00
2039	\$ 346,910.00	-	170,000	4.11%	175,133	345,133	345,133	1.01
2040	\$ 347,859.50	-	180,000	4.20%	167,860	347,860	347,860	1.00
2041	\$ 347,859.50	-	185,000	4.28%	160,121	345,121	345,121	1.01
2042	\$ 347,859.50	-	195,000	4.35%	151,920	346,920	346,920	1.00
2043	\$ 348,169.00	-	205,000	4.40%	143,169	348,169	348,169	1.00
2044	\$ 348,886.00	-	215,000	4.44%	133,886	348,886	348,886	1.00
2045	\$ 348,904.25	-	225,000	4.63%	123,904	348,904	348,904	1.00
2046	\$ 348,904.25	-	235,000	4.63%	113,255	348,255	348,255	1.00
2047	\$ 348,904.25	-	245,000	4.63%	102,143	347,143	347,143	1.01
2048	\$ 348,904.25	-	255,000	4.63%	90,568	345,568	345,568	1.01
2049	\$ 348,904.25	-	265,000	4.64%	78,517	343,517	343,517	1.02
2050	\$ 348,904.25	-	280,000	4.73%	65,747	345,747	345,747	1.01
2051	\$ 348,904.25	-	290,000	4.73%	52,267	342,267	342,267	1.02
2052	\$ 348,904.25	-	305,000	4.73%	38,195	343,195	343,195	1.02
2053	\$ 348,904.25	-	320,000	4.73%	23,414	343,414	343,414	1.02
2054	\$ 348,904.25	-	335,000	4.73%	7,923	342,923	342,923	1.02
		\$0	\$5,550,000		\$4,609,517	\$10,159,517	\$10,159,517	

AVERAGE (MATURITY) LIFE	18.63 YEARS
NET INTEREST RATE	4.458%
COST SAVINGS	\$1,123,182
AVERAGE ANNUAL REQUIREMENT	\$338,651

*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**  
 Harris Co WCID # 91  
 21824 - WCID 91 Waterline Pipe Bursting

Budget Items	This Commitment	Total
<b>Construction</b>		
Construction	\$3,370,000	\$3,370,000
<b>Subtotal for Construction</b>	<b>\$3,370,000</b>	<b>\$3,370,000</b>
<b>Basic Engineering Services</b>		
Construction Engineering	\$70,000	\$70,000
Design	\$235,000	\$235,000
Planning	\$50,000	\$50,000
<b>Subtotal for Basic Engineering Services</b>	<b>\$355,000</b>	<b>\$355,000</b>
<b>Special Services</b>		
Application	\$15,000	\$15,000
Environmental	\$80,000	\$80,000
Inspection	\$70,000	\$70,000
Surveying	\$70,000	\$70,000
<b>Subtotal for Special Services</b>	<b>\$235,000</b>	<b>\$235,000</b>
<b>Fiscal Services</b>		
Bond Counsel	\$111,000	\$111,000
Bond Reserve Fund	\$350,000	\$350,000
Capitalized Interest	\$260,000	\$260,000
Financial Advisor	\$166,500	\$166,500
Fiscal/Legal	\$12,500	\$12,500
Issuance Costs	\$15,000	\$15,000
<b>Subtotal for Fiscal Services</b>	<b>\$915,000</b>	<b>\$915,000</b>
<b>Contingency</b>		
Contingency	\$675,000	\$675,000
<b>Subtotal for Contingency</b>	<b>\$675,000</b>	<b>\$675,000</b>
<b>Total</b>	<b>\$5,550,000</b>	<b>\$5,550,000</b>

A RESOLUTION OF THE TEXAS WATER DEVELOPMENT BOARD  
APPROVING AN APPLICATION FOR FINANCIAL ASSISTANCE  
IN THE AMOUNT OF \$5,550,000  
TO HARRIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT NO. 91  
FROM THE FINANCIAL ASSISTANCE ACCOUNT OF  
THE TEXAS WATER DEVELOPMENT FUND II  
THROUGH THE PROPOSED PURCHASE OF \$5,550,000 HARRIS COUNTY WATER  
CONTROL AND IMPROVEMENT DISTRICT NO. 91 REVENUE BONDS  
PROPOSED SERIES 2024

(24- )

Recitals:

The Harris County Water Control and Improvement District No. 91, located in Harris County, Texas, (District) filed an application for financial assistance in the amount of \$5,550,000 from the Financial Assistance Account of the Texas Water Development Fund II, established by Texas Water Code § 17.959, to finance water system improvements, identified as Project No. 21824.

