



Ohio Water  
Development Authority

## Ohio Water Development Authority

\$250,000,000\*

Drinking Water Assistance Fund Revenue Bonds  
Series 2019

Investor Presentation

June 18, 2019



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## Transaction Summary\*

### Drinking Water Assistance Fund Revenue Bonds, Series 2019

Issuer:	Ohio Water Development Authority (the “Authority” or “OWDA”)
Par Amount:	\$250,000,000*
Expected Ratings:	Aaa / AAA (Moody’s / Standard & Poor’s)
Tax Status:	Tax-Exempt (Federal and State of Ohio)
Use of Funds:	Proceeds from the sale of the Series 2019 DWAF Bonds are expected to be used for the purposes of raising moneys for the sole benefit of the Drinking Water Assistance Loan Fund or reimbursing the Authority for funds previously advanced and to pay costs of issuance
Security:	Principal of and interest on the Series 2019 DWAF Bonds are payable solely from, and are secured on a subordinate basis to the previously issued Leverage Bonds that the Authority has issued or may issue in the future to refund previously issued and outstanding Leverage Bonds, by a pledge and assignment of Pledged Revenues, consisting primarily of the principal and interest payments by Governmental Agencies pursuant to the DWAF Loan Agreements entered into pursuant to the Program, and by certain funds created by the Trust Agreement
Bond Structure:	Fixed rate bonds with a serial semiannual principal amortization from December 1, 2020 to June 2029 and a bullet maturity (\$136,000,000*) on December 1, 2029
Optional Redemption:	Please see “The Series 2019 DWAF Bonds” on Page 18 of the Preliminary Official Statement
Interest:	Semiannually on each June 1 and December 1, beginning on December 1, 2019
Pricing Date:	June 25, 2019*
Closing Date:	July 23, 2019*
Underwriters:	RBC Capital Markets (Senior Manager), Piper Jaffray (Co-Senior Manager) Loop Capital Markets, Stifel, Nicolaus & Co, TD Securities (Co-Managers)

\*Preliminary, subject to change.

# Overview of OWDA

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## The Ohio Water Development Authority

- Created in 1968, the Authority has provided water and wastewater loans to communities throughout Ohio for over 50 years
- The Authority consists of eight members
  - Five members of the Authority are appointed by the Governor for eight-year, staggered terms, with the advice and consent of the State Senate
  - The Directors of the Department of Natural Resources, the Development Services Agency and the Ohio Environmental Protection Agency (the “OEPA”) are members ex-officio of the Authority
- Jointly administers (with Ohio EPA) the federally authorized bond funded Wastewater and Drinking Water revolving loan programs; and also funds its own bond funded revolving fund loan program (Fresh Water) and provides conduit financing for private businesses
- Established and administers non-bond funded programs that include: Solid Waste Program (established in 1991); R&D Grant Program (1991); Brownfield Program (1994); Local Economic Development Program (1995); Village Capital Improvement Fund Program (1996); Emergency Relief program (1997); Dam Safety Linked Deposit program (1999); County Coastal Erosion Loan Program (1999); Unsewered Area Planning Loan Program (2009); Alternative Stormwater Infrastructure Loan program (2010); Unsewered Area Assistance Program (2013); and Loan Advance Program (2015)



# Drinking Water Assistance Fund Program Overview

As of April 30, 2019

- OWDA's Drinking Water Assistance Fund Program is the State Revolving Fund program that funds qualified drinking water projects in the State of Ohio
- It is authorized at the federal level by the federal Safe Drinking Water Act that directs the U.S. EPA to create drinking water state revolving fund ("DWSRF") programs to assist public water systems to finance the cost of infrastructure to achieve or maintain compliance with the Safe Drinking Water Act
- In order to receive a federal capitalization grant, a state must provide a "state match" totaling 20% of the total federal grant and OWDA currently funds its State Match utilizing several approved funding mechanisms
- Since 1997, the DWAF has received nearly \$591.5 million of federal capitalization grants which have been matched with over \$118 million of State matching funds. The adjacent table shows this funding over the last five years
- OWDA utilized Capitalization Grants and State Match monies – combined with bond proceeds and excess loan repayments -- to make loans to borrowers in the DWAF
- OWDA has made over \$1.3 billion in DWAF loans since the program's inception
- Currently, the DWAF portfolio includes over \$931 million of pledged loans outstanding to 217 different borrowers for 527 projects



