

# Texas Water Development Board

## PROJECT FUNDING REQUEST

BOARD DATE: July 23, 2015

TEAM MANAGER: Luis Farias

<b>APPLICANT</b>	North Texas Municipal Water District
<b>TYPE OF ASSISTANCE</b>	\$82,105,000 Loan
<b>LEGAL PLEDGE</b>	First Lien on the Net System Revenues

### STAFF RECOMMENDATION

Approve       No Action

### ACTION REQUESTED

Consider approving, by resolution, a request from the **North Texas Municipal Water District (Collin, Hunt, Rockwall, Dallas, Kaufman, Ellis, Rains, Fannin, Denton counties)** for a \$82,105,000 loan from the State Water Implementation Revenue Fund for Texas to finance the acquisition and construction work ancillary to the Lower Bois d'Arc Creek Reservoir.

### PROJECT

Lower Bois d'Arc Creek Reservoir  
Project Number 51025

### BACKGROUND

Passed by the 83rd Legislature and approved by Texas voters through a constitutional amendment, the State Water Implementation Fund for Texas (SWIFT) and the State Water Implementation Revenue Fund for Texas (SWIRFT) were created to provide affordable, alternative financing options to develop projects that are recommended water management strategies in the State Water Plan. The program, referred to as SWIFT provides financing through low-interest loans, deferral of loan repayments, and incremental repurchase terms for projects with state ownership aspects. All SWIFT projects presented for consideration have been prioritized based on criteria outlined in Texas Administrative Code Title 31 §363.1304 and are included on the prioritized list of projects approved by the Board on May 6, 2015.

The North Texas Municipal Water District (District) supplies water to 35 utilities in 7 counties of Northeast Texas. The District currently has conservation strategies in place and makes interim water purchases to meet the demands of its client utilities. Demand projections show that even with conservation, the District will have a water supply shortage of 91,700 acre-feet in 2010, growing to 368,000 acre feet in 2060.

**COMMITMENT PERIOD: TO EXPIRE DECEMBER 31, 2015.**

To solve the majority of its water supply needs, the District proposes to construct a new reservoir on Lower Bois D' Arc Creek, with a total impoundment of 367,609 acre-feet and a firm yield of 126,000 acre-feet per year. In a previous Texas Water Development Board (TWDB) project, the District received Water Infrastructure Fund (WIF) assistance for the engineering and environmental planning of the entire Reservoir Project.

At this time, the District requests SWIFT funds for acquisition and construction work ancillary to the Reservoir. Acquisition activities will be for the purchase of easements and real estate for a proposed treated water transmission main. This pipeline provides transmission of treated water from the Lower Bois D' Arc Reservoir to a take point in the District's water distribution system in McKinney, Texas.

Construction work includes costs for additional mitigation as required in the United States Army Corps of Engineers' Environmental Impact Statement and will be a condition of the Record of Decision. The District purchased a 14,960 acre parcel of land to provide compensatory mitigation for the construction of the reservoir. Additional mitigation for this land will include restoring and rehabilitating existing streams and creeks, creating new wetlands and other necessary work to bring land to natural conditions. Also included are construction costs for necessary roads serving the reservoir area.

## **FINANCIAL**

### Key Issues

The District previously received a \$9,930,000 loan from the WIF, deferred payment option, to finance the planning and permitting of the Lower Bois d'Arc Creek Reservoir project. The District estimates they will need a total of \$92,239,000 in funding to complete the project. The source of this funding has not been determined at this time.

### Pledge and Repayment

The District is pledging a first lien on the net revenues of the water system for the repayment of the proposed loan. The District is a wholesale water provider and revenues are generated by the sale of water pursuant to contracts. The District provides water to 13 Member Cities and numerous other Customer Cities in North Central Texas. The District recently increased rates by \$0.19 per 1,000 gallons. It currently charges its Member Cities \$2.06 per 1,000 gallons of water, and its Customer Cities \$2.11 per 1,000 gallons. Based on staff's analysis of the financial documentation received, an additional rate increase is not needed at this time to meet the current and proposed debt service.

