

# Texas Water Development Board

## PROJECT FUNDING REQUEST

BOARD DATE: September 22, 2015

TEAM MANAGER: Nancy Richards

<b>APPLICANT</b>	Harris County Municipal Utility District No. 148
<b>TYPE OF ASSISTANCE</b>	\$1,100,000 Loan
<b>LEGAL PLEDGE</b>	Unlimited Tax Bonds

### STAFF RECOMMENDATION

Approve       No Action

Approve, by resolution, a request from the **Harris County Municipal Utility District No. 148 (Harris County)** for a \$1,100,000 loan from the Drinking Water State Revolving Fund to finance planning, design, and construction cost for the rehabilitation and upgrading of an existing water distribution system.

### PROJECT

Water Distribution System Upgrades and Rehabilitation  
Project Number 62679

### BACKGROUND

The purpose of the project is to upgrade and replace the existing water distribution lines within the existing developed subdivisions of Greensbrook Section 1 and Kings Lake Forest Section 1 of Harris County MUD No. 148 (District). This will increase the availability of water and improve circulation within the subdivisions. Trenchless construction methods will be used for the installation of the water lines. Along with the water lines, the work will include replacement of valves, fittings, connections, fire hydrants, water meters, service lines and other appurtenances. The water lines were installed in the late 1970's and early 1980's of Acrylonitrile Butadiene Styrene (ABS) pipe material. The deterioration of the water lines includes numerous line breaks, broken and/or inoperable valves.

**COMMITMENT PERIOD: ONE (1) YEAR TO EXPIRE ON SEPTEMBER 30, 2016**

## **FINANCIAL**

### Key Issues

The District currently has \$4,460,000 in outstanding loans from the Texas Water Development Board for water and sewer system improvements.

### Pledge and Repayment

The District is pledging unlimited taxes as the proposed source for loan repayment. The District currently has a balance of \$1,815,978 in its Debt Service Fund which is 2.18 times the average annual debt service payment (including the proposed issue). The District's current tax revenues will be sufficient to service its current and proposed debt service.

Staff's analysis is based on the project and financial documents received from the District and its consultants. The debt service analysis is based on estimation of the interest rate for a tax-exempt Drinking Water loan at the time of consideration.

### Cost Savings

Based on a 20-year maturity schedule and current interest rates, the District could save approximately \$366,868 over the life of the loan.

### Internal Risk Score

The District is assigned a risk score of 2B. A risk score of 2B means the District's repayment capacity is adequate. The applicant's earning trends and coverage ratios are sound and may be less susceptible to moderate changes in circumstances and economic conditions.

The District's population has increased 5.2% since 2010, to its current population of 1,944 compared to the State's average annual population increase of 5.4% during the same period. The District's median household income of \$72,761 is 40% higher than the State median income of \$51,900. The current unemployment rate of the District's service area is 9.0%, which is higher than the current State and County unemployment rate of 4.8%.

On average, the residential user pays 1.1% of their annual income for water and sewer service. This is below the TWDB's benchmark of 2% for two services. Staff has assigned a 2B risk rating to the proposed project. The risk score is established on an analysis of the District's economic indicators and utility management policies.

**LEGAL**

Key Issues

None.

**CONDITIONS**

Standard tax-exempt, tax and Drinking Water State Revolving Fund conditions and additional conditions as follows:

- Notification of conveyance;
- Notification of conversion; and
- Standard emergency discovery conditions.

- Attachments:
1. Project Data Summary
  2. Debt Service Schedule
  3. Engineering/Environmental Review
  4. Project Budget
  5. Resolution (15- )
  6. Water Conservation Review
  7. Location Map