## Capitalization Grants

### Federal Fiscal Years 2014-2018

Year	Capitalization	
	Grant	State Match
2014	24,586,000	4,917,200
2015	24,405,000	4,885,000
2016	23,107,000	4,621,400
2017	22,909,000	4,581,800
2018	27,935,000	5,587,000
<b>Total</b>	<b>\$122,942,000</b>	<b>\$24,592,400</b>

## DWAF Program Loan Terms & Interest Rates

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- The DWAF Program's subsidized loan rates provide below market funding and therefore a strong incentive for extensive participation by communities throughout Ohio
- The DWAF Program loan rates are reset monthly and current rates are as follows:

<b>Loan Rate</b>	<b>Rate Setting</b>
Standard Intermediate-Term Rate (5 – 20 years)	8-week average of the MMD 20 Year GO rate less 0.95%
Standard Long-Term Rate (21 – 30 years)	8-week average of the MMD 30 Year GO rate less 1.00%
Small Communities	Standard rate less 0.50%
Hardship	0% to 1.0% depending on community service population

- DWAF Loans are not callable by the borrowers and may not be prepaid by the borrower prior to maturity

## DWAF Loans Financed and Significant Government Agency Participants

As of April 30, 2019

- 217 Governmental Agencies with 527 Projects financed through loans made by the Authority (the “Existing DWAF Loans”) pursuant to loan agreements with the Authority
- Total of \$1,325,335,373 in principal amount of Existing DWAF Loans has been made, with a principal balance of \$931,282,565 outstanding

### Top 10 Local Government Agencies by Percent of Projected Total Remaining Repayments

(As of April 30, 2019)

Local Governmental Agency	Number of Projects	Estimated Project Costs Funded with DWAF Loans	Projected Remaining Leverage and DWAF Revenue Series Repayments	Percent of Projected Total Remaining Repayments
Columbus	34	\$174,137,305	\$200,173,037	18.91%
Cleveland	11	152,766,777	86,397,653	8.16%
Cincinnati	43	68,409,581	63,333,190	5.98%
Toledo	3	63,096,074	57,512,913	5.43%
Miamisburg	5	31,279,230	36,110,570	3.41%
Avon Lake	3	35,914,143	34,676,722	3.28%
Bucyrus	2	29,085,678	30,942,980	2.92%
Mahoning Valley Sanitary District	9	36,177,102	30,140,233	2.85%
Canton	5	27,435,479	24,864,587	2.35%
Oregon	5	33,457,193	23,171,435	2.19%
<b>Totals</b>	<b>120</b>	<b>\$651,758,862</b>	<b>\$587,323,319</b>	<b>55.48%</b>

## Enforcement Process for Revenue Collection

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- The Authority has covenanted to its bondholders that it will take all necessary actions to collect all loan payments due to the Authority, including:
  - Sending invoices 15 days prior to due date
  - Making demand for payment within 20 days after any default
  - Giving notice that if the default is not remedied within 2 months the Authority will file suit to collect the moneys due
  - Filing suit within 3 months of the default date
- The Authority has a strong, 50-year record of enforcing its rights to loan payments
  - Only one DWAF Loan is currently in default
    - Village of Bridgeport, Ohio failed to make payments due on July 1, 2018 and January 1, 2019 with the delinquent amount totaling \$36,701
    - Prior to its failure to make its July 1, 2018 payment, Bridgeport had made full and timely payments
    - In October 2018, the Authority filed a complaint against Bridgeport in the Franklin County Court of Common Pleas
    - The Authority anticipates that its ability to pay Bond Service Charges on DWAF Bonds will not be materially adversely affected by any of the developments associated with the Bridgeport default.
- Loan repayment dates are generally set five months prior to bond debt service payment dates to provide cushion for collections

