

**Northern Kentucky Water District
Revenue Bonds, Series 2019
(Final Schedules)**

Series 2019 Bond Schedules

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**Distribution of Funds
Northern Kentucky Water District
Revenue Bonds, Series 2019
(Distribution of Funds Schedule)**

Pricing: September 10, 2019
Dated Date: September 26, 2019
Delivery Date: September 26, 2019

Sources of Funds:

Par Amount of Bonds	\$17,845,000.00	
Plus: Original Issuer's Premium	\$1,253,998.75	
Less: Underwriter's Discount	(\$169,083.78)	
Total Due From Purchaser		\$18,929,914.97
Less: Good Faith Deposit (1%)	(\$178,450.00)	
Total Due from Purchaser at Closing	\$18,751,464.97	
Total Sources of Funds		<u><u>\$18,929,914.97</u></u>

Uses of Funds:

Deposit to Current Refunding Fund (to be Wired to Regions on 10/01/19)	\$17,825,002.23	
Deposit to Debt Service Reserve Fund	\$1,033,625.00	
Deposit to Cost of Issuance Fund	\$71,287.74	
<i>Wire to Ross, Sinclair & Associates their Financial Advisor Fees</i>	\$26,767.50	
<i>Remit to Dinsmore & Shohl their Bond Counsel Fees (Includes Expenses)</i>	\$12,849.00	
<i>Remit to Moody's Investors Service their Rating Fees</i>	\$25,000.00	
<i>Remit to The Bank of New York Mellon their Paying Agent and Registrar Fees</i>	\$1,150.00	
<i>Remit CPA Fees</i>	\$1,300.00	
<i>Remit Rounding Amount to Debt Service Fund</i>	\$4,221.24	
Total Uses:		<u><u>\$18,929,914.97</u></u>

Flow of Funds
Northern Kentucky Water District
Revenue Bonds, Series 2019
(Flow of Funds Schedule)

Pricing: September 10, 2019
Dated Date: September 26, 2019
Delivery Date: September 26, 2019

From Purchaser (Piper Jaffray)

September 10, 2019	Wire to The Bank of New York Mellon the Good Faith Deposit	\$178,450.00
September 26, 2019	Wire to The Bank of New York Mellon the Remaining Bond Proceeds	\$18,751,464.97
Total:		\$18,929,914.97

From Paying Agent and Registrar (Bank of New York)

September 26, 2019	Deposit to Current Refunding Fund (to be Wired to Regions on 10/01/19)	\$17,825,002.23
September 26, 2019	Remit to Debt Service Reserve Fund	\$1,033,625.00
September 26, 2019	Wire to Ross, Sinclair & Associates their Financial Advisor Fees	\$26,767.50
September 26, 2019	Remit to Dinsmore & Shohl their Bond Counsel Fees (Includes Expenses)	\$12,849.00
September 26, 2019	Remit to Moody's Investors Service their Rating Fees	\$25,000.00
September 26, 2019	Remit to The Bank of New York Mellon their Paying Agent and Registrar Fees	\$1,150.00
September 26, 2019	Remit CPA Fees	\$1,300.00
September 26, 2019	Remit Rounding Amount to Debt Service Fund	\$4,221.24
Total:		\$18,929,914.97

Wiring Instructions

BNY Mellon

The Bank of New York Mellon
ABA: 021000018
Account Number: 4074118400
Ref: Northern KY Water District Bonds 2019
Attn: Bart Trindeitmar, 502-566-6903

Ross, Sinclair & Associates LLC

Fifth Third Bank
Cincinnati, Ohio
ABA #: 042000314
Account #: 7021476085
Reference: NKY Water Series 2019

Regions (BAN Payoff)

Regions Capital Advantage, Inc.
1900 5th Avenue North Suite 2400
Birmingham, Alabama 35203
ABA# 062000019
ACCOUNT # 0107024142
Notify Regions Equip Fin 205-264-4778