**PROJECT DATA SUMMARY**

<b>Responsible Authority</b>	Harris County Municipal Utility District No. 148
<b>Program</b>	Drinking Water State Revolving Fund
<b>Commitment Code</b>	L1000457
<b>Project Number</b>	62679
<b>Intended Use Plan Year</b>	2015
<b>Fund Number</b>	951
<b>Type of Pledge</b>	1
<b>Revenue Pledge Level</b>	First
<b>Legal Description</b>	\$1,100,000 Unlimited Tax Bonds, Proposed Series 2015
<b>Tax-exempt or Taxable</b>	Tax-exempt
<b>Refinance</b>	No
<b>Outlay Requirement</b>	Yes
<b>Disbursement Method</b>	Escrow
<b>Outlay Type</b>	Outlay = Escrow Release
<b>Population</b>	1,944
<b>Rural</b>	No
<b>Water Connections</b>	1,391
<b>Wastewater Connections</b>	1,384
<b>Qualifies as Disadvantaged</b>	No
<b>Disadvantaged Level</b>	N/A
<b>Clean Water State Revolving Fund Type</b>	N/A
<b>Financial, Managerial, and Technical Review Complete?</b>	No
<b>Phase Committing</b>	Planning, Design, and Construction
<b>Pre-Design</b>	Yes
<b>Project Consistent with Water Plan</b>	Yes
<b>Water Conservation Plan</b>	Yes
<b>Water Rights Certification Required</b>	No
<b>Internal Risk Score</b>	2B
<b>External Ratings (for SRF rates)</b>	
<b>Standard and Poor's</b>	BBB-
<b>Moody's</b>	Non-Rated
<b>Fitch</b>	Non-Rated
<b>Special Issues</b>	None

**Project Team**

Manager	Nancy Richards
Financial Analyst	Charles R. Nichols
Engineering Reviewer	Jaswir Judge
Environmental Reviewer	Jean Delvin
Attorney	Annette Mass

ISSUE BEING EVALUATED  
 FOR ILLUSTRATION PURPOSES ONLY  
 Harris County MUD No. 148  
 Unlimited Tax Revenues Bonds, Series 2015

Dated Date: 12/1/2015  
 Delivery Date: 12/1/2015  
 First Interest: 6/1/2016  
 First Principal: 12/1/2016  
 Last Principal: 12/1/2034  
 Fiscal Year End: 08/31  
 Required Coverage: 1.1

Source: DWSRF  
 Rate: 1.61%  
 Insurance: Yes  
 Case: Tax  
 Admin.Fee: \$ 24,205  
 Admin. Fee Payment Date: 12/1/2015  
 Total Assessed Valuation: \$ 91,846,814

FISCAL YEAR	REQUIRED TAX RATE	TAX REVENUES WITH COLL. @ 90%	PROJECTED NET SYSTEM REVENUES	PROJECTED TOTAL REVENUES	CURRENT DEBT SERVICE	PRINCIPAL PAYMENT	INTEREST RATE	\$1,100,000 ISSUE			TOTAL DEBT SERVICE	COVERAGE
								INTEREST PAYMENT	TOTAL PAYMENT	TOTAL DEBT		
2016	1.652	1,365,403	-	1,365,403	1,232,420	-		8,855	8,855	1,241,275	1.10	
2017	1.231	1,017,437	-	1,017,437	857,635	50,000	1.61%	17,308	67,308	924,943	1.10	
2018	1.242	1,026,594	-	1,026,594	866,765	50,000	1.61%	16,503	66,503	933,268	1.10	
2019	0.921	761,678	-	761,678	626,737	50,000	1.61%	15,698	65,698	692,435	1.10	
2020	1.238	1,023,626	-	1,023,626	865,677	50,000	1.61%	14,893	64,893	930,570	1.10	
2021	1.234	1,019,865	-	1,019,865	858,103	55,000	1.61%	14,047	69,047	927,150	1.10	
2022	1.234	1,020,131	-	1,020,131	859,230	55,000	1.61%	13,162	68,162	927,392	1.10	
2023	1.241	1,025,458	-	1,025,458	864,958	55,000	1.61%	12,276	67,276	932,234	1.10	
2024	1.229	1,016,137	-	1,016,137	857,370	55,000	1.61%	11,391	66,391	923,761	1.10	
2025	1.238	1,022,976	-	1,022,976	864,473	55,000	1.61%	10,505	65,505	929,978	1.10	
2026	1.238	1,023,168	-	1,023,168	860,573	60,000	1.61%	9,580	69,580	930,153	1.10	
2027	1.370	1,132,331	-	1,132,331	960,778	60,000	1.61%	8,614	68,614	1,029,392	1.10	
2028	0.858	709,327	-	709,327	577,195	60,000	1.61%	7,648	67,648	644,843	1.10	
2029	0.859	709,824	-	709,824	578,613	60,000	1.61%	6,682	66,682	645,295	1.10	
2030	0.865	715,045	-	715,045	584,325	60,000	1.61%	5,716	65,716	650,041	1.10	
2031	0.863	713,712	-	713,712	584,080	60,000	1.61%	4,750	64,750	648,830	1.10	
2032	0.881	728,138	-	728,138	593,200	65,000	1.61%	3,743	68,743	661,943	1.10	
2033	0.893	737,766	-	737,766	603,000	65,000	1.61%	2,697	67,697	670,697	1.10	
2034	0.903	746,075	-	746,075	611,600	65,000	1.61%	1,650	66,650	678,250	1.10	
2035	0.924	764,020	-	764,020	624,000	70,000	1.61%	564	70,564	694,564	1.10	
		\$ 18,278,710	\$ 15,330,732	\$ 1,100,000	\$ 186,277	\$ 1,286,277	\$ 16,617,009					