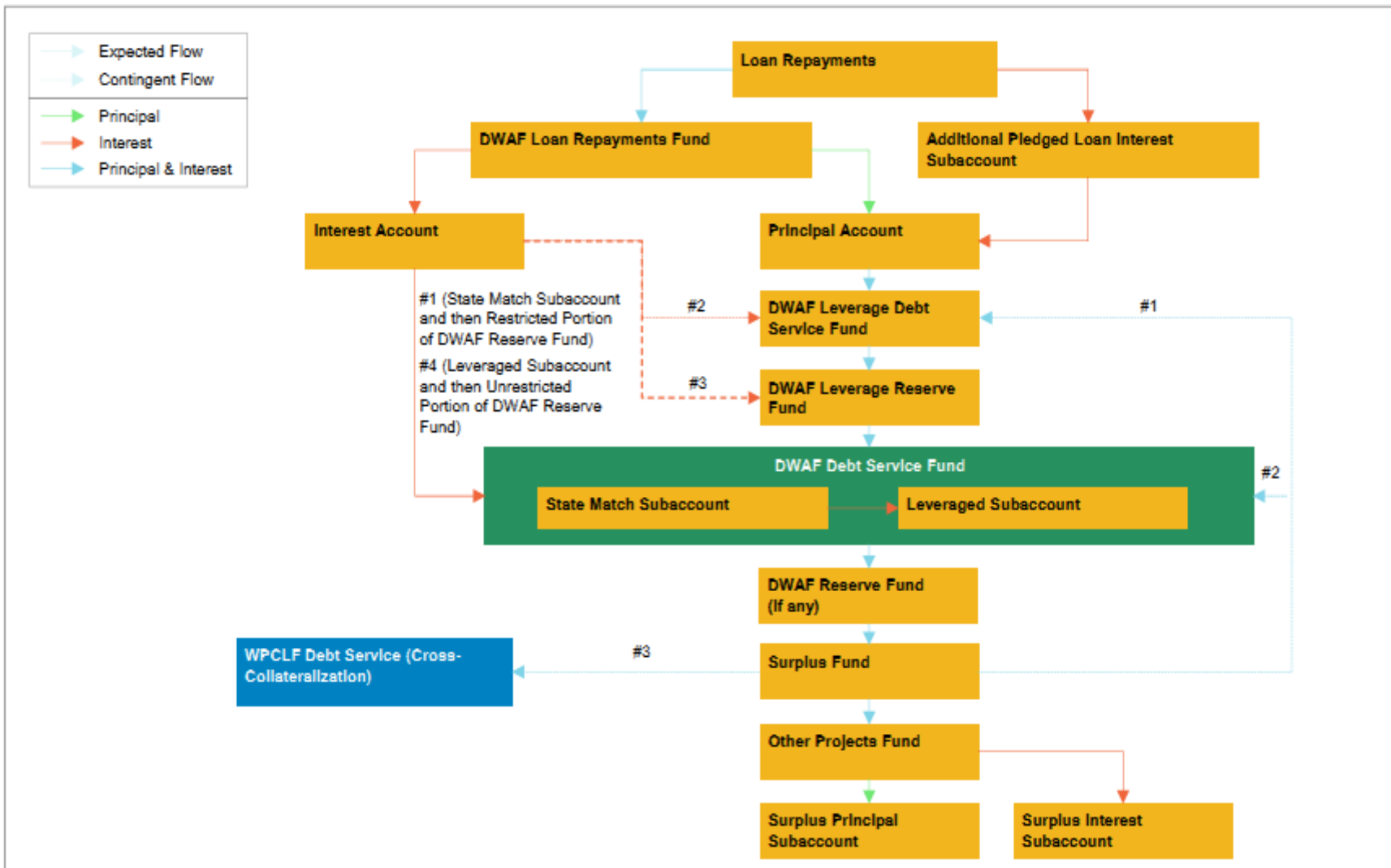


## DWAF Bondholder Security

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Security Feature	Details
DWAF Revenues Pledged to Leverage & DWAF Bonds:	Principal and interest repayments on all pledge Loan Agreement loans which are secured by the Governmental Agency's promise to pay from water rates and charges. OWDA has covenanted not to issue senior Leverage bonds except to refund outstanding leverage bonds
Coverage Pledge:	Minimum 1.00x coverage from existing loan repayment for DWAF Bonds.
Additional Coverage and Security:	<ul style="list-style-type: none"><li>▪ Payments from future loans made from Series 2019 DWAF bond proceeds</li><li>▪ Balance of and interest earnings on:<ul style="list-style-type: none"><li>– Debt Service Fund</li><li>– Debt Service Reserve Fund (if any)</li><li>– Direct Payments</li></ul></li><li>▪ With respect to the DWAF Portion only:<ul style="list-style-type: none"><li>– Unencumbered balance of Net Bond Proceeds Fund</li><li>– Unencumbered balance of Capitalization Grant Subaccount</li></ul></li></ul>
Debt Service Reserve Funds:	The Series 2019 DWAF Bonds will not be secured by a Debt Service Reserve Fund
Cross Collateralization:	<p>Cross-collateralization through investment between the WPCLF and DWAF Programs provides additional security and greater portfolio diversification for bonds issued under both programs</p> <p>Allows the WPCLF and DWAF to achieve an enhanced security through access to other Program's surpluses</p>
Additional Bonds Test:	<ul style="list-style-type: none"><li>▪ Must meet coverage (100%) pledge with payments of loans already made, and</li><li>▪ DSRF balance for the series of DWAF Bonds being issued is equal to or exceeds the Required Reserve Fund Balance</li></ul>

# DWAF Program Cash Flow and Pledged Funds



# Debt Service Coverage

Existing DWAF Loans as of April 30, 2019