The District seeks financial assistance from the Texas Water Development Board (TWDB) in the amount of \$5,550,000 through the TWDB's purchase of \$5,550,000 Harris County Water Control and Improvement District No. 91 Revenue Bonds, Proposed Series 2024 (together with all authorizing documents (Obligations)), all as is more specifically set forth in the application and in recommendations of the TWDB's staff.

The District has offered a pledge of a first lien on waterworks and sanitary sewer system revenue as sufficient security for the repayment of the Obligations.

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

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

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



Findings:

1. The public interest requires state assistance in the water supply project, in accordance with Texas Water Code § 17.125(a)(1).
2. In its opinion the tax or revenue pledged by the District will be sufficient to meet all the Obligations assumed by the District during the succeeding period of not more than 50 years, in accordance with Texas Water Code § 17.125(a)(2).
3. The District has submitted a proposed program of water conservation for the more efficient use of water that will meet reasonably anticipated local needs and conditions and that incorporates practices, techniques or technology prescribed by the Texas Water Code and TWDB's rules.
4. The application and financial assistance requested meet the requirements of Chapter 17, Subchapters D, E, and L, Water Code, and the TWDB's rules set forth in 31 TAC Chapter 363, Subchapter A.
5. The TWDB has approved a regional water plan for the region of the state that includes the area benefiting from the project and the needs to be addressed by the project will be addressed in a manner that is consistent with the approved regional and state water plans, as required by Texas Water Code § 16.053(j).
6. The current water audit required by Texas Water Code § 16.0121 has been completed by the District and filed with the TWDB, in accordance with Texas Water Code § 16.053(j).

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

A commitment is made by the TWDB to the Harris County Water Control and Improvement District No. 91 for financial assistance in the amount of \$5,550,000 from the Financial Assistance Account of the Texas Water Development Fund II, to be evidenced by the TWDB's purchase of \$5,550,000 Harris County Water Control and Improvement District No. 91 Revenue Bonds, Proposed Series 2024. This commitment will expire on September 30, 2024.

This commitment is conditioned as follows:

Standard Conditions:

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

2. This commitment is contingent upon the issuance of a written approving opinion of the Attorney General of the State of Texas stating that the District complied with all of the requirements of the laws under which the Obligations were issued; that the Obligations were issued in conformance with the Constitution and laws of the State of Texas; and that the Obligations are valid and binding obligations of the District.
3. This commitment is contingent upon the District's compliance with all applicable laws, rules, policies, and guidance (as these may be amended from time to time to adapt to a change in law, in circumstances, or any other legal requirement), including but not limited to 31 TAC Chapter 363.
4. The Obligations must provide that the Obligations can be called for early redemption only in inverse order of maturity, and on any date beginning on or after the first interest payment date that is 10 years from the dated date of the Obligations, at a redemption price of par, together with accrued interest to the date fixed for redemption.
5. The Obligations must provide that the District, 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 District's Obligations or obligated persons, will, at a minimum, covenant to comply with requirements for continuing disclosure on an ongoing basis substantially in the manner required by Securities and Exchange Commission (SEC) in 17 CFR § 240.15c2-12 (Rule 15c2-12) and determined as if the TWDB were a Participating Underwriter within the meaning of such rule, such continuing disclosure undertaking being for the benefit of the TWDB and the beneficial owners of the District's Obligations, if the TWDB sells or otherwise transfers such Obligations, and the beneficial owners of the TWDB's bonds if the District is an obligated person with respect to the bonds under SEC Rule 15c2-12.
6. The Obligations must require the District to levy a tax or maintain and collect sufficient rates and charges to produce system revenues in an amount necessary to meet the debt service requirements of all outstanding obligations and to maintain the funds required by the Obligations.
7. The Obligations must require the District to use any surplus financial assistance proceeds from the Obligations remaining after completion of a final accounting in a manner approved by the Executive Administrator.
8. The Obligations must provide that the TWDB may exercise all remedies available to it in law or equity, and any provision of the Obligations that restricts or limits the TWDB's full exercise of these remedies will be of no force and effect.