Northern Kentucky Water Service District

Revenue Bonds, Series 2019

FINAL Sold to Piper Jaffray on 09.10.19 Dated & Delivery 09.26.19

Sources & Uses

Dated 09/26/2019 | Delivered 09/26/2019

Sources Of Funds

Par Amount of Bonds	\$17,845,000.00
Reoffering Premium	1,253,998.75
Total Sources	\$19,098,998.75

Uses Of Funds

Total Underwriter's Discount (0.948%)	169,083.78
Costs of Issuance	67,066.50
Deposit to Debt Service Reserve Fund (DSRF)	1,033,625.00
Deposit to Current Refunding Fund	17,825,002.23
Rounding Amount	4,221.24
Total Uses	\$19,098,998.75

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Northern Kentucky Water Service District

Revenue Bonds, Series 2019

FINAL Sold to Piper Jaffray on 09.10.19 Dated & Delivery 09.26.19

Pricing Summary

Part 1 of 2

Maturity	Type of Bond	Coupon	Yield	Maturity Value	Price	YTM	Call Date	Call Price	Dollar Price
02/01/2020	Serial Coupon	3.000%	1.150%	535,000.00	100.637%	-	-	-	538,407.95
02/01/2021	Serial Coupon	3.000%	1.160%	455,000.00	102.451%	-	-	-	466,152.05
02/01/2022	Serial Coupon	3.000%	1.180%	470,000.00	104.200%	-	-	-	489,740.00
02/01/2023	Serial Coupon	4.000%	1.200%	485,000.00	109.158%	-	-	-	529,416.30
02/01/2024	Serial Coupon	4.000%	1.230%	505,000.00	111.689%	-	-	-	564,029.45
02/01/2025	Serial Coupon	5.000%	1.280%	530,000.00	119.165%	-	-	-	631,574.50
02/01/2026	Serial Coupon	5.000%	1.320%	560,000.00	122.333%	-	-	-	685,064.80
02/01/2027	Serial Coupon	5.000%	1.380%	585,000.00	125.208%	-	-	-	732,466.80
02/01/2028	Serial Coupon	5.000%	1.450%	615,000.00	126.239%	c	1.625%	100.000%	776,369.85
02/01/2029	Serial Coupon	4.000%	1.650%	645,000.00	117.228%	c	1.972%	100.000%	756,120.60
02/01/2030	Serial Coupon	3.000%	1.860%	665,000.00	108.286%	c	2.104%	100.000%	720,101.90
02/01/2031	Serial Coupon	3.000%	1.970%	690,000.00	107.453%	c	2.252%	100.000%	741,425.70
02/01/2032	Serial Coupon	3.000%	2.060%	710,000.00	106.777%	c	2.364%	100.000%	758,116.70
02/01/2033	Serial Coupon	3.000%	2.200%	730,000.00	105.735%	c	2.492%	100.000%	771,865.50
02/01/2034	Serial Coupon	3.000%	2.290%	755,000.00	105.071%	c	2.575%	100.000%	793,286.05
02/01/2035	Serial Coupon	3.000%	2.380%	775,000.00	104.412%	c	2.648%	100.000%	809,193.00
02/01/2036	Serial Coupon	3.000%	2.430%	800,000.00	104.048%	c	2.692%	100.000%	832,384.00
02/01/2037	Serial Coupon	3.000%	2.510%	825,000.00	103.468%	c	2.747%	100.000%	853,611.00
02/01/2038	Serial Coupon	3.000%	2.550%	850,000.00	103.180%	c	2.777%	100.000%	877,030.00
02/01/2039	Serial Coupon	3.000%	2.590%	875,000.00	102.892%	c	2.805%	100.000%	900,305.00
02/01/2040	Serial Coupon	3.000%	2.680%	900,000.00	102.248%	c	2.853%	100.000%	920,232.00
02/01/2041	Serial Coupon	3.000%	2.710%	930,000.00	102.035%	c	2.872%	100.000%	948,925.50
02/01/2042	Serial Coupon	3.000%	2.740%	955,000.00	101.822%	c	2.889%	100.000%	972,400.10
02/01/2044	Term 1 Coupon	3.000%	2.780%	2,000,000.00	101.539%	c	2.911%	100.000%	2,030,780.00
Total	-	-	-	\$17,845,000.00	-	-	-	-	\$19,098,998.75

