

Texas Water Development Board

State Water Implementation Revenue Fund for Texas

New Issue Summary

Sale Date: The bonds are expected to price (via negotiation) the week of Sept 26.

Series: Approximately \$915,545,000 State Water Implementation Revenue Fund for Texas Revenue Bonds, Series 2022 (Master Trust).

Purpose: Bond proceeds will be used to provide financing to governmental entities within Texas (the state) for water-related projects and to pay for the costs of issuance.

Security: Bonds are backed primarily by political subdivision obligation (PSO) repayments and certain pledged accounts tied to each series of bonds. In addition, although not pledged nor a legal requirement, in its sole discretion, the Texas Water Development Board (TWDB) may request that funds be transferred from the approximately \$1.8 billion (pre-issuance) balance of the State Water Implementation Fund for Texas (SWIFT) to the State Water Implementation Revenue Fund for Texas (SWIRFT) program to protect against bond debt service shortfalls. SWIFT funds are constitutionally protected and are only available to support TWDB's Texas State Water Plan (SWP) projects.

Key Rating Drivers

Program Assets Provide Support: Fitch Ratings' cash flow modeling demonstrates that program resources are sufficient to protect bondholders from losses under various default scenarios. While the majority of the funds for debt service on the bonds are provided by the program's PSO repayments, funds in the program's SWIRFT assistance accounts are required to ensure full and timely payment of debt service. Additional loss protection can be provided by funds available in the SWIFT investment portfolio if necessary.

Essentiality of SWIRFT Program: Fitch believes that the essentiality of the SWIRFT program, given its role in implementing the Texas SWP, has been demonstrated by strong state and voter support that led to the enabling legislation and creation of a constitutionally dedicated fund to capitalize the program (the SWIFT account).

PSO Pool Highly Rated yet Concentrated: The combined PSO pool is backed by highly-rated entities but, remains somewhat concentrated. The pool's top-10 concentration is approximately 78% versus Fitch's 'AAA' rating-category median of 55%. The SWIRFT program pool, which has diversified over the past seven years as new obligors have been added to the portfolio, is expected to become less concentrated over time as the SWIRFT program grows.

Investment Performance Vital to Program Longevity: The Texas Treasury Safekeeping Trust Company (TTSTC) is responsible for the management of the SWIFT investments, the growth of which could aid the growth of the SWIRFT program by providing future subsidies.

Strong Management of SWIRFT Expected: Management of the SWIRFT program is provided by the TWDB. The TWDB has extensive experience in managing large state pool programs, such as the TWDB's State Revolving Funds (AAA/Stable).

Rating Sensitivities

Factors that could, individually or collectively, lead to a positive rating action/upgrade:

- The ratings are at the highest level on Fitch's scale and cannot be upgraded.

Ratings

New Issue

\$915,545 million State Water Implementation Revenue Fund for Texas Revenue Bonds, Series 2022 (Master Trust).

AAA

Outstanding Debt

State Water Implementation Revenue Fund for Texas Program Bonds

AAA

Rating Outlook

Stable

Applicable Criteria

State Revolving Fund and Municipal Finance Pool Program Rating Criteria (September 2021)

Related Research

Fitch Rates Texas Water Development Board's Series 2022 SWIRFT Revs 'AAA'; Outlook Table (August 2022)

State Revolving Fund and Municipal Finance Pool Peer Review: 2021 (December 2021)

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Factors that could, individually or collectively, lead to a negative rating action/downgrade:

- Deterioration in aggregate pool credit quality or large increases in program leverage; and
- Substantial reductions in the availability of investment assets due to encumbrance, market-value declines or a move toward less liquid asset types.

Credit Profile

The TWDB's SWIRFT program facilitates the issuance of revenue bonds, the proceeds of which provide favorable financing to local governmental entities for eligible SWP projects. The SWIRFT and SWIFT programs were approved by voters in 2013 for the purpose of meeting the state's rapidly growing water needs. The SWIFT program was capitalized the same year with a one-time transfer of \$2 billion from the state's economic stabilization fund.

Recent pool metrics and program cash flow ratios are mixed but remained relatively stable since Fitch's August 2021 review. Cash flow model results are slightly weaker as the projected increase in debt service payments is not fully offset by the projected increase in loan repayments. Still, cash flow model results passed Fitch's 'AAA' stress hurdle with ample cushion. The SWIFT investments remained relatively stable at \$1.8 billion at June 30, 2022. PSM Liability Rating Stress Hurdles (LRSHs) declined marginally due to some portfolio diversification with the addition of new obligors associated with the series 2022 issuance (lower LRSHs represent an overall improvement in pool metrics).

Program Resources Provide Strong Default Tolerance

Fitch's cash flow modeling demonstrates that the availability of program resources allows for hypothetical PSO defaults of 81% in the first four years of the program's life and 100% in both the middle and last four years (as per Fitch criteria, a 90% recovery is also applied in its cash flow model when determining default tolerance) while still paying bond debt service in full. This is in excess of Fitch's 'AAA' liability rating stress hurdle of 35%, thereby indicating a passing result under Fitch's model analyses.