9. Financial assistance proceeds are public funds. Therefore, the Obligations must require that these proceeds be held at a designated state depository institution or other properly chartered and authorized institution in accordance with the Public Funds Investment Act, Government Code, Chapter 2256 and the Public Funds Collateral Act, Government Code, Chapter 2257.
10. Proceeds of this commitment must not be used by the District when sampling, testing, removing, or disposing of contaminated soils or media at the project site.
11. The Obligations must provide that the TWDB is not responsible for liability resulting from acts or omissions of the District, its employees, contractors, or agents arising from the sampling, analysis, transport, storage, treatment, recycling, and disposition of any contaminated sewage sludge, contaminated sediments or contaminated media that may be generated by the District, its contractors, consultants, agents, officials, and employees as a result of activities relating to the Project to the extent permitted by law.
12. Before closing, the District must submit documentation evidencing the adoption and implementation of sufficient system rates and charges or, if applicable, the levy of an interest and sinking tax rate sufficient for the repayment of all system debt service requirements.
13. Before closing, and if required under the TWDB's financial assistance program and not previously provided with the application, the District must submit an executed engineering contract as appropriate for the project scope of work, and an executed financial advisor contract and executed bond counsel contract as appropriate for the work to be performed in obtaining the TWDB's financial assistance for the project, in a form and substance satisfactory to the Executive Administrator. Fees to be reimbursed under any consulting contract must be reasonable in relation to the services performed, must be reflected in the contract, and must be acceptable to the Executive Administrator.
14. Before closing, when any portion of financial assistance proceeds are to be held in escrow or in trust, the District must execute an escrow agreement or trust agreement, approved as to form and substance by the Executive Administrator, and must submit that executed agreement to the TWDB.
15. The Executive Administrator may require that the District execute a separate financing agreement in form and substance acceptable to the Executive Administrator.
16. The District must abide by all applicable construction contract requirements related to the use of iron and steel products produced in the United States, as

required by Texas Government Code, Chapter 2252, Subchapter F and Texas Water Code § 17.183.

17. The District must immediately notify TWDB, in writing, of any suit against it by the Attorney General of Texas under Texas Penal Code § 1.10(f) (related to federal laws regulating firearms, firearm accessories, and firearm ammunition).

Conditions Related To Tax-Exempt Status:

18. Before closing, the District's bond counsel must prepare a written opinion that states the interest on the Obligations is excludable from gross income or is exempt from federal income taxation. Bond counsel may rely on covenants and representations of the District when rendering this opinion.
19. Before closing, the District's bond counsel must prepare a written opinion that states the Obligations are not "private activity bonds." Bond counsel may rely on covenants and representations of the District when rendering this opinion.
20. The Obligations must include a provision prohibiting the District from using the proceeds of this financial assistance in a manner that would cause the Obligations to become "private activity bonds" within the meaning of § 141 of the Internal Revenue Code of 1986, as amended (Code) and the Treasury Regulations promulgated thereunder (Regulations).
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 used, directly or indirectly, to acquire Nonpurpose Investments (as defined in the Code and Regulations) that produce a yield materially higher than the yield on the TWDB's bonds issued to provide the financial assistance (Source Series Bonds), other than Nonpurpose Investments acquired with:
  - a. proceeds of the TWDB's Source Series Bonds invested for a reasonable temporary period of up to three (3) years after the issue date of the Source Series Bonds until such proceeds are needed for the facilities to be financed;
  - b. amounts invested in a bona fide debt service fund, within the meaning of § 1.148-1(b) of the Regulations; and
  - c. amounts deposited in any reasonably required reserve or replacement fund to the extent such amounts do not exceed the least of maximum annual debt service on the Obligations, 125% of average annual debt

service on the Obligations, or 10 percent of the stated principal amount, or, in the case of a discount, the issue price of the Obligations.

