

Texas Water Development Board

PROJECT FUNDING REQUEST

BOARD DATE: February 18, 2016

PRESENTED BY: Nancy Richards

APPLICANT	City of Houston
TYPE OF ASSISTANCE	\$65,750,000 Loan
LEGAL PLEDGE	Combined Utility System Revenue Bonds

STAFF RECOMMENDATION

Approve No Action

Approve, by resolution, a request from the **City of Houston (Harris County)** for a \$65,750,000 loan from the Clean Water State Revolving Fund to finance the construction of citywide sanitary sewer collection system rehabilitation.

PROJECT

Collection System Rehabilitation 2016
Project Number 73719

BACKGROUND

The City of Houston (City) will use the funds to address the Texas Commission on Environmental Quality's Agreed Order to reduce sanitary sewer overflows in the collection system and optimize performance through the replacement and rehabilitation of sewer lines, which contribute to significant inflow and infiltration.

FINANCIAL

Key Issues

None

Pledge and Repayment

The City's debt will be subordinate to debt issued under the Previous Bond Ordinance and on parity with debt issued under the current Master Ordinance. The Master Ordinance requires the City to maintain and collect rates that will produce net revenues at least equal to the greater of: (1) 1.20 times coverage of the maximum annual principal and interest requirements of all first lien bonds and any previous ordinance bonds; or (2) 1.10 times coverage of the maximum annual principal and interest requirements on all first lien bonds, second lien bonds, and any previous ordinance bonds.

COMMITMENT PERIOD: ONE (1) YEAR TO EXPIRE ON FEBRUARY 28, 2017

The City's most recent Clean Water State Revolving Fund loan commitment totaling \$63,435,000 closed on January 20, 2016. The attached debt service schedule reflects the impact of the issuance of the current commitment and the proposed funding request. The City's existing user rates are sufficient to fund the existing and proposed debt service in accordance with the requirements of the Master Ordinance.

Reserve Fund

The Master Ordinance requires a reserve fund amount equal to 50% of the maximum annual debt service. Historically, the City has funded the reserve fund with the purchase of surety bonds; however, at this time, there are no guarantors on the Texas Water Development Board (TWDB) Approved Guarantors List. As such, the City is requesting \$1,815,300 in bond proceeds to fund the reserve.

Cost Savings

Based on a 30-year maturity schedule and current interest rates, the City could save approximately \$19,499,242 over the life of the loan.

Internal Risk Score

Staff assigns a 2A to the City, and the proposed project to be funded by the TWDB. A risk score of 2A means the City's repayment capacity is strong; the risk score is based on staff analysis of the City's Combined Utility Revenues and strong management policies of the City. The City remains in good financial condition. As the fourth largest city in the United States, the City is expanding its economic base to include not just the historical energy sectors but also medical, manufacturing and retail industries. On average, the residential user pays 1.84% of their annual income for water and sewer services. This is below the TWDB's benchmark of 2% for two services. The City's assessed valuation increased by 15% from fiscal 2013 to 2014.

The City's population has grown by 6.8 % since 2010, which is comparable to the State's growth rate of 7.2%. The median household income is \$45,728 or 86% of the State median household income. In September 2015 the City's unemployment rate of 4.9% is comparable to the State unemployment rates of 4.8%. The City intends to review the system revenues on an annual basis to ensure that the necessary revenues are in place to repay the proposed debt service. The stability of the City's financial and operational management supports the recommendation of a 2A risk rating.

LEGAL

Key Issues

None.

CONDITIONS

Standard tax-exempt, revenue, and Clean Water State Revolving Fund conditions and further conditions as follows:

- Reserve Fund Agreement;
- Standard emergency discovery conditions;
- Fiscal Sustainability Plan; and
- Alternative bonds test.

- Attachments:
1. Project Data Summary
 2. Debt Service Schedule
 3. Engineering/Environmental Review
 4. Project Budget
 5. Resolution (16-)
 6. Water Conservation Review
 7. Location Map

PROJECT DATA SUMMARY

Responsible Authority	City of Houston
Program	Clean Water State Revolving Fund
Commitment Code	L1000508
Project Number	73719
Intended Use Plan Year	2016
Fund Number	651
Type of Pledge	2
Revenue Pledge Level	First
Legal Description	\$65,750,000 Combined Utility System Revenue Bonds, Proposed Series 2017
Tax-exempt or Taxable	Tax-exempt
Refinance	No
Outlay Requirement	Yes
Disbursement Method	Escrow
Outlay Type	Outlay=Escrow Release
Population	2,200,000
Rural	No
Water Connections	450,315
Wastewater Connections	433,771
Qualifies as Disadvantaged	No
Disadvantaged Level	N/A
Clean Water State Revolving Fund Type	Equivalency
SWIFT Financing Type	N/A
SWIFT Project Type	N/A
Financial, Managerial, and Technical Review Complete?	N/A
Phase Committing	Construction
Pre-Design	Yes
Project Consistent with Water Plan	Yes
Water Conservation Plan	Adopted
Water Rights Certification Required	No
Internal Risk Score	2A
External Ratings (for SRF rates)	
Standard and Poor's	AA
Moody's	Aa2
Fitch	AA
Special Issues	None