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Northern Kentucky Water Service District

Revenue Bonds, Series 2019

FINAL Sold to Piper Jaffray on 09.10.19 Dated & Delivery 09.26.19

Pricing Summary

Part 2 of 2

Bid Information

Par Amount of Bonds	\$17,845,000.00
Reoffering Premium or (Discount)	1,253,998.75
Gross Production	\$19,098,998.75
Total Underwriter's Discount (0.948%)	\$(169,083.78)
Bid (106.080%)	18,929,914.97
Total Purchase Price	\$18,929,914.97
Bond Year Dollars	\$250,646.18
Average Life	14.046 Years
Average Coupon	3.1655241%
Net Interest Cost (NIC)	2.7326769%
True Interest Cost (TIC)	2.6457043%

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Northern Kentucky Water Service District

Revenue Bonds, Series 2019

FINAL Sold to Piper Jaffray on 09.10.19 Dated & Delivery 09.26.19

Debt Service Schedule

Part 1 of 3

Date	Principal	Coupon	Interest	Total P+I
09/26/2019	-	-	-	-
02/01/2020	535,000.00	3.000%	207,465.28	742,465.28
08/01/2020	-	-	290,725.00	290,725.00
02/01/2021	455,000.00	3.000%	290,725.00	745,725.00
08/01/2021	-	-	283,900.00	283,900.00
02/01/2022	470,000.00	3.000%	283,900.00	753,900.00
08/01/2022	-	-	276,850.00	276,850.00
02/01/2023	485,000.00	4.000%	276,850.00	761,850.00
08/01/2023	-	-	267,150.00	267,150.00
02/01/2024	505,000.00	4.000%	267,150.00	772,150.00
08/01/2024	-	-	257,050.00	257,050.00
02/01/2025	530,000.00	5.000%	257,050.00	787,050.00
08/01/2025	-	-	243,800.00	243,800.00
02/01/2026	560,000.00	5.000%	243,800.00	803,800.00
08/01/2026	-	-	229,800.00	229,800.00
02/01/2027	585,000.00	5.000%	229,800.00	814,800.00
08/01/2027	-	-	215,175.00	215,175.00
02/01/2028	615,000.00	5.000%	215,175.00	830,175.00
08/01/2028	-	-	199,800.00	199,800.00
02/01/2029	645,000.00	4.000%	199,800.00	844,800.00
08/01/2029	-	-	186,900.00	186,900.00
02/01/2030	665,000.00	3.000%	186,900.00	851,900.00
08/01/2030	-	-	176,925.00	176,925.00
02/01/2031	690,000.00	3.000%	176,925.00	866,925.00
08/01/2031	-	-	166,575.00	166,575.00
02/01/2032	710,000.00	3.000%	166,575.00	876,575.00
08/01/2032	-	-	155,925.00	155,925.00
02/01/2033	730,000.00	3.000%	155,925.00	885,925.00
08/01/2033	-	-	144,975.00	144,975.00