Although the previously issued bonds and the series 2022 bonds are separately secured, the respective series' pools and associated cash flows were combined in Fitch's analysis given that the moneys credited to the SWIFT account are not tied to any specific series of bonds.

Loss Protection Provided Primarily by Investment Funds

SWIRFT bondholders are secured primarily by PSO repayments and amounts in the SWIRFT assistance accounts. The series 2022 assistance account will initially be funded by proceeds from the SWIFT investment account. Inclusive of outstanding amounts tied to previous series of SWIRFT revenue bonds, an estimated cumulative total of \$412 million is projected to be received as FCFs from the respective bond series' assistance accounts. The total amount of the SWIRFT assistance accounts will represent approximately 5.5% of the total bonds as of the closing on the series 2022 bonds.

Transfers from the SWIRFT assistance accounts to pay bond debt service are made pursuant to the scheduled transfers under the respective bond series' indentures. Sufficiency of PSO repayment revenue is calculated 40 days prior to the bond debt service payment date, allowing time to work out any potential delinquencies. If PSO repayments and scheduled transfers from the SWIRFT assistance accounts are insufficient to cover bond debt service then due, additional transfers from the SWIRFT assistance accounts may be made upon board approval.

Furthermore, if funds available in the assistance accounts are not used or are not available, the TWDB, in its sole discretion and subject to the laws of the state, has the ability to enter into a funds transfer agreement with the TTSTC, whereby funds could be transferred from the SWIFT corpus to the benefit of the SWIRFT bondholders. Although the transfer of funds from SWIFT to SWIRFT is not a legal requirement, Fitch views the likelihood of such a transfer to be high due to the essentiality of the SWIRFT program in implementing the SWP and the Texas constitutional restrictions limiting the use of SWIFT to SWP-related funding, such as the SWIRFT program.

Rating History – Abbreviated

Rating	Action	Outlook/ Watch	Date
AAA	Affirmed	Stable	8/29/22
AAA	Affirmed	Stable	8/30/21
AAA	RNA	Stable	8/6/21
AAA	Affirmed	Stable	8/14/20
AAA	Affirmed	Stable	8/20/19
AAA	Affirmed	Stable	8/17/18
AAA	Affirmed	Stable	3/21/18
AAA	Affirmed	Stable	8/15/17
AAA	RNA	Stable	7/13/17
AAA	Affirmed	Stable	9/1/16
AAA	Assigned	—	9/9/15

As of June 30, 2022, the estimated market value of the SWIFT investments was approximately \$1.8 billion, equating to approximately 25% of the outstanding bonds (post issuance). In its cash flow modeling, the SWIFT investments were discounted using the Portfolio Analysis Model (PAM), as described in Fitch's criteria. The PAM produced a base-case loss stress of negative 24%, which was scaled to a 'AAA' stress of negative 48%. This resulted in approximately \$957.3 million of discounted SWIFT investments to cover losses, which equates to approximately 13% of (projected) outstanding bonds.

SWIRFT Portfolio Highly Rated Yet Concentrated

Upon issuance of the series 2022 bonds, the SWIRFT portfolio is expected to consist of 54 individual PSOs, approximately 87% of which are rated investment grade and 39% are rated at or above 'AA-'. Favorably, nearly the entire pool of PSOs is secured by utility revenues or utility-contract revenues.

The three largest pool obligors remain the same since Fitch's review in August 2021 and represent nearly one-half of the total portfolio. North Harris County Regional Water Authority (A+/Stable), which will increase its funding amount by \$226 million with the series 2022 bond issuance, remains the largest obligor and accounts for approximately 20% of the total loan portfolio. North Texas Municipal Water District and West Harris County Regional Water Authority (both senior and subordinated pledged loans) represent 17% and 11%, respectively, of the total loan portfolio. Fitch rates West Harris County Regional Water Authority's Issuer Default Rating 'A+/Stable. North Texas Municipal Water District is not rated by Fitch but is assessed at a very high credit quality.

The SWIRFT portfolio 'AAA' liability rating stress hurdle of 35% (as produced by the PSM), remains slightly above Fitch's 'AAA' median level of 31% (higher liability stresses correlate to lower credit quality). The hurdles remain somewhat elevated due to the portfolio's relatively high concentration and longer weighted average life.

Largest Borrowers

Borrower	Outstanding (\$)	% of Portfolio
North Harris County Regional Water Authority	1,645,855,000	19.8
North Texas Municipal Water District	1,367,710,000	16.5
West Harris Co Regional Water Authority	818,775,000	9.9
North Fort Bend Water Authority (Subordinate)	546,310,000	6.6
City of Houston	445,115,000	5.4
Upper Trinity Regional Water District	430,770,000	5.2
Tarrant Regional Water District (Dallas)	376,995,000	4.5
Coastal Water Authority	296,900,000	3.6
North Fort Bend Water Authority (Senior)	273,830,000	3.3
Tarrant Regional Water District (Waterworks System)	253,935,000	3.1
Total	6,456,195,000	77.8

Source: Fitch Ratings, TWDB.