22. The Obligations must require the District to take all necessary steps to comply with the requirement that certain amounts earned on the investment of gross proceeds of the Obligations be rebated to the federal government in order to satisfy the requirements of § 148 of the Code. The Obligations must provide that the District will:
- a. account for all Gross Proceeds, as defined in the Code and Regulations, (including all receipts, expenditures, and investments on its books of account) separately and apart from all other funds (and receipts, expenditures, and investments) and retain all records of such accounting for at least six years after the final Computation Date. The District may, however, to the extent permitted by law, commingle Gross Proceeds of its financial assistance with other money of the District, provided that the District separately accounts for each receipt and expenditure of such Gross Proceeds and the obligations acquired with those proceeds;
  - b. calculate the Rebate Amount, as defined in the Code and Regulations, with respect to its financial assistance, not less frequently than each Computation Date, in accordance with rules set forth in § 148(f) of the Code, § 1.148-3 of the Regulations, and the rulings under the Code. The District must maintain a copy of such calculations for at least six years after the final Computation Date;
  - c. as additional consideration for the making of the financial assistance, and in order to induce the making of the financial assistance by measures designed to ensure the excludability of the interest on the TWDB's Source Series Bonds from the gross income of the owners for federal income tax purposes, pay to the United States the amount described in paragraph (b) above within 30 days after each Computation Date; and
  - d. exercise reasonable diligence to assure that no errors are made in the calculations required by paragraph (b) and, if an error is made, to discover and promptly correct the error within a reasonable amount of time after discovery, including payment to the United States of any interest and any penalty required by the Regulations.
23. The Obligations must include a provision prohibiting the District 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 District 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 District will refrain from using the proceeds of the Obligations to pay debt service on another issue of obligations of the borrower in contravention of section 149(d) of the Code (related to “advance refundings”).
26. The transcript must include a No Arbitrage Certificate or similar Federal Tax Certificate setting forth the District’s reasonable expectations regarding the use, expenditure and investment of the proceeds of the Obligations.
27. The transcript must include evidence that the information reporting requirements of § 149(e) of the Code will be satisfied. This requirement may be satisfied by filing an IRS Form 8038 with the Internal Revenue Service. In addition, the completed IRS Form 8038, or other evidence that the information reporting requirements of § 149(e) have been satisfied, must be provided to the Executive Administrator within 14 days of closing. The Executive Administrator may withhold the release of funds for failure to comply.
28. The Obligations must provide that neither the District nor a related party will acquire any of the TWDB’s Source Series Bonds in an amount related to the amount of the Obligations to be acquired from the District by the TWDB.
29. Prior to closing, the District must provide certification that the average weighted maturity of the Obligations purchased by the TWDB does not exceed 120 percent of the average reasonably expected economic life of the Project.

Pledge Conditions:

30. The Obligations must require the accumulation of a reserve fund of no less than average annual debt service requirements, to be accumulated in equal monthly installments over the initial 60 months following the issuance of the Obligations.
31. If the District has existing revenue obligations with the same pledge of security as the proposed Obligations that will remain outstanding after any financial assistance provided by the TWDB pursuant to this commitment, the lien or liens securing the Obligations issued to the TWDB must be at least on a parity with lien or liens securing the outstanding obligations.
32. The Obligations must provide that additional revenue obligations may only be incurred if net system revenues are at least 1.0 times the average annual debt service requirements after giving effect to the additional obligations when net

revenues are a) determined from the last completed fiscal year or a 12 consecutive calendar month period ending not more than 90 days before the adoption of the additional obligations as certified by a certified public accountant; or b) the District certifies that the District is expected to continue to meet or exceed the net system revenue test with a minimum coverage of 1.0 times the average annual debt service requirement. An authorized representative of the District must provide the calculations identifying reasonable assumptions in a format that is acceptable to the Executive Administrator.