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Revenue Bonds, Series 2019

FINAL Sold to Piper Jaffray on 09.10.19 Dated & Delivery 09.26.19

Debt Service Schedule

Part 2 of 3

Date	Principal	Coupon	Interest	Total P+I
02/01/2034	755,000.00	3.000%	144,975.00	899,975.00
08/01/2034	-	-	133,650.00	133,650.00
02/01/2035	775,000.00	3.000%	133,650.00	908,650.00
08/01/2035	-	-	122,025.00	122,025.00
02/01/2036	800,000.00	3.000%	122,025.00	922,025.00
08/01/2036	-	-	110,025.00	110,025.00
02/01/2037	825,000.00	3.000%	110,025.00	935,025.00
08/01/2037	-	-	97,650.00	97,650.00
02/01/2038	850,000.00	3.000%	97,650.00	947,650.00
08/01/2038	-	-	84,900.00	84,900.00
02/01/2039	875,000.00	3.000%	84,900.00	959,900.00
08/01/2039	-	-	71,775.00	71,775.00
02/01/2040	900,000.00	3.000%	71,775.00	971,775.00
08/01/2040	-	-	58,275.00	58,275.00
02/01/2041	930,000.00	3.000%	58,275.00	988,275.00
08/01/2041	-	-	44,325.00	44,325.00
02/01/2042	955,000.00	3.000%	44,325.00	999,325.00
08/01/2042	-	-	30,000.00	30,000.00
02/01/2043	985,000.00	3.000%	30,000.00	1,015,000.00
08/01/2043	-	-	15,225.00	15,225.00
02/01/2044	1,015,000.00	3.000%	15,225.00	1,030,225.00
Total	\$17,845,000.00	-	\$7,934,265.28	\$25,779,265.28

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Revenue Bonds, Series 2019

FINAL Sold to Piper Jaffray on 09.10.19 Dated & Delivery 09.26.19

Debt Service Schedule

Part 3 of 3

Yield Statistics

Bond Year Dollars	\$250,646.18
Average Life	14.046 Years
Average Coupon	3.1655241%
Net Interest Cost (NIC)	2.7326769%
True Interest Cost (TIC)	2.6457043%
Bond Yield for Arbitrage Purposes	-
All Inclusive Cost (AIC)	2.6868281%

IRS Form 8038

Net Interest Cost	2.5376061%
Weighted Average Maturity	13.783 Years

Northern Kentucky Water Service District

Revenue Bonds, Series 2019

FINAL Sold to Piper Jaffray on 09.10.19 Dated & Delivery 09.26.19

Net Debt Service Schedule

Part 1 of 3

Date	Principal	Coupon	Interest	Total P+I	Expenses	DSR	Net New D/S	Fiscal Total
09/26/2019	-	-	-	-	-	-	-	-
02/01/2020	535,000.00	3.000%	207,465.28	742,465.28	1,000.00	-	743,465.28	-
08/01/2020	-	-	290,725.00	290,725.00	-	-	290,725.00	-
12/31/2020	-	-	-	-	-	-	-	1,034,190.28
02/01/2021	455,000.00	3.000%	290,725.00	745,725.00	1,000.00	-	746,725.00	-
08/01/2021	-	-	283,900.00	283,900.00	-	-	283,900.00	-
12/31/2021	-	-	-	-	-	-	-	1,030,625.00
02/01/2022	470,000.00	3.000%	283,900.00	753,900.00	1,000.00	-	754,900.00	-
08/01/2022	-	-	276,850.00	276,850.00	-	-	276,850.00	-
12/31/2022	-	-	-	-	-	-	-	1,031,750.00
02/01/2023	485,000.00	4.000%	276,850.00	761,850.00	1,000.00	-	762,850.00	-
08/01/2023	-	-	267,150.00	267,150.00	-	-	267,150.00	-
12/31/2023	-	-	-	-	-	-	-	1,030,000.00
02/01/2024	505,000.00	4.000%	267,150.00	772,150.00	1,000.00	-	773,150.00	-
08/01/2024	-	-	257,050.00	257,050.00	-	-	257,050.00	-
12/31/2024	-	-	-	-	-	-	-	1,030,200.00
02/01/2025	530,000.00	5.000%	257,050.00	787,050.00	1,000.00	-	788,050.00	-
08/01/2025	-	-	243,800.00	243,800.00	-	-	243,800.00	-
12/31/2025	-	-	-	-	-	-	-	1,031,850.00
02/01/2026	560,000.00	5.000%	243,800.00	803,800.00	1,000.00	-	804,800.00	-
08/01/2026	-	-	229,800.00	229,800.00	-	-	229,800.00	-
12/31/2026	-	-	-	-	-	-	-	1,034,600.00
02/01/2027	585,000.00	5.000%	229,800.00	814,800.00	1,000.00	-	815,800.00	-
08/01/2027	-	-	215,175.00	215,175.00	-	-	215,175.00	-
12/31/2027	-	-	-	-	-	-	-	1,030,975.00
02/01/2028	615,000.00	5.000%	215,175.00	830,175.00	1,000.00	-	831,175.00	-
08/01/2028	-	-	199,800.00	199,800.00	-	-	199,800.00	-
12/31/2028	-	-	-	-	-	-	-	1,030,975.00