AVERAGE (MATURITY) LIFE	10.52 YEARS
NET INTEREST RATE	1.610%
COST SAVINGS	\$ 366,868
AVERAGE ANNUAL REQUIREMENT	\$830,850

**Harris Co MUD # 148  
62679 Water System Improvements  
Engineering and Environmental Review**

**Engineering:**

Key Issues:

No Key issues

Project Need/Description

Project Need: The existing water distribution lines within the developed subdivisions of Greensbrook Section 1 and Kings Lake Forest Section 1 of the Harris County MUD No. 148 (District) were installed in the late 1970's and early 1980's of ABS pipe material. Due to age, these water lines have deteriorated resulting in numerous line breaks leading to water loss and other potential health issues. Additionally, numerous existing water valves that are used to control the water distribution system in these two subdivisions either are inoperable or simply cannot be found or located. Finally, due to the combined effect of old water pipes and inoperable valves, several areas of the District have experienced low water pressures. Thus, the District needs to replace and upgrade the existing water lines and associated appurtenances to provide adequate and reliable water service to its customers and to alleviate low water pressure situations.

Project Description: The project's objective is the replacement and upgrading of the existing water distribution lines within the existing developed subdivisions of Greensbrook Section 1 and Kings Lake Forest Section 1 of Harris County MUD No. 148 to increase the availability of water, improve circulation and enhance fire protection within the two subdivisions. New, adequately sized lines of sufficient capacity to serve current and future needs of the two subdivisions will be installed using trenchless technology. The project also includes the replacement of the existing valves, fire hydrants, water meters, service lines and other associated appurtenances. Finally, existing water services will be connected to the new water lines.

**Project Schedule:**

<b>Project Task</b>	<b>Schedule Date</b>
Closing	12/1/2015
Engineering Feasibility Report Completion (End of Planning Phase)	2/5/2016
Design Phase Complete	2/15/2016
Start of Construction	8/12/2016
Construction Completion	3/17/2017

**Environmental Section:**

Key Issues:

None known at this time.

Environmental Summary:

A Categorical Exclusion (CE) for this project was issued on August 14, 2015. As required by 31 Texas Administrative Code (TAC) §375, Subchapter E, environmental review of the proposed project has been completed. The proposed project is in compliance with the National Environmental Policy Act.