Swift Account Investments Managed by the TTSTC

The TTSTC manages the SWIFT investments in the name of the TWDB. TTSTC's investment objective is to preserve its purchasing power while maintaining sufficient liquidity to meet the needs of the TWDB. The SWIFT investment policy asset allocation targets 30% equities, 25% fixed income, 20% private debt, 15% real assets and 10% cash.

The TTSTC is annually audited and provides its financial reporting to the TWDB, state comptroller's investment advisory board and the SWIFT advisory committee. The advisory committee is a seven-member group established by legislation to monitor and advise SWIFT. The committee consists of the state comptroller or designee, three members of the state Senate appointed by the lieutenant governor and three members of the state House of Representatives appointed by the speaker of the House.

Strong Management and Underwriting

The TWDB, the administrator of both the SWIFT and SWIRFT programs, is responsible for the majority of long-range water resource planning in the state. Since its inception in 1957, the TWDB has initiated more than \$33 billion in commitments under various water and sewer-related programs. The TWDB's performance history has been exemplary, having never experienced a permanent default in its more than 60-year existence.

PSOs are required to be secured by GO water and/or wastewater utility system revenue pledges, or a combination of GO/assessment/utility pledges, including electric or gas revenues. Subordinate or junior revenue pledges typically also require reserves equal to 1.0x average annual debt service and a suitable additional bonds test.

Extensive State Water Needs

The state's population growth, which is projected to increase to 52 million by 2070 (from 30 million in 2020), coupled with the state's near-record drought from 2011 to 2015, precipitated the need for the SWIFT and SWIRFT programs. The SWP details the objectives needed to address the state's water needs over the next 50 years in a drought of record. Full implementation of the SWP is projected to cost approximately \$80 billion. The SWIRFT is intended to provide funding for \$27 billion of these costs.

Series Comparison

	2021 'AAA' Median ^a	Ser. 2022	Ser. 2021	Ser. 2020	Ser. 2019AB	Ser. 2018A
Revolving Fund Type	—	Water Util.				
Purpose	—	Financing	Financing	Financing	Financing	Financing
Total New Issuance (\$ Mil.)	—	915.5	428.9	614.6	859.8	805.4
Fitch Rating	—	AAA	AAA	AAA	AAA	AAA
Rating Date	—	8/29/22	8/30/21	8/14/20	8/20/19	3/21/18
Fitch Default Tolerance Test (%)						
Minimum Default Tolerance Rate	100.0	81.1	95.2	86.6	95.5	76.2
Less: Fitch PSM Stress Hurdle	30.6	34.8	35.8	42.7	41.0	32.9
Rating Stress Cushion	69.4	46.3	59.5	43.9	54.5	43.3
Financial Structure (\$ Mil.)						
Total Outstanding Program Bonds	369	7,416	6,611	6,278	5,750	3,226
Program Assets (\$ Mil.)						
Total Pledged Revenues Excluding Reserves	1,638	12,731	11,011	10,545	10,182	5,575
Total Pledged Revenues Including Reserves	1,774	13,688	11,983	11,366	11,106	6,303
Debt Service Reserve Fund Balance	3	957	971	821	924	339
Program Liabilities (\$ Mil.)						
Total Debt Service	625	12,690	10,942	10,459	10,178	5,897
Financial Ratios						
Projected Minimum Annual DSC (x)	1.6	1.0	1.0	1.0	1.0	1.0
Program Asset Strength Ratio (x)	2.0	1.1	1.1	1.1	1.1	1.1
DSRF as % of Bonds Outstanding	2.0	12.9	14.7	13.1	16.1	10.5
Portfolio Summary						
No. of Borrowers	202	54	50	45	44	42
Implied WA Pool Rating (PSM)	BBB	A-/BBB+	A-	A-	A	A
WA Life (Years)	16.9	28.4	28.6	28.9	28.9	28.5
% Investment Grade	72.9	87.2	90.8	91.8	93.6	95.9
Top 10 Concentration (%)	55.4	77.8	79.7	85.9	88.7	87.8
Largest Single Borrower (%)	15.3	19.8	19.3	20.4	22.9	23.1
Largest Borrower Composite Rating	AA-	A+	A+	AA	AA	AA
Security Pledge Distribution (%)						
Pledge 1	—	GO and Utility 63.7	Utility Revenues 98.8	Utility Revenues 98.9	Utility Revenues 96.1	Utility Revenues 86.6
Pledge 2	—	Utility Revenues 36.3	GO and Utility 1.2	GO and Utility 1.0	GO and Utility 1.1	Other 11.4

Series Comparison

	2021 'AAA' Median ^a	Ser. 2022	Ser. 2021	Ser. 2020	Ser. 2019AB	Ser. 2018A
Pledge 3	—	—	—	GO 0.1	GO 0.1	GO and Utility 1.9
Pledge 4	—	—	—	—	—	GO (0.1)

^aBased on data collected for Fitch's peer review (through Nov. 30, 2021). WA - Weighted average.
Source: Fitch Ratings, TWDB.

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