



PROJECT FUNDING REQUEST

BOARD DATE: August 21, 2025

Team Manager: Nancy Richards

ACTION REQUESTED

Consider approving by resolution a request from the Harris County Fresh Water Supply District 1A (Harris County) for \$584,000 in grant funding from the Water Loan Assistance Fund for construction of water system improvements.

STAFF RECOMMENDATION

☒ Approve ☐ No Action

BACKGROUND

The Harris County Fresh Water Supply District 1A (District) is located 30 miles east of Houston. The District provides water services to a population of approximately 2,166 residents with approximately 795 water connections.

PROJECT NEED AND DESCRIPTION

The District's manual water meters are over 20 years old, and it is estimated that as much as 30 percent of the water going through the meters are not registered, resulting in unreliable water usage data. The District reports two to four leaks per month and currently estimates total water loss of 25 million gallons of water per year, or 38 percent of water treated in the system.

The District proposes to replace its manual meters with automated water meters and to add 22 fire hydrants.

PROJECT SCHEDULE

Task	Schedule Date
Closing	November 1, 2025
Engineering Feasibility Report Completion (End of Planning Phase)	April 30, 2026
Design Phase Completion	June 30, 2026
Start of Construction	August 31, 2026
Construction Completion	July 31, 2027

KEY ISSUES

The District qualifies for \$584,000 in grant funding as an applicant with a population between 1,001 and 10,000 for a water loss mitigation project.

The District is above its threshold for real water loss. This project includes the installation of smart meters and smart fire hydrants. This will enable the District to pinpoint and address leaks in water lines as problems arise.

COMMITMENT PERIOD: SIX (6) MONTHS TO EXPIRE FEBRUARY 28, 2026

While this project does not directly mitigate its real water loss, staff believes this project will help the District improve its ability to identify distribution leaks and provide them with better data to help mitigate real water loss. Staff recommends that the District implement a procedure to track their leak detection and water main repairs.

The funding is provided in the form of a 100 percent grant and therefore is not subject to the Texas Water Development Board's internal risk score analysis that is applied to loans.

Staff reviewed the most recent audited financial statements to assess the applicant's ability to manage existing obligations and business practices. Based on this analysis, staff have determined that the applicant has adequate capabilities to manage its obligations.

LEGAL/SPECIAL CONDITIONS

- Executed grant agreement
- Notice of change in legal status
- Notice of conveyance

Attachments:

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

Responsible Authority	Harris Co FWSD # 1A
Program	WAF
Commitment Number	G1002179
Project Number	21883
List Year	2024
Type of Pledge	N/A
Pledge Level (if applicable)	N/A
Legal Description	\$584,000 Grant Agreement
Tax-exempt or Taxable	Tax-Exempt
Refinance	No
Outlay Requirement	Yes
Disbursement Method	Escrow
Outlay Type	Outlay = Escrow Release
Qualifies as Disadvantaged	No
Financial Managerial & Technical Complete	N/A
Phases Funded	Construction
Pre-Design	No
Project Consistent with State Water Plan	Yes
Water Conservation Plan	Adopted
Overall Risk Score	N/A

PROJECT TEAM

Team Manager	Financial Analyst	Engineering Reviewer	Environmental Reviewer	Attorney
Nancy Richards	Kyle DuQuesnay	Sophia Fousie	Britt Wilson	Marshall Walters



Project Budget Summary
Harris Co FWSD No. 1A
21883 - Smart Meters & Smart Fire Hydrants

Budget Items	TWDB Funds	Local and Other Funds	Total
Construction			
Construction	\$507,500.00	\$1,000.00	\$508,500.00
Subtotal for Construction	\$507,500.00	\$1,000.00	\$508,500.00
Basic Engineering Services			
Planning	\$0.00	\$15,000.00	\$15,000.00
Design	\$0.00	\$49,000.00	\$49,000.00
Construction Engineering	\$8,000.00	\$0.00	\$8,000.00
Subtotal for Basic Engineering Services	\$8,000.00	\$64,000.00	\$72,000.00
Special Services			
Environmental	\$4,000.00	\$0.00	\$4,000.00
Subtotal for Special Services	\$4,000.00	\$0.00	\$4,000.00
Fiscal Services			
Bond Counsel	\$5,000.00	\$0.00	\$5,000.00
Financial Advisor	\$5,000.00	\$0.00	\$5,000.00
Fiscal/Legal	\$4,500.00	\$0.00	\$4,500.00
Subtotal for Fiscal Services	\$14,500.00	\$0.00	\$14,500.00
Contingency			
Contingency	\$50,000.00	\$0.00	\$50,000.00
Subtotal for Contingency	\$50,000.00	\$0.00	\$50,000.00
Total	\$584,000.00	\$65,000.00	\$649,000.00

