

Texas Water Development Board

PROJECT FUNDING REQUEST

BOARD DATE: December 14, 2015

TEAM MANAGER: Luis Farias

APPLICANT	Ables Springs Water Supply Corporation
TYPE OF ASSISTANCE	\$1,215,000 Loan
LEGAL PLEDGE	First Lien on the Gross Revenues of the System and a Lien on the Mortgage of the System

STAFF RECOMMENDATION

Approve No Action

ACTION REQUESTED

Approve, by resolution, a request from the Ables Springs Water Supply Corporation (Kaufman County) for a loan in the amount of \$1, 215,000 from the Texas Water Development Fund to refinance existing debt associated with water system improvements.

PROJECT

Refinance System Improvements
Project Number 21753

BACKGROUND

The Ables Springs Water Supply Corporation (Corporation) previously received water from the MacBee Special Utility District. In December 2012, the Corporation completed construction of a take-point, and replaced water distribution lines for the delivery of water from the North Texas Municipal Water District (NTMWD). The take-point includes an underground concrete storage tank with pumps, piping, metering vault, electrical and control building, disinfection equipment, and related appurtenances. The site provides service to the entire system. The water distribution lines have been constructed from the take-point site to connect to the existing water distribution lines.

The new water treatment facility allows the Corporation to purchase water from the NTMWD. The Corporation will save a significant amount of money by purchasing its treated water from the NTMWD due to its lower wholesale water rates. Additionally, there are no other water supply options for the Corporation.

COMMITMENT PERIOD: ONE (1) YEAR TO EXPIRE ON DECEMBER 31, 2016

FINANCIAL

Key Issues

The Corporation previously received a \$1,300,000 loan from the Texas Bank and Trust Company for construction of a take-point facility and to replace existing waterlines. The Corporation will use the Texas Water Development Board (TWDB) loan proceeds to refinance \$1,106,000 of outstanding debt and \$109,000 reimbursement of engineering costs associated with the construction of the water system improvements.

Pledge and Repayment

The Corporation is pledging gross system revenues for the repayment of the proposed loan. Utilizing a no-growth scenario, the Corporation's current system revenues are sufficient to meet existing and proposed debt service.

The proforma is based on the 5-year average of net revenues available for debt service. Although the Corporation does not need a rate increase to meet its debt service requirements, a \$2.15 increase to the base water rate went into effect April 1, 2015. This will generate approximately \$29,876 of additional revenue annually.

Cost Savings

Based on a 25-year maturity schedule and current interest rates, the Corporation could save approximately \$203,006 over the life of the loan.

Internal Risk Score

Staff assigns a 2B to the Corporation, and the proposed loan to be refinanced by the TWDB. This means that the Corporation's payment capacity is adequate. The applicant's earnings trends and coverage ratios, while stable, may be more susceptible to adverse changes in circumstances and economic conditions than the higher rated obligations. Certain risk elements may exist that suggest susceptibility to future impairment, if not managed.

The Corporation serves an estimated population of 3,058. The number of water connections has slowly increased since 2010, and the total population in surrounding area of northeastern Kaufman County has increased 7.2% from 2010 to 2013. The area's median household income of \$56,148 is approximately 108% of the State's overall median income of \$51,900. The unemployment rate in Kaufman County is 3.9% as of September 2015, compared to a State unemployment rate of 4.4%.

The Corporation's current per capita debt level, which includes the loan to be refinanced by TWDB, is low at \$447. On average, the residential user pays 1.39% of their annual income for water service. This is above the 1% benchmark for assessing affordability of rates.

Staff's risk score is based on the Corporation's debt coverage, low debt per capita, household cost factor, and median household income.

LEGAL

Key Issues

None

CONDITIONS

Standard Water Development Fund, taxable, water supply corporation, revenue conditions and further conditioned as follows:

- Notification of conveyance; and
- Notification of conversion.

- 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

Authority	Ables Springs Water Supply Corporation
Program	Texas Water Development Fund
Commitment Code	L1000442
Project Number	21753
Intended Use Plan Year	2015
Fund Number	371
Type of Pledge	2- Revenue
Revenue Pledge Level	First
Legal Description	\$1,215,000 Loan Agreement
Tax-exempt or Taxable	Taxable
Refinance	Yes
Outlay Requirement	No
Disbursement Method	Escrow
Outlay Type	N/A
Population	3,058
Rural	Yes
Water Connections	1,158
Wastewater Connections	N/A
Qualifies as Disadvantaged	No
Disadvantaged Level	9
Clean Water State Revolving Fund Type	N/A
SWIFT Financing Type	N/A
SWIFT Project Type	N/A
Financial Managerial & Technical Complete	N/A
Funding Phase Code	Design and Construction
Pre-Design	No
Project Consistent with Water Plan	Yes
Water Conservation Plan	Adopted
Water Rights Certification Required	No
Internal Risk Score	2B
External Ratings (for SRF rates)	
Standard and Poor's	Non-Rated
Moody's	Non-Rated
Fitch	Non-Rated
Special Issues	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
Ables Springs WSC
\$1,215,000 Loan Agreement