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Northern Kentucky Water Service District

Revenue Bonds, Series 2019

FINAL Sold to Piper Jaffray on 09.10.19 Dated & Delivery 09.26.19

Net Debt Service Schedule

Part 2 of 3

Date	Principal	Coupon	Interest	Total P+I	Expenses	DSR	Net New D/S	Fiscal Total
02/01/2029	645,000.00	4.000%	199,800.00	844,800.00	1,000.00	-	845,800.00	-
08/01/2029	-	-	186,900.00	186,900.00	-	-	186,900.00	-
12/31/2029	-	-	-	-	-	-	-	1,032,700.00
02/01/2030	665,000.00	3.000%	186,900.00	851,900.00	1,000.00	-	852,900.00	-
08/01/2030	-	-	176,925.00	176,925.00	-	-	176,925.00	-
12/31/2030	-	-	-	-	-	-	-	1,029,825.00
02/01/2031	690,000.00	3.000%	176,925.00	866,925.00	1,000.00	-	867,925.00	-
08/01/2031	-	-	166,575.00	166,575.00	-	-	166,575.00	-
12/31/2031	-	-	-	-	-	-	-	1,034,500.00
02/01/2032	710,000.00	3.000%	166,575.00	876,575.00	1,000.00	-	877,575.00	-
08/01/2032	-	-	155,925.00	155,925.00	-	-	155,925.00	-
12/31/2032	-	-	-	-	-	-	-	1,033,500.00
02/01/2033	730,000.00	3.000%	155,925.00	885,925.00	1,000.00	-	886,925.00	-
08/01/2033	-	-	144,975.00	144,975.00	-	-	144,975.00	-
12/31/2033	-	-	-	-	-	-	-	1,031,900.00
02/01/2034	755,000.00	3.000%	144,975.00	899,975.00	1,000.00	-	900,975.00	-
08/01/2034	-	-	133,650.00	133,650.00	-	-	133,650.00	-
12/31/2034	-	-	-	-	-	-	-	1,034,625.00
02/01/2035	775,000.00	3.000%	133,650.00	908,650.00	1,000.00	-	909,650.00	-
08/01/2035	-	-	122,025.00	122,025.00	-	-	122,025.00	-
12/31/2035	-	-	-	-	-	-	-	1,031,675.00
02/01/2036	800,000.00	3.000%	122,025.00	922,025.00	1,000.00	-	923,025.00	-
08/01/2036	-	-	110,025.00	110,025.00	-	-	110,025.00	-
12/31/2036	-	-	-	-	-	-	-	1,033,050.00
02/01/2037	825,000.00	3.000%	110,025.00	935,025.00	1,000.00	-	936,025.00	-
08/01/2037	-	-	97,650.00	97,650.00	-	-	97,650.00	-
12/31/2037	-	-	-	-	-	-	-	1,033,675.00
02/01/2038	850,000.00	3.000%	97,650.00	947,650.00	1,000.00	-	948,650.00	-