Special Conditions:

33. Before closing, the District must adopt and implement the water conservation program approved by the TWDB.
34. The District must notify the Executive Administrator in writing 30 days before taking any actions to alter its legal status in any manner.
35. The Obligations must require that the District notify the Executive Administrator in writing before any action by it to convey its Obligations held by the TWDB to another entity. The conveyance and the assumption of the Obligations must be approved by the TWDB.
36. Before closing, the District must adopt a plan, acceptable to the Executive Administrator, ensuring that the District will address all material audit findings that may be issued during any annual or special financial audit while the Obligations are outstanding. This plan must be adopted by the District and presented to the Executive Administrator at least forty-five (45) days before closing.

APPROVED and ordered of record this, the 11th day of April 2024.

TEXAS WATER DEVELOPMENT BOARD

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Brooke T. Paup, Chairwoman

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

ATTEST:

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Bryan McMath, Interim Executive Administrator



<input checked="" type="checkbox"/>	Water
<input type="checkbox"/>	Wastewater
<input type="checkbox"/>	Other _____

**WATER CONSERVATION REVIEW**

Entity: Harris County WCID 91

Other entity: \_\_\_\_\_

**WATER CONSERVATION PLAN DATE:**

2023



Approvable



Adopted

	Total GPCD	Residential GPCD	Water Loss GPCD
Baseline	80	71	1
5-year Goal	79	70	1
10-year Goal	78	69	1

**WATER LOSS AUDIT YEAR:**

2020

Service connections: 832

Length of main lines (miles): 7

Water Loss GCD: 7

Retail population: 3,018

Connections per mile: 118

Water Loss GPCD: 2

ILI<sup>1</sup>: NA

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

**WATER LOSS THRESHOLDS**Water Loss Project: Wholesale Adjusted: 

Threshold Type:

Population ≤ 10K, connections/mile ≥ 32 :

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
3.5	NA	3.5	16	NA	30

Does the applicant meet Water Loss Threshold Requirements?

Yes No NA **ADDITIONAL INFORMATION**

The district's draft water conservation plan states that the goal is to reduce consumption by using water conserving fixtures and encouraging water conservation habits. In 2023 the district began replacing aging water mains and infrastructure and continues to monitoring the system for leaks, illegal connections, and abandoned services. Some other ways they intend to meet their goals is by regulating water pressure in the system, providing information on retrofitting devices and appliances, and having a regularly scheduled meter maintenance program. Additionally, the district recognizes the importance of public participation in water conservation and informs customers on methods to save in their daily use, landscaping irrigation, and recreational use. This information is provided through direct mailings, information on the district's website, and conservation literature to new customers.

**STAFF NOTES AND RECOMMENDATIONS**

The district will need to provide proof of adoption of its water conservation plan and documentation that a copy of the plan was provided to the regional water planning group prior to loan closing.

The district has stated they are experiencing water loss due to aging distribution lines that are past their useful life and in 2023 repaired 12 major line breaks. This project includes replacement of over 15,000 linear feet of distribution lines (approximately 40 percent of the system) via pipe bursting technology.

## DEFINITIONS

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

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

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

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

**GPCD** means gallons per capita per day.

**GCD** means gallons per connection per day.

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

**NA** means not applicable.

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

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

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

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

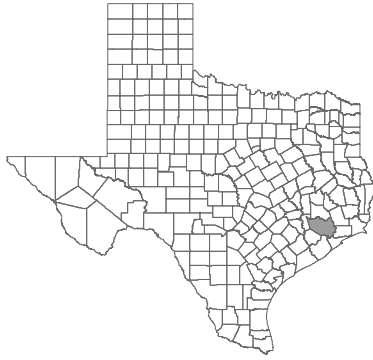
**Water loss** is the difference between the input volume and the authorized consumption within a water system. Water Loss consists of real losses and apparent losses.

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

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

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

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



# Harris County WCID No. 91 Harris County