A RESOLUTION OF THE TEXAS WATER DEVELOPMENT BOARD
APPROVING AN APPLICATION FOR FINANCIAL ASSISTANCE IN THE AMOUNT OF
\$584,000 TO HARRIS COUNTY FRESH WATER SUPPLY DISTRICT NO. 1A
FROM THE WATER LOAN ASSISTANCE FUND
THROUGH THE
EXECUTION OF A GRANT AGREEMENT IN THE AMOUNT OF \$584,000

(25-)

Recitals:

The Harris County Fresh Water Supply District No. 1A (District), located in Harris County, Texas, has filed an application for financial assistance in the amount of \$584,000 to finance certain water system improvements, identified as Project No. 21883.

The District seeks financial assistance from the Texas Water Development Board (TWDB) in the amount of \$584,000 through the TWDB's execution of a Grant Agreement in the amount \$584,000, all as is more specifically set forth in the application and in recommendations of the TWDB's staff.

The Board hereby authorizes the transfer of \$584,000 from the Texas Water Fund to the Water Assistance Fund, as authorized by Texas Water Code § 15.504(a).

The Board hereby authorizes the transfer of \$584,000 from the Water Assistance Fund to the Water Loan Assistance fund, as authorized by Texas Water Code § 15.011(b).

In accordance with Texas Water Code § 15.105, 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 project and the benefit of the project to the area in relation to the needs of other areas requiring state assistance in any manner and the benefits of those projects to the other areas.
2. The availability of revenue to the District, from all sources, for the ultimate repayment of the cost of the project, including interest.
3. The relationship of the project to overall statewide needs.
4. The ability of the District to finance the project without state assistance.
5. The ability of the applicant to construct the project without the grant and benefits of the project to water and wastewater needs of the state.

Findings:

1. The public interest requires state assistance in the financing of this project, in accordance with Texas Water Code § 15.106(a)(1).
2. No debt obligations are to be assumed by the District for the financial assistance and no taxes or revenues are required to be pledged by the District in accordance with Texas Water Code § 15.106(a)(2).
3. The District has adopted and implemented a water conservation program for the more efficient use of water that will meet reasonably anticipated local needs and conditions and that incorporates practices, techniques or technology prescribed by the Texas Water Code and TWDB's rules.
4. The 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).
5. The District has completed its current water audit required by Texas Water Code § 16.0121 and has filed it 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 Fresh Water Supply District No. 1A for financial assistance in the amount of \$584,000 from the Water Loan Assistance Fund through a transfer from the Texas Water Fund to the Water Loan Assistance Fund through the Water Assistance Fund, to be evidenced by the execution of a Grant Agreement in the amount of \$584,000. This commitment will expire on February 28, 2026.

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 District'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.
3. The Grant Agreement must provide that the TWDB may exercise all remedies available to it in law or equity, and any provision that restricts or limits the TWDB's full exercise of these remedies shall be of no force and effect.
4. Financial assistance proceeds are public funds. Therefore, the Grant Agreement 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.

5. Grant Funds Financial assistance proceeds shall not be used by the District when sampling, testing, removing, or disposing of contaminated soils or media at the project site. The Grant Agreement must provide that the District is solely 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.
6. 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.
7. 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.
8. Before closing, the District shall submit to the escrow agent a closing memo signed by the Executive Administrator
9. The Executive Administrator may require that the District execute a separate financing agreement in form and substance acceptable to the Executive Administrator.
10. 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.
11. 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).