Dated Date: 3/1/2016
Delivery Date: 3/1/2016
First Interest: 8/1/2016
First Principal: 2/1/2017
Last Principal: 2/1/2041
Fiscal Year End: 12/31
Required Coverage: 1.0

Source: WDF
Rate: 4.13%
Insurance: No
Case: Revenues
Admin.Fee: \$ -
Admin. Fee Payment Date: N/A

FISCAL YEAR	PROJECTED NET SYSTEM REVENUES	CURRENT DEBT SERVICE	PRINCIPAL PAYMENT	INTEREST RATE	\$1,215,000 ISSUE		TOTAL DEBT SERVICE	COVERAGE
					INTEREST PAYMENT	TOTAL PAYMENT		
2016	155,609	26,736	-	0.00%	20,908	20,908	47,644	3.27
2017	155,609	26,736	30,000	4.13%	49,560	79,560	106,296	1.46
2018	155,609	26,736	30,000	4.13%	48,321	78,321	105,057	1.48
2019	155,609	26,736	30,000	4.13%	47,082	77,082	103,818	1.50
2020	155,609	26,736	30,000	4.13%	45,843	75,843	102,579	1.52
2021	155,609	26,736	35,000	4.13%	44,501	79,501	106,237	1.46
2022	155,609	26,736	35,000	4.13%	43,055	78,055	104,791	1.48
2023	155,609	26,736	35,000	4.13%	41,610	76,610	103,346	1.51
2024	155,609	26,736	40,000	4.13%	40,061	80,061	106,797	1.46
2025	155,609	26,736	40,000	4.13%	38,409	78,409	105,145	1.48
2026	155,609	26,736	40,000	4.13%	36,757	76,757	103,493	1.50
2027	155,609	26,736	45,000	4.13%	35,002	80,002	106,738	1.46
2028	155,609	26,736	45,000	4.13%	33,143	78,143	104,879	1.48
2029	155,609	26,736	45,000	4.13%	31,285	76,285	103,021	1.51
2030	155,609	26,736	50,000	4.13%	29,323	79,323	106,059	1.47
2031	155,609	26,736	50,000	4.13%	27,258	77,258	103,994	1.50
2032	155,609	26,736	55,000	4.13%	25,090	80,090	106,826	1.46
2033	155,609	26,736	55,000	4.13%	22,818	77,818	104,554	1.49
2034	155,609	4,456	55,000	4.13%	20,547	75,547	80,003	1.95
2035	155,609	-	60,000	4.13%	18,172	78,172	78,172	1.99
2036	155,609	-	60,000	4.13%	15,694	75,694	75,694	2.06
2037	155,609	-	65,000	4.13%	13,113	78,113	78,113	1.99
2038	155,609	-	65,000	4.13%	10,428	75,428	75,428	2.06
2039	155,609	-	70,000	4.13%	7,641	77,641	77,641	2.00
2040	155,609	-	75,000	4.13%	4,646	79,646	79,646	1.95
2041	155,609	-	75,000	4.13%	1,549	76,549	76,549	2.03
		\$ 485,704	\$ 1,215,000		\$ 751,815	\$ 1,966,815	\$ 2,452,519	

AVERAGE (MATURITY) LIFE	14.98 YEARS
NET INTEREST RATE	4.130%
COST SAVINGS	\$203,006
AVERAGE ANNUAL REQUIREMENT	\$94,328



**Ables Springs Water Supply Corporation
21753 Refinance System Improvements
Engineering and Environmental Review**

Engineering:

Key Issues:

None

Project Need/Description

Refinance existing debt associated with the construction of a take-point and replacement of existing waterlines.

Need: The Ables Springs Water Supply Corporation (Corporation) had an opportunity to purchase treated water at lower cost from a new provider, the North Texas Municipal Water District (District).

Project: The Corporation has completed the piping, storage, and pumping facilities to allow them access to the District's treated water source, using commercial financing. They are now seeking a Development Fund commitment from the Texas Water Development Board for long-term financing of the take point facilities.

Project Schedule:

Project Task	Schedule Date
Closing	3/1/2016

Environmental Section:

Key Issues:

None known at this time.

Environmental Summary:

As required by 31 Texas Administrative Code §363.14, environmental review of the proposed project has been completed. A Memo To the File, issued on October 29, 2015, documented the determination that the project did not involve adverse environmental impacts, was performed in compliance with environmental regulations, and met program standards as per 31 Texas Administrative Code (TAC) 363.14.