### Cost Savings

Based on a 20-year maturity schedule, current interest rates and a 35.5% subsidy, the District could save approximately \$9,694,284 over the life of the loan by utilizing TWDB funding.

### Internal Risk Score

Staff assigns a 2A to the District, and the proposed project to be funded by the TWDB. This means that the District's payment capacity is strong.

The District serves one of the fastest growing areas of North Texas with a majority of its customers residing in Collin County. The population of Collin County has increased at an

average annual rate of 2.8% since 2010. The unemployment rate in Collin County was 3.4% for the month of May, compared to a State rate of 4.1%. Similarly, with a median household income of \$82,762 in Collin County, it has outpaced the overall State median of \$51,900. The total debt per capita supported by water system revenues is approximately \$769, and would increase to \$821 with the proposed loan.

The District's top ten customers account for 83% of the revenues from water sales. This is a high concentration of revenues from the top ten customers, which is not uncommon for a wholesale water provider. The top customers' utility systems are financially sound and all exhibit strong credit quality. In addition, the District has strong contractual provisions with its member cities to help cover operating costs and to ensure sufficient debt service coverage. The District reviews rates annually, and has historically increased rates every year to provide sufficient resources to meet current and future obligations.

The positive socioeconomic indicators, the District's willingness to adjust rates annually, and positive financial ratios support staff's rating of 2A at this time.

## **LEGAL**

### Key Issues

None

### Conditions

Standard SWIFT, tax-exempt, and net revenue conditions and further conditioned as follows:

- Water rights certification;
- Notification prior to actions altering the legal status of the Authority; and
- TWDB approval of any conveyance and assumption of the Obligations.

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>Authority</b>	North Texas Municipal Water District
<b>Program</b>	State Water Implementation Fund for Texas
<b>Commitment Codes</b>	L15032-Project # 51025
<b>Project Number</b>	51025 Lower Bois D'Arc Creek Reservoir
<b>Intended Use Plan Year</b>	N/A
<b>Fund Number</b>	361
<b>Type of Pledge</b>	2- Revenue
<b>Revenue Pledge Level</b>	First
<b>Legal Description</b>	North Texas Municipal Water District Water System Revenue Bonds, Series 2015A
<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>	N/A
<b>Population</b>	1.6 million
<b>Rural</b>	No
<b>Water Connections</b>	N/A
<b>Wastewater Connections</b>	N/A
<b>Qualifies as Disadvantaged</b>	No
<b>Disadvantaged Level</b>	9 - NA
<b>Clean Water State Revolving Fund Type</b>	N/A
<b>Financial, Managerial and Technical Review Complete?</b>	N/A
<b>SWIFT Financing Type</b>	Low-Interest Loan
<b>SWIFT Characteristics</b>	None
<b>Phase Committing</b>	Acquisition and Construction
<b>Pre-Design</b>	Yes
<b>Project Consistent with Water Plan</b>	Yes
<b>Water Conservation Plan</b>	Adopted
<b>Water Rights Certification Required</b>	Yes
<b>Internal Risk Score</b>	2A
<b>External Ratings</b>	
<b>Standard and Poor's</b>	AAA
<b>Moody's</b>	Aa2
<b>Fitch</b>	Non-Rated
<b>Special Issues</b>	None

**Project Team**

Team Manager	Luis Farias
Financial Analyst	Ben Munguia
Engineering Reviewer	Joel Smith
Environmental Reviewer	Kathy Calnan
Attorney	Annette Mass

ISSUE BEING EVALUATED  
FOR ILLUSTRATION PURPOSES ONLY  
North Texas Municipal Water District  
North Texas Municipal Water District Water System Revenue Bonds, Series 2015A

**Dated Date:** 12/1/2015  
**Delivery Date:** 12/1/2015  
**First Interest:** 9/1/2016  
**First Principal:** 9/1/2016  
**Last Principal:** 9/1/2035  
**Fiscal Year End:** 09/30  
**Required Coverage:** 1.0

**Source:** SWIFT-LOW  
**Insurance:** No  
**Case:** System Revenues  
**Admin.Fee:** N/A  
**Admin. Fee Payment Date:** N/A