**Harris Co MUD # 148  
62679 - Water System Improvements**

<b>Budget Items</b>	<b>TWDB Funds</b>	<b>Local &amp; Other Funds</b>	<b>Total Cost</b>
<b>Construction</b>			
Construction	\$700,000	\$0	\$700,000
<b>Construction Total</b>	<b>\$700,000</b>	<b>\$0</b>	<b>\$700,000</b>
<b>Basic Engineering Services</b>			
Construction Engineering	\$28,000	\$0	\$28,000
Design	\$60,000	\$0	\$60,000
Planning	\$26,000	\$0	\$26,000
<b>Basic Engineering Services Total</b>	<b>\$114,000</b>	<b>\$0</b>	<b>\$114,000</b>
<b>Special Services</b>			
Environmental	\$10,000	\$0	\$10,000
Inspection	\$30,000	\$0	\$30,000
Surveying	\$20,000	\$0	\$20,000
Testing	\$15,000	\$0	\$15,000
<b>Special Services Total</b>	<b>\$75,000</b>	<b>\$0</b>	<b>\$75,000</b>
<b>Contingency</b>			
Contingency	\$110,000	\$0	\$110,000
<b>Contingency Total</b>	<b>\$110,000</b>	<b>\$0</b>	<b>\$110,000</b>
<b>Other</b>			
Administration	\$14,945	\$0	\$14,945
Other (Describe) - AG Fees	\$1,100	\$0	\$1,100
Other (Describe) - Bond Application	\$7,500	\$0	\$7,500
<b>Other Total</b>	<b>\$23,545</b>	<b>\$0</b>	<b>\$23,545</b>
<b>Fiscal Services</b>			
Bond Counsel	\$22,000	\$0	\$22,000
Financial Advisor	\$19,250	\$0	\$19,250
Issuance Costs	\$12,000	\$0	\$12,000
Loan Origination Fee	\$24,205	\$0	\$24,205
<b>Fiscal Services Total</b>	<b>\$77,455</b>	<b>\$0</b>	<b>\$77,455</b>
<b>Grand Total</b>	<b>\$1,100,000</b>	<b>\$0</b>	<b>\$1,100,000</b>

A RESOLUTION OF THE TEXAS WATER DEVELOPMENT BOARD  
APPROVING AN APPLICATION FOR FINANCIAL ASSISTANCE IN THE AMOUNT  
OF \$1,100,000 TO HARRIS COUNTY MUNICIPAL UTILITY DISTRICT NO. 148  
FROM THE DRINKING WATER STATE REVOLVING FUND  
THROUGH THE PROPOSED PURCHASE OF  
\$1,100,000 HARRIS COUNTY MUNICIPAL UTILITY DISTRICT NO. 148  
UNLIMITED TAX BONDS, PROPOSED SERIES 2015

(15- )

WHEREAS, the Harris County Municipal Utility District No. 148 (District) has filed an application for financial assistance in the amount of \$1,100,000 from the Drinking Water State Revolving Fund (DWSRF) to finance the planning, design, and construction of certain water system improvements identified as Project No. 62679; and

WHEREAS, the District seeks financial assistance from the Texas Water Development Board (TWDB) through the TWDB's proposed purchase of \$1,100,000 Harris County Municipal Utility District No. 148 Unlimited Tax Bonds, Proposed Series 2015 (together with all authorizing documents) (Obligations), all as is more specifically set forth in the application and in recommendations of the TWDB's staff; and

WHEREAS, the District has offered a pledge of unlimited taxes as sufficient security for the repayment of the Obligations; and

WHEREAS, the loan is approved for funding under the TWDB's pre-design funding option, and initial and future releases of funds being subject to 31 TAC Chapter 371; and

WHEREAS, the TWDB hereby finds:

1. that the revenue and/or taxes pledged by the District will be sufficient to meet all the Obligations assumed by the District, in accordance with Texas Water Code § 15.607;
2. that the application and assistance applied for meet the requirements of the Safe Drinking Water Act, 42 U.S.C. §§ 300f *et seq.* as well as state law, in accordance with Texas Water Code § 15.607;
3. that 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. that the TWDB has approved a regional water plan for the region of the state that includes the area benefiting from the project and the needs to be addressed by the

project will be addressed in a manner that is consistent with the approved regional and state water plans, as required by Texas Water Code § 16.053(j);

5. that a current water audit required by Texas Water Code § 16.0121 and 31 TAC § 358.6 has been completed by the District and filed with the TWDB in accordance with Texas Water Code § 16.053(j); and
6. that the Executive Administrator issued a Categorical Exclusion on August 14, 2015, such findings being subject to the standard emergency discovery conditions for threatened and endangered species and cultural resources in the Project contract documents. The TWDB concurs with the environmental finding issued by the Executive Administrator.

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

A commitment is made by the TWDB to the Harris County Municipal Utility District No. 148 for financial assistance in the amount of \$1,100,000 from the Drinking Water State Revolving Fund through the TWDB's proposed purchase of \$1,100,000 Harris County Municipal Utility District No. 148 Unlimited Tax Bonds, Proposed Series 2015. This commitment will expire on September 30, 2016.