Project Team

Manager	Nancy Richards
Financial Analyst	Charles R. Nichols
Engineering Reviewer	Jeff Dunsworth
Environmental Reviewer	Jean Devlin
Attorney	Annette Mass

ISSUE BEING EVALUATED
FOR ILLUSTRATION PURPOSES ONLY

City of Houston

\$65,750,000 Combined Utility System Revenue Bonds, Proposed Series 2017

Dated Date: 2/1/2017
Delivery Date: 2/1/2017
First Interest: 8/1/2017
First Principal: 2/1/2018
Last Principal: 2/1/2046
Fiscal Year End: 06/30
Required Coverage: 1.0

Source: CWSRF-EQUIVALENCY
Rate: 1.61%
Insurance: No
Case: -
Admin.Fee: \$ 1,194,281
Admin. Fee Payment Date: 2/1/2017

FISCAL YEAR	PROJECTED NET SYSTEM REVENUES	CURRENT DEBT SERVICE	PRINCIPAL PAYMENT	INTEREST RATE	\$65,750,000 ISSUE		TOTAL DEBT SERVICE	COVERAGE
					INTEREST PAYMENT	TOTAL PAYMENT		
2018	730,500,000	492,853,160	1,990,000	0.00%	858,335	2,848,335	495,701,495	1.47
2019	730,500,000	513,807,598	1,990,000	0.00%	858,335	2,848,335	516,655,933	1.41
2020	730,500,000	531,496,130	1,990,000	0.00%	858,335	2,848,335	534,344,465	1.37
2021	730,500,000	543,805,098	1,990,000	0.14%	858,335	2,848,335	546,653,433	1.34
2022	730,500,000	564,045,826	1,995,000	0.35%	855,549	2,850,549	566,896,375	1.29
2023	730,500,000	581,111,559	2,000,000	0.56%	848,567	2,848,567	583,960,126	1.25
2024	730,500,000	600,846,677	2,015,000	0.72%	837,367	2,852,367	603,699,044	1.21
2025	730,500,000	618,786,587	2,025,000	0.84%	822,859	2,847,859	621,634,446	1.18
2026	730,500,000	638,206,130	2,045,000	0.98%	805,849	2,850,849	641,056,979	1.14
2027	730,500,000	654,440,902	2,065,000	1.10%	785,808	2,850,808	657,291,710	1.11
2028	730,500,000	672,265,297	2,085,000	1.19%	763,093	2,848,093	675,113,390	1.08
2029	730,500,000	691,588,735	2,110,000	1.27%	738,281	2,848,281	694,437,016	1.05
2030	730,500,000	729,177,983	2,140,000	1.36%	711,484	2,851,484	732,029,467	1.00
2031	730,500,000	749,530,037	2,170,000	1.43%	682,380	2,852,380	752,382,417	0.97
2032	730,500,000	770,359,729	2,200,000	1.48%	651,349	2,851,349	773,211,078	0.94
2033	730,500,000	793,538,679	2,230,000	1.53%	618,789	2,848,789	796,387,468	0.92
2034	730,500,000	815,223,497	2,265,000	1.58%	584,670	2,849,670	818,073,167	0.89
2035	730,500,000	837,242,436	2,300,000	1.63%	548,883	2,848,883	840,091,319	0.87
2036	730,500,000	674,843,500	2,340,000	1.68%	511,393	2,851,393	677,694,893	1.08
2037	730,500,000	698,246,843	2,380,000	1.73%	472,081	2,852,081	701,098,924	1.04
2038	730,500,000	697,078,502	2,420,000	1.77%	430,907	2,850,907	699,929,409	1.04
2039	730,500,000	636,217,104	2,460,000	1.79%	388,073	2,848,073	639,065,177	1.14
2040	730,500,000	655,558,224	2,505,000	1.81%	344,039	2,849,039	658,407,263	1.11
2041	730,500,000	611,377,802	2,550,000	1.83%	298,699	2,848,699	614,226,501	1.19
2042	730,500,000	634,956,176	2,600,000	1.85%	252,034	2,852,034	637,808,210	1.15
2043	730,500,000	622,979,048	2,645,000	1.86%	203,934	2,848,934	625,827,982	1.17
2044	730,500,000	630,117,178	2,695,000	1.87%	154,737	2,849,737	632,966,915	1.15
2045	730,500,000	617,392,476	2,745,000	1.88%	104,340	2,849,340	620,241,816	1.18
2046	730,500,000	604,241,081	2,805,000	1.88%	52,734	2,857,734	607,098,815	1.20
		\$ 18,881,333,994	\$ 65,750,000		\$ 16,901,234	\$ 82,651,234	\$ 18,963,985,228	