FISCAL YEAR	PROJECTED NET SYSTEM REVENUES	CURRENT DEBT SERVICE	PRINCIPAL PAYMENT	INTEREST RATE	\$82,105,000 ISSUE		TOTAL DEBT SERVICE	COVERAGE
					INTEREST PAYMENT	TOTAL PAYMENT		
2016	135,600,630	98,409,448	3,240,000	0.31%	1,111,396	4,351,396	102,760,844	1.32
2017	135,600,630	97,626,292	3,320,000	0.60%	1,471,980	4,791,980	102,418,272	1.32
2018	135,600,630	97,573,992	3,400,000	0.77%	1,451,993	4,851,993	102,425,985	1.32
2019	135,600,630	98,592,679	3,480,000	0.91%	1,425,813	4,905,813	103,498,492	1.31
2020	135,600,630	98,472,989	3,565,000	1.07%	1,394,319	4,959,319	103,432,308	1.31
2021	135,600,630	97,375,474	3,650,000	1.25%	1,356,067	5,006,067	102,381,541	1.32
2022	135,600,630	94,111,248	3,740,000	1.43%	1,310,551	5,050,551	99,161,799	1.37
2023	135,600,630	94,840,123	3,830,000	1.52%	1,257,144	5,087,144	99,927,267	1.36
2024	135,600,630	94,642,907	3,925,000	1.60%	1,198,775	5,123,775	99,766,682	1.36
2025	135,600,630	89,726,264	4,020,000	1.69%	1,135,897	5,155,897	94,882,161	1.43
2026	135,600,630	89,578,561	4,115,000	1.88%	1,068,119	5,183,119	94,761,680	1.43
2027	135,600,630	89,469,657	4,215,000	2.03%	990,840	5,205,840	94,675,497	1.43
2028	135,600,630	86,988,362	4,315,000	2.15%	905,317	5,220,317	92,208,679	1.47
2029	135,600,630	85,679,923	4,420,000	2.24%	812,372	5,232,372	90,912,295	1.49
2030	135,600,630	84,588,002	4,530,000	2.33%	713,232	5,243,232	89,831,234	1.51
2031	135,600,630	86,010,479	4,640,000	2.40%	607,818	5,247,818	91,258,297	1.49
2032	135,600,630	86,113,571	4,750,000	2.45%	496,644	5,246,644	91,360,215	1.48
2033	135,600,630	60,216,483	4,865,000	2.50%	380,127	5,245,127	65,461,610	2.07
2034	135,600,630	59,969,929	4,985,000	2.54%	258,502	5,243,502	65,213,431	2.08
2035	135,600,630	54,466,328	5,100,000	2.58%	131,733	5,231,733	59,698,061	2.27
		\$ 1,744,452,711	\$ 82,105,000		\$ 19,478,640	\$ 101,583,640	\$ 1,846,036,351	

<b>AVERAGE (MATURITY) LIFE</b>	<b>11.04 YEARS</b>
<b>NET INTEREST RATE</b>	<b>2.149%</b>
<b>COST SAVINGS</b>	<b>\$9,694,284</b>
<b>AVERAGE ANNUAL REQUIREMENT</b>	<b>\$92,301,818</b>

**North Texas MWD**  
**Engineering and Environmental Review**

**Engineering:**Key Issues

The proposed project is a part of the larger project to construct a reservoir on Lower Bois D' Arc Creek. A previous TWDB Project, 21653, paid for the planning work on the reservoir.

Project Need / Description

**Need:** The North Texas Municipal Water District (District) supplies water to 35 utilities in 7 counties of Northeast Texas. The District currently has conservation strategies in place and makes interim water purchases to meet the demands of its client utilities. Demand projections show that even with conservation, the District will have a water supply shortage of 91,700 acre-feet in 2010, growing to 368,000 acre feet in 2060.