	A	B	C = (A - B)	D	E	F = (C - D - E)	G = (A / (B + D + E))
	Estimated Total Project Repayments (a)	Outstanding Leverage Series Debt Service	Estimated Net Revenues	Outstanding DWAF Series Debt Service	Hypothetical DWAF Series 2019 A Debt Service (b)*	Estimated Surplus	DWAF Coverage
12/01/2019	32,825,169	15,640,764	17,184,406	3,180,000	4,266,667	9,737,739	142%
06/01/2020	34,519,785	17,342,232	17,177,552	3,180,000	6,000,000	7,997,552	130%
12/01/2020	34,953,896	14,919,551	20,034,345	3,680,000	9,000,000	7,354,345	127%
06/01/2021	35,072,302	14,062,945	21,009,357	4,670,000	9,955,000	6,384,357	122%
12/01/2021	35,789,996	12,540,139	23,249,858	5,647,500	10,895,000	6,707,358	123%
06/01/2022	37,162,055	8,449,457	28,712,597	7,085,000	10,795,000	10,832,597	141%
12/01/2022	36,622,683	8,912,028	27,710,655	6,985,000	10,695,000	10,030,655	138%
06/01/2023	37,005,566	4,198,549	32,807,017	9,385,000	12,595,000	10,827,017	141%
12/01/2023	35,923,190	4,103,715	31,819,475	9,222,500	12,455,000	10,141,975	139%
06/01/2024	35,529,343	4,063,614	31,465,730	9,060,000	12,315,000	10,090,730	140%
12/01/2024	35,192,933	3,334,107	31,858,827	8,897,500	12,140,000	10,821,327	144%
06/01/2025	34,137,828	3,310,795	30,827,033	8,735,000	11,965,000	10,127,033	142%
12/01/2025	33,981,628	3,286,428	30,695,200	8,585,000	11,790,000	10,320,200	144%
06/01/2026	33,490,346	3,266,005	30,224,341	8,422,500	11,650,000	10,151,841	143%
12/01/2026	30,440,738	3,238,512	27,202,225	7,260,000	11,475,000	8,467,225	139%
06/01/2027	29,776,295	3,214,728	26,561,567	6,622,500	11,300,000	8,639,067	141%
12/01/2027	29,592,208	3,189,507	26,402,701	6,497,500	11,125,000	8,780,201	142%
06/01/2028	27,637,440	3,162,852	24,474,588	5,372,500	10,950,000	8,152,088	142%
12/01/2028	25,952,665	3,134,761	22,817,904	4,772,500	10,775,000	7,270,404	139%
06/01/2029	24,227,831	3,105,234	21,122,597	4,185,000	11,600,000	5,337,597	128%
12/01/2029	23,696,472	3,074,272	20,622,200	4,110,000	11,400,000	5,112,200	128%