AVERAGE (MATURITY) LIFE	15.92 YEARS
NET INTEREST RATE	1.615%
COST SAVINGS	\$19,499,242
AVERAGE ANNUAL REQUIREMENT	\$653,930,525

Houston
73719 Collection System Rehabilitation 2016
Engineering and Environmental Review

Engineering:

Key Issues:

None known at this time.

Project Need/Description

Project Need: This project is required by TCEQ Agreed Order, and as part of that agreement the City of Houston (City) must rehab at least 600,000 linear feet of the sanitary sewer collection system per year. Project will reduce sanitary sewer overflows in the collection system and optimize its performance through the replacement and rehabilitation of sewer lines, which contribute to significant inflow and infiltration.

Project Description: City will perform rehabilitation of approximately 650,000 linear feet of sanitary sewer pipe using pipe bursting, slip-lining and cured-in-place methods at various locations throughout the City. Pipe sizes range from 6-inches to 72-inches in diameter. Point repairs will also be performed in addition to these rehabilitation methods.

Project Schedule:

Project Task	Schedule Date
Closing	2/1/2017
Start of Construction	9/1/2016
Construction Completion	2/28/2019

Environmental Section:

Key Issues:

None known at this time.

Environmental Summary:

A Categorical Exclusion (CE) for this project was issued on November 3, 2015. As required by 31 Texas Administrative Code (TAC) §375, environmental review of the proposed project has been completed. The proposed project is in compliance with the National Environmental Policy Act.

73719 - Collection System Rehabilitation 2016

Last Update: 1/7/2016

Budget Items	CWSRF L1000508 (Application)			
	TWDB Funds	Local Funds	Other Funds	Total
Construction				
Construction	\$57,000,000.00	\$0.00	\$0.00	\$57,000,000.00
Subtotal for Construction	\$57,000,000.00	\$0.00	\$0.00	\$57,000,000.00
Fiscal Services				
Bond Reserve Fund	\$1,815,300.00	\$0.00	\$0.00	\$1,815,300.00
Issuance Costs	\$40,419.00	\$0.00	\$0.00	\$40,419.00
Loan Origination Fee	\$1,194,281.00	\$0.00	\$0.00	\$1,194,281.00
Subtotal for Fiscal Services	\$3,050,000.00	\$0.00	\$0.00	\$3,050,000.00
Contingency				
Contingency	\$5,700,000.00	\$0.00	\$0.00	\$5,700,000.00
Subtotal for Contingency	\$5,700,000.00	\$0.00	\$0.00	\$5,700,000.00
Total	\$65,750,000.00	\$0.00	\$0.00	\$65,750,000.00

A RESOLUTION OF THE TEXAS WATER DEVELOPMENT BOARD
APPROVING AN APPLICATION FOR FINANCIAL ASSISTANCE IN THE AMOUNT OF
\$65,750,000 TO CITY OF HOUSTON
FROM THE CLEAN WATER STATE REVOLVING FUND
THROUGH THE PROPOSED PURCHASE OF
\$65,750,000 CITY OF HOUSTON, TEXAS COMBINED UTILITY SYSTEM REVENUE
BONDS,
PROPOSED SERIES 2017

(16-)

WHEREAS, the City of Houston (City) has filed an application for financial assistance in the amount of \$65,750,000 from the Clean Water State Revolving Fund (CWSRF) to finance the construction of certain wastewater system improvements identified as Project No. 73719; and

WHEREAS, the City seeks financial assistance from the Texas Water Development Board (TWDB) through the TWDB's proposed purchase of \$65,750,000 City of Houston, Texas Combined Utility System Revenue Bonds, Proposed Series 2017 (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 City has offered a parity lien on the net revenues of the combined utility system as sufficient security for the repayment of the Obligations; and

WHEREAS, the TWDB hereby finds:

1. that the revenue and/or taxes pledged by the City will be sufficient to meet all the Obligations assumed by the City, in accordance with Texas Water Code § 15.607;
2. that the application and assistance applied for meet the requirements of the Federal Water Pollution Control Act, 33 U.S.C. §§ 1251 *et seq.*, as well as state law, in accordance with Texas Water Code § 15.607;
3. that the City has adopted and implemented a water conservation program for the more efficient use of water that will meet reasonably anticipated local needs and conditions and that incorporates practices, techniques or technology prescribed by the Texas Water Code and TWDB's rules;
4. that the City has considered cost-effective, innovative, and nonconventional methods of treatment, in accordance with Texas Water Code § 15.007; and
5. that the Executive Administrator issued a Categorical Exclusion on November 3, 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 City of Houston for financial assistance in the amount of \$65,750,000 from the Clean Water State Revolving Fund through the TWDB's proposed purchase of \$65,750,000 City of Houston, Texas Combined Utility System Revenue Bonds, Proposed Series 2017. This commitment will expire on February 28, 2017.

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 City;
3. this commitment is contingent upon the City's compliance with all applicable requirements contained in 31 TAC Chapter 375;
4. the Obligations must provide that the 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 City, or an obligated person for whom financial or operating data is presented to the TWDB in the application for financial assistance either individually or in combination with other issuers of the City's Obligations or obligated persons, will, at a minimum, regardless of the amount of the Obligations, covenant to comply with requirements for continuing disclosure on an ongoing basis substantially in the manner required by Securities and Exchange Commission (SEC) in 17 CFR § 240.15c2-12 (Rule 15c2-12) and determined as if the TWDB were a Participating Underwriter within the meaning of such rule, such continuing disclosure undertaking being for the benefit of the TWDB and the beneficial owners of the City's Obligations, if the TWDB sells or otherwise transfers such Obligations, and the beneficial owners of the TWDB's bonds if the City is an obligated person with respect to such bonds under SEC Rule 15c2-12;
6. the Obligations must contain a provision requiring the City to levy a tax and/or maintain and collect sufficient rates and charges to produce system revenues in an amount necessary to meet the debt service requirements of all outstanding obligations and to maintain the funds established and required by the Obligations;

7. the Obligations must include a provision requiring the City 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 City when sampling, testing, removing or disposing of contaminated soils and/or media at the project site. The Obligations shall include an environmental indemnification provision wherein the City agrees to indemnify, hold harmless and protect the TWDB from any and all claims, causes of action or damages to the person or property of third parties arising from the sampling, analysis, transport, storage, treatment and disposition of any contaminated sewage sludge, contaminated sediments and/or contaminated media that may be generated by the City, its contractors, consultants, agents, officials and employees as a result of activities relating to the project to the extent permitted by law;
11. prior to closing, the City shall submit documentation evidencing the adoption and implementation of sufficient system rates and charges or, if applicable, the levy of an interest and sinking tax rate sufficient for the repayment of all system debt service requirements;
12. prior to closing, and if not previously provided with the application, the City 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 City 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 City execute a separate financing agreement in form and substance acceptable to the Executive Administrator;

Conditions Related To Tax-Exempt Status

15. the City's bond counsel must prepare a written opinion that states that the interest on the Obligations is excludable from gross income or is exempt from federal income taxation. Bond counsel may rely on covenants and representations of the City when rendering this opinion;
16. the City'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 City when rendering this opinion;
17. the Obligations must include a provision prohibiting the City 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);
18. 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;
19. the Obligations must include a provision requiring the City take all necessary steps to comply with the requirement that certain amounts earned on the investment of gross proceeds of the Obligations be rebated to the federal government in order to satisfy the requirements of § 148 of the Code. The Obligations must provide that the City will:

- a. account for all Gross Proceeds, as defined in the Code and Regulations, (including all receipts, expenditures and investments thereof) on its books of account separately and apart from all other funds (and receipts, expenditures and investments thereof) and retain all records of such accounting for at least six years after the final Computation Date. The City may, however, to the extent permitted by law, commingle Gross Proceeds of its loan with other money of the City, provided that the City separately accounts for each receipt and expenditure of such Gross Proceeds and the obligations acquired therewith;
 - b. calculate the Rebate Amount, as defined in the Code and Regulations, with respect to its 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 City 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;
20. the Obligations must include a provision prohibiting the City from taking any action that would cause the interest on the Obligations to be includable in gross income for federal income tax purposes;
 21. the Obligations must provide that the City will not cause or permit the Obligations to be treated as "federally guaranteed" obligations within the meaning of § 149(b) of the Code;
 22. the transcript must include a No Arbitrage Certificate or similar Federal Tax Certificate setting forth the City's reasonable expectations regarding the use, expenditure and investment of the proceeds of the Obligations;
 23. 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;