**Project Description:** To solve the majority of its water supply needs, the District proposes to construct a new reservoir on Lower Bois D' Arc Creek, with a total impoundment of 367,609 acre-feet and a firm yield of 126,000 acre-feet per year. In a previous TWDB Project, the District received Water Infrastructure Fund assistance for the engineering and environmental planning of the entire Reservoir Project.

At this time, the District requests State Water Implementation Fund for Texas funds for acquisition and construction work ancillary to the Reservoir. Acquisition activities will be for the purchase of easements and real estate for a proposed treated water transmission main. This pipeline provides transmission of treated water from the Lower Bois D' Arc Reservoir to a take point in the District's water distribution system in McKinney, Texas.

Construction work includes costs for additional mitigation as required in the United States Army Corps of Engineers' (USACE) Environmental Impact Statement and will be a condition of the Record of Decision. The District purchased a 14,960 acre parcel of land to provide compensatory mitigation for the construction of the reservoir. Additional mitigation for this land will include restoring and rehabilitating existing streams and creeks, creating new wetlands and other necessary work to bring land to natural conditions. Also included are construction costs for necessary roads serving the reservoir area.

Project Schedule

<b>Project Task</b>	<b>Schedule Date</b>
Engineering Feasibility Report Completion (End of Planning Phase)	10/31/2015
Closing	12/1/2015
Start of Construction	1/31/2016
Design Phase Complete	8/31/2017
Construction Completion	5/31/2020

**Environmental:**

Key Issues

An individual permit is required under Section 404 of the Clean Water Act for the construction of the proposed reservoir including ancillary project activities such as road relocation and bridge construction, construction of a surface water treatment plant (WTP) west of the City of Leonard, and a transmission line from the WTP to the McKinney Pump Station No. 4. The USACE, acting as lead permitting agency, has required the preparation of an Environmental Impact Statement (EIS) for the evaluation of potential impacts of the proposed project before issuing a permit. The EIS will include a Mitigation Plan to compensate for potentially adverse environmental impacts. The TWDB will base its environmental determination on the USACE's Record of Decision (ROD). The Draft EIS was published in February 2015. The District anticipates that the Final EIS and a favorable ROD will be completed by July 2016.

Environmental Summary

Pursuant to the requirements of 31 Texas Administrative Code §363.14 all financial assistance shall be conditioned to read that funding for acquisition and construction costs for the proposed project will not be released until the environmental review has been completed and a favorable environmental determination has been issued. TWDB funding will assist in costs associated with mitigation and the securing of the state and federal permits that are required for the reservoir.

**North Texas MWD  
51025 - Lower Bois d'Arc Creek Reservoir**

Budget Items	TWDB Funds	Local & Other Funds	Total Cost
<b>Construction</b>			
Construction	\$68,300,000	\$3,000,000	\$71,300,000
<b>Construction Total</b>	<b>\$68,300,000</b>	<b>\$3,000,000</b>	<b>\$71,300,000</b>
<b>Basic Engineering Services</b>			
Design	\$0	\$8,150,000	\$8,150,000
Planning	\$0	\$2,744,000	\$2,744,000
<b>Basic Engineering Services Total</b>	<b>\$0</b>	<b>\$10,894,000</b>	<b>\$10,894,000</b>
<b>Special Services</b>			
Inspection	\$572,000	\$0	\$572,000
Project Management (by engineer)	\$0	\$1,000,000	\$1,000,000
<b>Special Services Total</b>	<b>\$572,000</b>	<b>\$1,000,000</b>	<b>\$1,572,000</b>
<b>Other</b>			
Land/Easements Acquisition - \$8,189,000 for mitigation; \$4,670,000 treated trans main.	\$12,859,000	\$0	\$12,859,000
Other (Describe)	\$710	\$0	\$710
<b>Other Total</b>	<b>\$12,859,710</b>	<b>\$0</b>	<b>\$12,859,710</b>
<b>Fiscal Services</b>			
Bond Counsel	\$221,700	\$0	\$221,700
Financial Advisor	\$129,140	\$0	\$129,140
Issuance Costs	\$22,450	\$0	\$22,450
<b>Fiscal Services Total</b>	<b>\$373,290</b>	<b>\$0</b>	<b>\$373,290</b>
<b>Grand Total</b>	<b>\$82,105,000</b>	<b>\$14,894,000</b>	<b>\$96,999,000</b>