\*Preliminary, subject to change. Please refer to the following page for footnotes to this table.

# Debt Service Coverage

Existing DWAF Loans as of April 30, 2019

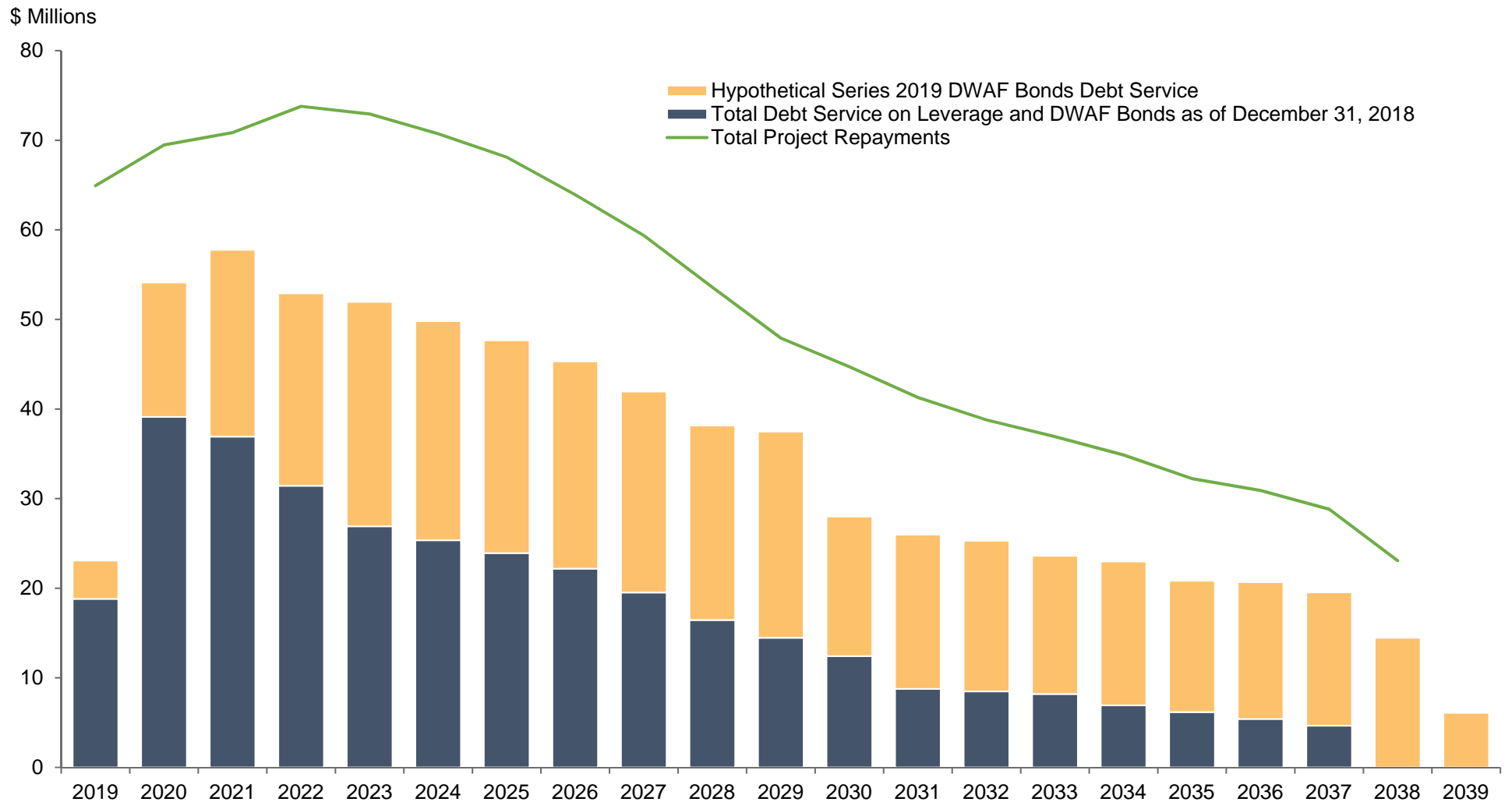
	A	B	C = (A - B)	D	E	F = (C - D - E)	G = (A / (B + D + E))
	Estimated Total Project Repayments (a)	Outstanding Leverage Series Debt Service	Estimated Net Revenues	Outstanding DWAF Series Debt Service	Hypothetical DWAF Series 2019 A Debt Service (b)*	Estimated Surplus	DWAF Coverage
06/01/2030	22,810,230	2,446,874	20,363,356	4,035,000	7,830,400	8,497,956	159%
12/01/2030	21,911,286	1,975,123	19,936,163	3,975,000	7,744,600	8,216,563	160%
06/01/2031	20,915,669	-	20,915,669	4,415,000	8,658,800	7,841,869	160%
12/01/2031	20,382,208	-	20,382,208	4,345,000	8,558,700	7,478,508	158%
06/01/2032	19,590,534	-	19,590,534	4,275,000	8,458,600	6,856,934	154%
12/01/2032	19,198,069	-	19,198,069	4,205,000	8,358,500	6,634,569	153%
06/01/2033	18,759,741	-	18,759,741	4,135,000	8,258,400	6,366,341	151%
12/01/2033	18,167,297	-	18,167,297	4,065,000	7,158,300	6,943,997	162%
06/01/2034	17,616,074	-	17,616,074	3,495,000	8,072,500	6,048,574	152%
12/01/2034	17,266,662	-	17,266,662	3,435,000	7,972,400	5,859,262	151%
06/01/2035	16,408,356	-	16,408,356	3,375,000	6,872,300	6,161,056	160%
12/01/2035	15,821,735	-	15,821,735	2,800,000	7,786,500	5,235,235	149%