Current Budget Summary
Ables Springs WSC
21753 - Refinance System Improvements

Budget Items	Description	TWDB Funds	Local Funds	Total
Basic Engineering Services				
Design	previously incurred with construction	\$109,000.00	\$0.00	\$109,000.00
Subtotal for Basic Engineering Services		\$109,000.00	\$0.00	\$109,000.00
Other				
Other (Describe)	Refinancing of completed facilities	\$1,106,000.00	\$0.00	\$1,106,000.00
Subtotal for Other		\$1,106,000.00	\$0.00	\$1,106,000.00
Total		\$1,215,000.00	\$0.00	\$1,215,000.00

A RESOLUTION OF THE TEXAS WATER DEVELOPMENT BOARD
APPROVING AN APPLICATION FOR FINANCIAL ASSISTANCE TO
ABLES SPRINGS WATER SUPPLY CORPORATION
FROM THE FINANCIAL ASSISTANCE ACCOUNT OF
THE TEXAS WATER DEVELOPMENT FUND II
THROUGH THE PROPOSED PURCHASE OF
A PROMISSORY NOTE IN THE AMOUNT OF \$1,215,000
AND EXECUTION OF A LOAN AGREEMENT

(15-)

WHEREAS, the Ables Springs Water Supply Corporation, located in Kaufman County, Texas, Corporation, has filed an application for financial assistance in the amount of \$1,215,000 from the Financial Assistance Account of the Texas Water Development Fund II, established by Texas Water Code § 17.959 to finance water system improvements, identified as Project No. 21753; and

WHEREAS, the Corporation seeks financial assistance from the Texas Water Development Board (TWDB) in the amount of \$1,215,000 through the TWDB's purchase of a Promissory Note in the amount of \$1,215,000 and execution of a Loan Agreement (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 Corporation has offered a pledge of a lien on the gross revenues of the system as sufficient security for the repayment of the Obligations; and

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

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

WHEREAS, the TWDB hereby finds:

1. that the public interest requires state assistance in the water supply project, in accordance with Texas Water Code § 17.125(a)(1);
2. that in its opinion the tax and/or revenue pledged by the Corporation will be sufficient to meet all the Obligations assumed by the Corporation during the succeeding period of not more than 50 years, in accordance with Texas Water Code § 17.125(a)(2);

3. that the Corporation 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 application and financial assistance requested meet the requirements of Chapter 17, Subchapters D, E, and L, Water Code, and the TWDB's rules set forth in 31 TAC Chapter 363, Subchapter A;
5. 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); and
6. that the current water audit required by Texas Water Code § 16.0121 has been completed by the Corporation and filed with the TWDB if the Corporation is a retail public utility providing potable water, in accordance with Texas Water Code § 16.053(j).

NOW THEREFORE, based on these considerations and findings, the Texas Water Development Board resolves as follows:

A commitment is made by the TWDB to Ables Springs Water Supply Corporation for financial assistance in the amount of \$1,215,000 from the Financial Assistance Account of the Texas Water Development Fund II, to be evidenced by the Board's purchase of a \$1,215,000 Promissory Note and the execution of a Loan Agreement. This commitment will expire on December 31, 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. prior to closing, the Corporation must submit to the Executive Administrator an attorney's opinion confirming the legal authority for the Corporation to incur the debt;
3. this commitment is contingent upon the Corporation's compliance with all applicable requirements contained in 31 TAC Chapter 363;
4. the Obligations must provide that the Corporation may prepay all or part of the amounts of principal and interest then due on the loan on any regularly scheduled payment date as specified in the Repayment Schedule, as revised, beginning no earlier than the first interest payment date that is 10 years from the date of the first delivery of funds from the TWDB to the Corporation pursuant to this Agreement;