A RESOLUTION OF THE TEXAS WATER DEVELOPMENT BOARD  
APPROVING AN APPLICATION FOR FINANCIAL ASSISTANCE IN THE AMOUNT OF  
\$82,105,000 TO NORTH TEXAS MUNICIPAL WATER DISTRICT  
FROM THE STATE WATER IMPLEMENTATION REVENUE FUND FOR TEXAS  
THROUGH THE PROPOSED PURCHASE OF \$82,105,000 NORTH TEXAS MUNICIPAL  
WATER DISTRICT WATER SYSTEM REVENUE BONDS, PROPOSED SERIES 2015A

(15- )

WHEREAS, the North Texas Municipal Water District located in Collin County, Texas, (District) has filed an application for financial assistance in the amount of \$82,105,000 from the State Water Implementation Revenue Fund for Texas (SWIRFT), to finance the acquisition and construction of certain water supply project(s) identified as Project No. 51025; and

WHEREAS, the District seeks financial assistance from the Texas Water Development Board (TWDB) through the TWDB's proposed purchase of \$82,105,000 North Texas Municipal Water District Water System Revenue Bonds, Proposed Series 2015A, (together with all authorizing documents "Obligations"), all as is more specifically set forth in the application and in recommendations of the Executive Administrator's staff; and

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

WHEREAS, the commitment is approved for funding under the TWDB's pre-design funding option, and initial and future releases of funds are subject to 31 TAC § 363.1307; and

WHEREAS, interest rate subsidies are available to the District at the following levels: 35.5% for loans of a term of 20 years, 27% for loans of a term of 25 years, and 22% for loans of a term of 30 years. The interest rate subsidy applicable to each proposed series will be set through each financing agreement executed between the TWDB and the Authority, pursuant to this Resolution; and

WHEREAS, the TWDB hereby finds:

1. that the application and assistance applied for meet the requirements of Texas Water Code, Chapter 15, Subchapters G and H and 31 TAC Chapter 363, Subchapters A and M;
2. that the project is a recommended water management strategy in the State Water Plan adopted pursuant to Texas Water Code § 16.051, in accordance with Texas Water Code § 15.474(a);
3. the District has submitted and implemented a water conservation plan in accordance with Texas Water Code § 11.1271 and 31 TAC § 363.1309(b)(1);

4. that the District satisfactorily completed any request by the Executive Administrator or a regional planning group for information relevant to the project, including a water infrastructure financing survey under Texas Water Code § 16.053(q), in accordance with 31 TAC § 363.1309(b)(2);
5. that the current water audit, if required by Texas Water Code § 16.0121, has been completed by the District and filed with the TWDB in accordance with 31 TAC § 358.6;
6. that the District has acknowledged its legal obligation to comply with any applicable requirements of federal law relating to contracting with disadvantaged business enterprises, and any applicable state law relating to contracting with historically underutilized businesses, in accordance with Texas Water Code § 15.435(h) and 31 TAC § 363.1309(b)(3).

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

A commitment is made by the TWDB to North Texas Municipal Water District for financial assistance in the amount of \$82,105,000 from the State Water Implementation Revenue Fund for Texas, to be evidenced by the TWDB's proposed purchase of \$82,105,000 North Texas Municipal Water District Water System Revenue Bonds, Proposed Series 2015A. This commitment will expire on December 31, 2015.

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 continued compliance with all applicable laws, rules, policies and guidance as these may be amended from time to time to adapt to a change in law, in circumstances, or any other legal requirement;
4. this commitment is contingent upon the District executing a separate financing agreement, approved as to form and substance by the Executive Administrator, and submitting that executed agreement to the TWDB consistent with the terms and conditions described in the financing agreement;
5. the District shall use a paying agent/registrars in accordance with 31 TAC Section 363.42(c)(2), and shall require the paying agent/registrars to provide a copy, to the TWDB

and to the TWDB's designated Trustee, of all receipts documenting debt service payments.