06/01/2036	15,616,164	-	15,616,164	2,737,500	7,686,400	5,192,264	150%
12/01/2036	15,286,392	-	15,286,392	2,675,000	7,586,300	5,025,092	149%
06/01/2037	14,860,412	-	14,860,412	2,612,500	7,486,200	4,761,712	147%
12/01/2037	13,962,782	-	13,962,782	2,050,000	7,386,100	4,526,682	148%
06/01/2038	12,364,052	-	12,364,052	-	7,286,000	5,078,052	170%
12/01/2038	10,713,017	-	10,713,017	-	7,185,900	3,527,117	149%
6/1/2039 - 12/1/2043	52,908,361	-	52,908,361	-	6,085,800	46,822,561	869%
6/1/2044 - 12/1/2048	9,883,199	-	9,883,199	-	-	9,883,199	0%
6/1/2049 - 6/1/2051	1,057,223	-	1,057,223	-	-	1,057,223	0%
	1,059,029,832	143,972,190	915,057,642	192,185,000	371,574,367	351,298,275	

\*Preliminary, subject to change.

- (a) The amounts shown are the pledged amounts required to be paid by Local Governmental Agencies under existing DWAF Loan Agreements as of 4/30/2019. Such amounts have been pledged as security for currently issued and / or additional Leverage and DWAF Series Bonds. Amounts shown are semi-annual payment amounts and do not include interest earnings thereon. Payments by the Local Governmental Agencies are due semi-annually on January 1 and July 1 of each year.
- (b) Actual amortization through December 1, 2029. Hypothetical debt service of the \$136,000,000 DWAF Series 2019 Bonds December 1, 2029 bullet maturity at 2.86% for 10 years beginning on December 1, 2029.