The Following Conditions Must Be Included in the Grant Agreement:

12. The Grant Agreement must provide that the District 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.
13. The Grant Agreement must provide that the District will not begin construction for a portion of the Project until the environmental finding has been issued for that portion of the Project.
14. The Grant Agreement must contain a provision requiring the District to maintain insurance coverage sufficient to protect the TWDB's interest in the project.
15. The Grant Agreement must include a provision requiring a final accounting to be made of the total sources and authorized use of Project funds within 60 days of the completion of the Project.
16. The Grant Agreement must include a provision stating that the District shall return any grant funds that are determined to be surplus funds remaining after completion of the Project and completion of a final accounting, including any interest earned on the grant funds in a manner approved by the executive administrator.
17. The Grant Agreement must contain a provision stating that the District 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.
18. Before release of funds for the relevant services, and if required under the TWDB's financial assistance program and if not previously provided with the application, the District shall submit executed contracts for engineering and, if applicable, financial advisor and legal services, 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.
19. Before closing, when any portion of financial assistance is to be held in escrow or in trust, the District 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.
20. Before release of funds for construction, the District must provide the TWDB with evidence that the necessary acquisitions of land, leases, easements and rights-of-way have been completed or, if all acquisitions have not been completed, evidence that the applicant has the legal District necessary to complete the acquisitions.

Special Conditions:

21. The District must notify the Executive Administrator in writing 30 days before taking any actions to alter its legal status in any manner.
22. 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.

APPROVED and ordered of record this, the 21st Day of August 2025.

TEXAS WATER DEVELOPMENT BOARD

L'Oreal Stepney, P.E., Chairwoman

DATE SIGNED: _____

ATTEST:

Bryan McMath, Executive Administrator

☒ Water

☐ Wastewater

☒ Other WAF

WATER CONSERVATION REVIEWEntity: Harris County Fresh Water Supply District #1A

Other entity: _____

WATER CONSERVATION PLAN DATE:

2025

☐

Approvable

☒

Adopted

	Total GPCD	Residential GPCD	Water Loss GPCD
Baseline	68	39	25
5-year Goal	66	37	20
10-year Goal	65	36	19

WATER LOSS AUDIT YEAR:

2024

Validation Required: Yes

Validation Performed: Yes

Service connections: 878Length of main lines (miles): 13Water Loss GCD: 87Retail population: 2,634Connections per mile: 67Water Loss GPCD: 29ILI: NAReal Loss GMD: NA**WATER LOSS THRESHOLDS**Water Loss Project: ☒Waiver Requested: ☐Wholesale Adjusted: ☐

Threshold Type:

Connection Density >= 32 per mile

Apparent Loss GCD		Real Loss GCD	
Reported	Threshold	Reported	Threshold
1	7	87	30

Does the applicant meet Water Loss Threshold Requirements?

Yes ☐No ☒NA ☐**ADDITIONAL INFORMATION**

The district's water conservation plan satisfies minimum requirements and uses reasonable efforts to reduce water loss and municipal use of water. The district's current strategies include

- a record management system capable of tracking and classifying water sales,
- a monthly inspection and monitoring program for faulty/inaccurate meters, and
- distribution of water conservation information to the public in the district's service area.

Future efforts to achieve goals include implementing phased transitions to smart meters to enhance data tracking accuracy and the deployment of smart hydrants throughout the distribution system to monitor pressure, flow, and potential leak activity in real time.

STAFF NOTES AND RECOMMENDATIONS

The district is above its threshold for real water loss. This project includes the installation of smart meters and smart fire hydrants. This will enable the district to pinpoint and address leaks in water lines as problems arise. While this project does not directly mitigate its real water loss, TWDB conservation staff believes this project will help the district improve its ability to identify distribution leaks and provide them with better data to help mitigate real water loss. TWDB conservation staff recommends the district implement a procedure to track their leak detection and water main repairs.

DEFINITIONS

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

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

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

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

GPCD means gallons per capita per day.

GCD means gallons per connection per day.

GMD means gallons per mile per day.

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

NA means not applicable.

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

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

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

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

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

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

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

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

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



Harris County FWSD 1A
Harris County