**The Following Conditions Must Be Included in the Obligations:**

6. 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;
7. the Obligations must include a provision wherein 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;
8. the Obligations must contain a provision requiring the District to 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;
9. the Obligations must include a provision requiring the District to use any loan proceeds from the Obligations that are determined to be surplus proceeds remaining after completion of the project for the following purposes as approved by the Executive Administrator: (1) 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 (2) eligible costs for the project as authorized by the Executive Administrator;
10. 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;
11. 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;

12. 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, recycling 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;
13. the Obligations must include a provision stating that the District shall report to the TWDB the amounts of project funds, if any, that were used to compensate historically underutilized businesses that worked on the project, in accordance with 31 TAC § 363.1312;
14. the Obligations must contain a provision that the TWDB will purchase the Obligations, acting through the TWDB's designated Trustee, and the Obligations shall be registered in the name of Cede & Co. and closed in book-entry form in accordance with 31 TAC Section 363.42(c)(1);
15. 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 amended (Code) and the Treasury Regulations promulgated thereunder (Regulations);
16. 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;

17. 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;
18. 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;
19. 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;
20. 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;

### **Revenue Pledge**

21. 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 sixty (60) months following the issuance of the Obligations;
22. if the District 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 Obligations must contain a provision providing that 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;
23. the Obligations must contain a provision providing that the District issue no additional revenue bonds unless (a) an independent, registered professional engineer of the State of Texas or a firm of such engineers executes a certificate or report to the effect that in his or her opinion the Pledged Revenues in each complete fiscal year thereafter will be at least equal to 1.25 times the average annual principal and interest requirements of all Parity Bonds and Additional Bonds to be outstanding after the delivery of the then proposed Additional Bonds, or (b) in the alternative to (a), above, the President and Secretary of the Board sign a written certificate to the effect that, based upon an opinion of legal counsel to the Issuer, there are Contracts then in effect pursuant to which the Member Cities and others which are parties to such Contracts are obligated to make minimum payments to the Issuer at such times (including during periods when water is not available to such Member Cities and others) and in such amounts as shall be necessary to provide to the Issuer Net Revenues of the System sufficient to pay when due all principal of and interest on all Parity Bonds and Additional Bonds to be outstanding after the issuance of the proposed Additional Bonds, and to make deposits in the Reserve Fund as required under this Resolution;
24. the Obligations must contain a provision requiring that, upon request by the Executive Administrator, the District shall submit annual audits of contracting parties for the Executive Administrator's review;
25. the Obligations must contain a provision requiring the District to require its customers to maintain rates and charges sufficient to pay all of their revenue obligations arising from the operation of the water system;

**Conditions to Close or for Release of Funds:**

26. prior to closing, the District shall submit documentation evidencing the adoption and implementation of sufficient system rates and charges sufficient for the repayment of all system debt service requirements;
27. 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;

28. prior to 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;
29. prior to 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 that the District has the legal authority necessary to complete the acquisitions;
30. prior to release of funds for acquisition or construction for specific project elements, the environmental review must be completed and a favorable environmental finding must have been issued;
31. prior to closing, 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;
32. prior to closing, the District's bond counsel must prepare a written opinion that also states that the Obligations are not "private activity bonds." Bond counsel may rely on covenants and representations of the District when rendering this opinion;
33. 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;
34. 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;

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

**Special Conditions:**

35. prior to the release of funds for the costs of planning, engineering, architectural, legal, title, fiscal, or economic investigation, studies, surveys, or designs for that portion of a project that proposes surface water or groundwater development, the Executive Administrator must either issue a written finding that the District has the right to use the

water that the project financed by the TWDB will provide or a written determination that a reasonable expectation exists that such a finding will be made before the release of funds for construction;

36. prior to the release of construction funds for that portion of a project that proposes surface water or groundwater development, the Executive Administrator must have issued a written finding that the District has the right to use the water that the project financed by the TWDB will provide;
37. 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
38. 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, the 23<sup>rd</sup> day of July, 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.

**North Texas Municipal Water District,  
Collin County**