24. the Obligations must provide that neither the City nor a related party thereto will acquire any of the TWDB's Source Series Bonds in an amount related to the amount of the Obligations to be acquired from the City by the TWDB;

State Revolving Fund Conditions

25. the City shall submit outlay reports with sufficient documentation on costs on a quarterly or monthly basis in accordance with TWDB outlay report guidelines;
26. 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 City, 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;
27. the Obligations must include a provision stating that the City shall provide the TWDB with all information required to be reported in accordance with the Federal Funding Accountability and Transparency Act of 2006, Pub. L. 109-282, as amended by Pub. L. 110-252. The City shall obtain a 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;
28. 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 City will adhere to the approved project schedule;
29. the Obligations must contain a covenant that the City will abide by all applicable construction contract requirements related to the use of iron and steel products produced in the United States, as required by the 2014 Federal Appropriations Act and related State Revolving Fund Policy Guidelines;
30. the Obligations must contain language detailing compliance with the requirements set forth in 33 U.S.C. § 1382 *et seq.* related to maintaining project accounts containing financial assistance for planning, design, acquisition, or construction, as applicable, in accordance with generally accepted accounting principles (GAAP). These standards and principles also apply to the reporting of underlying infrastructure assets;
31. the City shall submit, prior to the release of funds, a schedule of the useful life of the project components prepared by an engineer as well as a certification by the applicant that the average weighted maturity of the obligations purchased by the TWDB does not

exceed 120% of the average estimated useful life of the project, as determined by the schedule;

Clean Water State Revolving Fund Conditions

32. prior to or at closing, the City shall pay a 1.85% origination fee to the TWDB calculated pursuant 31 TAC Chapter 375;
33. at the TWDB's option, the TWDB may fund the financial assistance under this Resolution with either available cash-on-hand or from bond proceeds. If the financial assistance is funded with available cash-on-hand, the TWDB reserves the right to change the designated source of funds to bond proceeds issued for the purpose of reimbursing funds used to provide the financial assistance approved in this Resolution;
34. prior to release of funds for professional consultants including, but not limited to, the engineer, financial advisor, and bond counsel, as appropriate, the City 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;
35. prior to release of funds for professional services related to architecture or engineering, including but not limited to contracts for program management, construction management, feasibility studies, preliminary engineering, design, engineering, surveying, mapping, or other architectural and engineering services as defined in 40 U.S.C. § 1102(2)(A)(C), the City must provide documentation that it has met all applicable federal procurement requirements as more specifically set forth in 40 U.S.C. § 1101 *et seq.*;

Pledge Conditions For The Loan

36. the Obligations shall contain a provision that Houston will at all times maintain and collect sufficient rates and charges to produce net system revenues in each fiscal year at least equal to the greater of (i) 120% of the combined debt service requirements scheduled to occur in such fiscal year on all Previous Ordinance Bonds and First Lien Bonds then outstanding; or (ii) 110% of the combined debt service requirements schedule to occur in such fiscal year on all Previous Ordinance Bonds, First Lien and Second Lien Bonds then outstanding;
37. if Houston has existing revenue obligations with the same pledge of security as the proposed Obligations that will remain outstanding after any loan(s) made by the TWDB pursuant to this commitment, the lien or liens securing the Obligations issued to the TWDB shall be at least on a parity with lien or liens securing such outstanding obligations;
38. the Obligations shall contain a provision for the accumulation of a reserve fund equal to 50% of the maximum annual debt service requirements, to be accumulated in equal

monthly installments over the initial sixty (60) months following the issuance of the Obligations; and

39. the Obligations shall contain a provision stating that no additional revenue bonds may be issued by Houston unless net system revenues for the last completed fiscal year or any consecutive 12-month period out of the 18-month period immediately preceding the month in which the Supplemental Ordinance adopting such additional First Lien Bonds or additional Second Lien Bonds was issued shall have been not less than the greater of (1) 120% of the combined maximum annual debt service requirements on all First Lien Bonds and any Previous Ordinance Bonds; or (ii) 110% of the combined maximum annual debt service requirements on all First Lien Bonds, Second Lien Bonds and any Previous Ordinance Bonds, considering existing, outstanding bond ordinance language regarding calculation methodologies.

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

Special Conditions:

40. prior to final disbursement, the City shall submit to the TWDB certification that it has developed and is currently implementing a fiscal sustainability plan for critical assets part of the treatment works receiving financial assistance as outlined in 33 U.S.C. §1383; and
41. the City 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.

APPROVED and ordered of record this 18th day of February, 2016.

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
Baseline				
5-year Goal				
10-year Goal				

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.

**City of Houston,
Harris County**