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 all of the requirements of the laws under which said Obligations were issued have been complied with; 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 District;
3. this commitment is contingent upon the District's compliance with all applicable requirements contained in 31 TAC Chapter 371;
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 which is 10 years from the dated date of the Obligations, at a redemption price of par, together with accrued interest to the date fixed for redemption;
5. the 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, 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 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 such bonds under SEC Rule 15c2-12;

6. the Obligations must contain a provision requiring the District 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;
7. the Obligations must include a provision requiring the District to use any loan proceeds from the Obligations that are determined to be surplus funds remaining after completion of the project for the following purposes as approved by the Executive Administrator: (1) to redeem, in inverse annual order, the Obligations owned by the TWDB; (2) deposit into the Interest and Sinking Fund or other debt service account for the payment of interest or principal on the Obligations owned by the TWDB; or (3) eligible project costs as authorized by the Executive Administrator;
8. 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;
9. loan 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;
10. loan proceeds shall not be used by the District 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 District agrees to indemnify, hold harmless and protect the TWDB from any and all claims, causes of action or damages to the person or property of third parties arising from the sampling, analysis, transport, storage, treatment and disposition of any contaminated sewage sludge, contaminated sediments and/or contaminated media that may be generated by the District, its contractors, consultants, agents, officials and employees as a result of activities relating to the project to the extent permitted by law;
11. prior to closing, the District 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;

12. prior to closing, and if not previously provided with the application, the District shall submit executed contracts for engineering and, if applicable, financial advisor and bond counsel contracts, for the project that are satisfactory to the Executive Administrator. Fees to be reimbursed under the contracts must be reasonable in relation to the services performed, reflected in the contract, and acceptable to the Executive Administrator;
13. prior to closing, when any portion of the financial assistance is to be held in escrow or in trust, the District shall execute an escrow or trust agreement, approved as to form and substance by the Executive Administrator, and shall submit that executed agreement to the TWDB;
14. the Executive Administrator may require that the District execute a separate financing agreement in form and substance acceptable to the Executive Administrator;
15. the TWDB retains the option to purchase the Obligations in separate lots and/or on an installment basis, with delivery of the purchase price for each installment to be paid against delivery of the relevant installment of Obligations as approved by the Executive Administrator;

#### Conditions Related To Tax-Exempt Status

16. the District'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 District when rendering this opinion;
17. the District's bond counsel opinion must also state that the Obligations are not "private activity bonds." Bond counsel may rely on covenants and representations of the District when rendering this opinion;
18. the Obligations must include a provision prohibiting the District from using the proceeds of this loan 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);
19. the Obligations must provide that no portion of the proceeds of the loan 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 which were used, directly or indirectly, to acquire Nonpurpose Investments (as defined in the Code and Regulations) which

produce a yield materially higher than the yield on the TWDB's bonds that are issued to provide financing for the loan (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;
20. the Obligations must include a provision requiring the District 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 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 District may, however, to the extent permitted by law, commingle Gross Proceeds of its Loan 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 therewith;
  - b. calculate the Rebate Amount, as defined in the Code and Regulations, with respect to its Loan, 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 District shall 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 Loan, and in order to induce the making of the Loan 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;
- 21. 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;
- 22. 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;
- 23. 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;
- 24. 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 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;
- 25. the Obligations must provide that neither the District 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 District by the TWDB;

State Revolving Fund Conditions

- 26. the District shall submit outlay reports with sufficient documentation on costs on a quarterly or monthly basis in accordance with TWDB outlay report guidelines;
- 27. the Obligations must include a provision stating that all laborers and mechanics employed by contractors and subcontractors for projects shall be paid wages at rates not less than those prevailing on projects of a similar character in the locality in accordance with the Davis-Bacon Act, and the U.S. Department of Labor’s implementing regulations. The District, all contractors, and all sub-contractors shall ensure that all project contracts mandate compliance with Davis-Bacon. All contracts and subcontracts for the construction of the project carried out in whole or in part with financial assistance made available as provided herein shall insert in full in any contract in excess of \$2,000 the contracts clauses as provided by the TWDB;