# Leverage and DWAF Debt Service Structure

Estimated Debt Service on Outstanding Leverage and DWAF Series Bonds (Including Series 2019)\*



\*Preliminary, subject to change.

# Financing Summary

## Drinking Water Assistance Fund Revenue Bonds, Series 2019

Principal*	Semiannual serial maturities beginning on December 1, 2020 through December 1, 2029
Interest	Semiannually on each June 1 and December 1, beginning on December 1, 2019
Optional Redemption	Please see “The Series 2019 DWAF Bonds” on Page 18 of the Preliminary Official Statement

### Sources of Funds<sup>(1)</sup>

Par Amount of Series 2019 DWAF Bonds	\$	250,000,000 *
[Net] Original Issue Premium		
<b>Total</b>	<b>\$</b>	

### Uses of Funds<sup>(1)</sup>

Deposit to DWAF Bond Subfund	\$	
Costs of Issuance <sup>(2)</sup>		
<b>Total</b>	<b>\$</b>	

Maturity Date	Par Amount*
12/1/2020	\$3,000,000
6/1/2021	\$4,000,000
12/1/2021	\$5,000,000
6/1/2022	\$5,000,000
12/1/2022	\$5,000,000
6/1/2023	\$7,000,000
12/1/2023	\$7,000,000
6/1/2024	\$7,000,000
12/1/2024	\$7,000,000
6/1/2025	\$7,000,000
12/1/2025	\$7,000,000
6/1/2026	\$7,000,000
12/1/2026	\$7,000,000
6/1/2027	\$7,000,000
12/1/2027	\$7,000,000
6/1/2028	\$7,000,000
12/1/2028	\$7,000,000
6/1/2029	\$8,000,000
12/1/2029	\$136,000,000
<b>TOTAL</b>	<b>250,000,000*</b>

(1) Totals rounded to the nearest dollar.

(2) Including Underwriters' Discount, Bond Counsel fees, Trustee fees, Financial Advisor fees, rating agency fees, and other costs.

\*Preliminary, subject to change. Does not reflect the hypothetical amortization for the December 1, 2029 bullet maturity.

## Credit Highlights

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- ✓ The Drinking Water Assistance Fund was created as a stand-alone, self-sufficient financing program in 1997
  - No reliance on State funding to the SRF Programs
- ✓ Credit strengths reflect the high quality of the Program
  - Rated Aaa/AAA by Moody's/S&P
  - 50-year track record of managing loan programs for communities throughout the State of Ohio
  - Strong record of enforcing revenue collection and legal enforcement
- ✓ The DWAF maintains a sizeable and diverse loan pool that provides significant overcollateralization for bondholders
  - As of April 30, 2019, there were 217 Governmental Agencies with 527 Projects financed through the DWAF
  - A total of \$1.33 billion in principal amount of loans has been made in the DWAF program, with a principal balance of \$931.28 million outstanding
  - Top 10 Borrowers constitute approximately 55.48% of the total projected remaining repayments pursuant to existing loan agreements
    - The City of Columbus (18.9%) and City of Cleveland (8.2%) are the programs two largest borrowers
  - As of April 30, 2019, the Authority has approximately \$133.4 million of Leverage bonds and \$135 million of DWAF revenue bonds outstanding
- ✓ The DWAF is cross-collateralized with the Water Pollution Control Loan Fund ("WPCLF")
  - Cross-collateralization between the DWAF and the WPCLF provides for the investment of surplus funds between the WPCLF and the DWAF to enhance the security for bonds



# Financing Schedule\*

JUNE						
S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

JULY						
S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

 Pricing

 Closing

 Holiday

Activity	Date*
Release of Preliminary Official Statement	Tuesday, June 18 <sup>th</sup>
Pricing	Tuesday, June 25 <sup>th</sup>
BPA Signing	Tuesday, June 25 <sup>th</sup>
Closing	Tuesday, July 23 <sup>rd</sup>

\*Preliminary, subject to change.



## Contact Information

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