5. the Corporation, 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 Corporation's Obligations or obligated persons, will, at a minimum, covenant to comply with requirements for continuing disclosure on an ongoing basis substantially in the manner required by Securities and Exchange Commission (SEC) in 17 CFR § 240.15c2-12 (Rule 15c2-12) and determined as if the TWDB were a Participating Underwriter within the meaning of such rule, such continuing disclosure undertaking being for the benefit of the TWDB and the beneficial owners of the Corporation's Obligations, if the TWDB sells or otherwise transfers such Obligations, and the beneficial owners of the TWDB's bonds if the Corporation is an obligated person with respect to such bonds under SEC Rule 15c2-12;
6. the Obligations must contain a provision requiring the Corporation 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 Corporation 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 Corporation 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 Corporation 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 Corporation, 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 Corporation 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 required under the TWDB's financial assistance program and not previously provided with the application, the Corporation shall submit an executed engineering contract as appropriate for the project scope of work, and an executed financial advisor contract and executed bond counsel contract as appropriate for the work to be performed in obtaining the TWDB's financial assistance for the project, in a form and substance that are satisfactory to the Executive Administrator. Fees to be reimbursed under any consulting contract must be reasonable in relation to the services performed, must be reflected in the contract, and must be acceptable to the Executive Administrator;
13. prior to closing, when any portion of loan proceeds are to be held in escrow or in trust, the Corporation 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;
14. the Executive Administrator may require that the Corporation 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;
16. the Corporation's indebtedness to the TWDB shall be evidenced by loans specifically secured by:
 - a. a first or parity lien on the gross revenues of the Corporation's water system (System); and
 - b. a first or parity lien mortgage on the System;
17. upon closing or within 20 days after closing, the Corporation must file a Deed of Trust with the County Clerk of the county in which the property is located, as required by Business and Commerce Code, Chapter 9, or a Utility Security Instrument with the Secretary of State's Office and corresponding notice with the County Clerk, as required by Business and Commerce Code, Chapter 261, as evidence of the TWDB's security interest in the Corporation's System. Within thirty (30) days of the date of each filing, the Corporation shall submit a copy of the recorded instrument to the TWDB;
18. upon closing or within 20 days after closing, the Corporation must file a security instrument with the Secretary of State's Office, as required by Business and Commerce Code, Chapter 9 or Chapter 261 to evidence the TWDB's security interest in any personal property directly related to water supply and/or sewer service, owned or to be acquired by the Corporation. A copy of the recorded security instrument shall be submitted by the Corporation to the TWDB within thirty (30) days of its filing with the Secretary of State's Office;
19. prior to closing, the Corporation must obtain a commitment from a title insurance company in

accordance with the standards established by the Texas Department of Insurance, resulting in the issuance of a mortgagee title insurance policy on the property owned in fee simple, upon which the TWDB will be given a first or parity lien mortgage. A copy of the mortgagee title insurance policy shall be submitted to the TWDB within thirty (30) days of its execution;

20. prior to closing, the Corporation must cure any defects or liens upon the property listed in Schedule C of the title insurance company commitment that the Executive Administrator deems necessary;
21. prior to release of funds for construction, the Corporation must provide the TWDB with evidence that the necessary acquisitions of land, leases, easements, and rights-of-way have been completed, or that the Corporation has the legal authority necessary to complete the acquisitions;
22. prior to closing, the Corporation must submit to the Executive Administrator evidence that the Corporation's bylaws have been amended to include the following requirements:
 - a. as long as the Corporation is indebted for a loan or loans made by or through the TWDB, the bylaws shall not be altered, amended or repealed without the prior written consent of the Executive Administrator; and
 - b. the Corporation is a nonprofit entity; no part of the income of the Corporation will be distributed to the Corporation's members, directors, or officers;
23. prior to closing, if the Corporation is pledging a lien on real property that is to be on parity with a lien or liens on real property securing debt that will remain outstanding after closing the TWDB's loan, then the Corporation must execute a Parity Agreement with each entity that holds such debt that is acceptable in form and substance to the Executive Administrator;
24. the Obligations shall include a special covenant prohibiting the Corporation from encumbering, pledging or otherwise impairing the revenues of the System in any manner with respect to the payment of any Obligations or with respect to any liability, except for the payment of the following: (1) maintenance and operating expenses payable within the current fiscal year with current revenues; and (2) additional debt, and that the Corporation shall in no way encumber, pledge or otherwise impair its title to the land used by or for the System or any interests therein, including improvements and facilities of the System, without prior TWDB approval;

Pledge Conditions For The Loan

25. 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;
26. if the Corporation 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;

27. the Obligations must contain a provision providing that additional revenue obligations may only be incurred if net system revenues are at least 1.25 times the average annual debt service requirements after giving effect to the additional obligations when net revenues are a) determined from the last completed fiscal year or a 12 consecutive calendar month period ending not more than ninety (90) days preceding the adoption of the additional obligations as certified by a certified public accountant; or b) the Corporation certifies that the Corporation is expected to continue to meet or exceed the net system revenue test with a minimum coverage of 1.25 times the average annual debt service requirement. An authorized representative of the Corporation must provide the calculations, identifying reasonable assumptions, in a manner and format that is acceptable to the Executive Administrator.

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

Special Conditions:

28. the Corporation 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
29. the Obligations must include a provision requiring that, prior to any action by the Corporation 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 14th day of December, 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
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:

If < 32 connections/mile, population < 10K:
 If < 32 connections/mile, population > 10K:
 If > 32 connections/mile, population > 10K:

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
		NA			NA
	NA			NA	
	NA			NA	

Does the applicant meet Water Loss Threshold requirements? Yes No

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.

**Ables Springs WSC,
Kaufman County**