28. the Obligations must include a provision stating that the District shall provide the TWDB with all information required to be reported in accordance with the Federal Funding Accountability and Transparency Act of 2006, Pub. L. 109-282, as amended by Pub. L. 110-252. The District shall obtain a Data Universal Numbering System (DUNS) Number and shall register with System for Award Management (SAM), and maintain current registration at all times during which the Obligations are outstanding;
29. the Obligations shall provide that all loan proceeds will be timely and expeditiously used, as required by 40 CFR § 35.3135(d), and also shall provide that the District will adhere to the approved project schedule;
30. The Obligations must contain a covenant that the District will abide by all applicable construction contract requirements related to the use of iron and steel products produced in the United States, as required by the 2014 Federal Appropriations Act and related State Revolving Fund Policy Guidelines;

#### Drinking Water State Revolving Fund Conditions

31. prior to or at closing, the District shall pay a 2.25% origination fee to the TWDB calculated pursuant to 31 TAC Chapter 371;
32. prior to closing, the Texas Commission on Environmental Quality, must make a determination, the form and substance of which is satisfactory to the Executive Administrator, that the District has demonstrated the necessary financial, managerial, and technical capabilities to proceed with the project or projects to be funded with the proceeds of these Obligations;
33. prior to release of funds for professional consultants including, but not limited to, the engineer, financial advisor, and bond counsel, as appropriate, the District must provide documentation that it has met all applicable state procurement requirements as well as all federal procurement requirements under the Disadvantaged Business Enterprises program;

#### Pledge Conditions for the Loan

34. the Obligations must contain a provision that for each year the Bonds are outstanding, the District will levy a debt service tax rate, and collect taxes sufficient for the repayment of annual principal and interest requirements on the Obligations;

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

#### Special Conditions:

35. the District must comply with the standard emergency discovery conditions for threatened and endangered species and cultural resources, as more fully specified in the final environmental finding of the Executive Administrator;
36. the District must notify the Executive Administrator prior to taking any actions to alter its legal status in any manner, such as by conversion to a conservation and reclamation district or a sale-transfer-merger with another retail public utility; and
37. the Obligations must include a provision requiring that, prior to any action by the District 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 22<sup>nd</sup> day of September, 2015.

TEXAS WATER DEVELOPMENT BOARD

\_\_\_\_\_  
Bech K. Bruun, Chairman

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

ATTEST:

\_\_\_\_\_  
Kevin Patteson  
Executive Administrator

# WATER CONSERVATION REVIEW

Entity: \_\_\_\_\_

Review date: \_\_\_\_\_

**WATER CONSERVATION PLAN DATE:** **Approvable**      **Adopted**

	Total GPCD	Residential GPCD	Water Loss GPCD	Water Loss Percent
<b>Baseline</b>				
<b>5-year Goal</b>				
<b>10-year Goal</b>				

**WATER LOSS AUDIT YEAR:**

Total water loss (GPCD): \_\_\_\_\_      Total water loss (percent): \_\_\_\_\_      Wholesale Water  
 Total no. of connections: \_\_\_\_\_      Length of mains (miles): \_\_\_\_\_      Connections per mile: \_\_\_\_\_  
 If > 16 connections per mile and > 3,000 connections, Infrastructure Leakage Index (ILI): \_\_\_\_\_

**WATER LOSS THRESHOLDS:**

	Apparent Loss Gallons per connection per day	Real Loss Gallons per mile per day	Real Loss Gallons per connection per day	Apparent Threshold Gallons per connection per day	Real Threshold Gallons per mile per day	Real Threshold Gallons per connection per day
If population ≤ 10K, connections/mile < 32 :						
If population ≤ 10K, connections/mile ≥ 32 :						
If population > 10K :						

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 loss** refers to unauthorized consumption, meter inaccuracy, billing adjustments, and waivers.

**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 5,000 connections, average pressure greater than 35 psi, and a connection density of more than 32 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 benchmarking 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.

**Produced water** is the total amount of water purchased or produced by the utility.

**Real loss** comes from main breaks and leaks, storage tank overflows, customer service line breaks, and leaks.

**Residential GPCD** is the amount of water per capita used solely for residential use and ideally includes both single and multi-family customer use.

**Total baseline GPCD** is the amount of all water purchased or produced by the utility divided by the service area population and then 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 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.

**Harris County MUD No. 148,  
Harris County**