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Revenue Bonds, Series 2019

FINAL Sold to Piper Jaffray on 09.10.19 Dated & Delivery 09.26.19

Net Debt Service Schedule

Part 3 of 3

Date	Principal	Coupon	Interest	Total P+I	Expenses	DSR	Net New D/S	Fiscal Total
08/01/2038	-	-	84,900.00	84,900.00	-	-	84,900.00	-
12/31/2038	-	-	-	-	-	-	-	1,033,550.00
02/01/2039	875,000.00	3.000%	84,900.00	959,900.00	1,000.00	-	960,900.00	-
08/01/2039	-	-	71,775.00	71,775.00	-	-	71,775.00	-
12/31/2039	-	-	-	-	-	-	-	1,032,675.00
02/01/2040	900,000.00	3.000%	71,775.00	971,775.00	1,000.00	-	972,775.00	-
08/01/2040	-	-	58,275.00	58,275.00	-	-	58,275.00	-
12/31/2040	-	-	-	-	-	-	-	1,031,050.00
02/01/2041	930,000.00	3.000%	58,275.00	988,275.00	1,000.00	-	989,275.00	-
08/01/2041	-	-	44,325.00	44,325.00	-	-	44,325.00	-
12/31/2041	-	-	-	-	-	-	-	1,033,600.00
02/01/2042	955,000.00	3.000%	44,325.00	999,325.00	1,000.00	-	1,000,325.00	-
08/01/2042	-	-	30,000.00	30,000.00	-	-	30,000.00	-
12/31/2042	-	-	-	-	-	-	-	1,030,325.00
02/01/2043	985,000.00	3.000%	30,000.00	1,015,000.00	1,000.00	-	1,016,000.00	-
08/01/2043	-	-	15,225.00	15,225.00	-	-	15,225.00	-
12/31/2043	-	-	-	-	-	-	-	1,031,225.00
02/01/2044	1,015,000.00	3.000%	15,225.00	1,030,225.00	-	(1,033,625.00)	(3,400.00)	-
12/31/2044	-	-	-	-	-	-	-	(3,400.00)
Total	\$17,845,000.00	-	\$7,934,265.28	\$25,779,265.28	\$24,000.00	(1,033,625.00)	\$24,769,640.28	-

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Northern Kentucky Water Service District

Revenue Bonds, Series 2019

FINAL Sold to Piper Jaffray on 09.10.19 Dated & Delivery 09.26.19

Proof of D/S for Arbitrage Purposes

Part 1 of 2

<u>Date</u>	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
09/26/2019	-	-	-
02/01/2020	535,000.00	207,465.28	742,465.28
08/01/2020	-	290,725.00	290,725.00
02/01/2021	455,000.00	290,725.00	745,725.00
08/01/2021	-	283,900.00	283,900.00
02/01/2022	470,000.00	283,900.00	753,900.00
08/01/2022	-	276,850.00	276,850.00
02/01/2023	485,000.00	276,850.00	761,850.00
08/01/2023	-	267,150.00	267,150.00
02/01/2024	505,000.00	267,150.00	772,150.00
08/01/2024	-	257,050.00	257,050.00
02/01/2025	530,000.00	257,050.00	787,050.00
08/01/2025	-	243,800.00	243,800.00
02/01/2026	560,000.00	243,800.00	803,800.00
08/01/2026	-	229,800.00	229,800.00
02/01/2027	585,000.00	229,800.00	814,800.00
08/01/2027	11,720,000.00	215,175.00	11,935,175.00
02/01/2028	-	30,000.00	30,000.00
08/01/2028	-	30,000.00	30,000.00
02/01/2029	-	30,000.00	30,000.00
08/01/2029	-	30,000.00	30,000.00
02/01/2030	-	30,000.00	30,000.00
08/01/2030	-	30,000.00	30,000.00
02/01/2031	-	30,000.00	30,000.00
08/01/2031	-	30,000.00	30,000.00
02/01/2032	-	30,000.00	30,000.00
08/01/2032	-	30,000.00	30,000.00
02/01/2033	-	30,000.00	30,000.00
08/01/2033	-	30,000.00	30,000.00

SERIES 2019 BONDS FINAL | SINGLE PURPOSE | 9/10/2019 | 12:50 PM



Public Finance

Northern Kentucky Water Service District

Revenue Bonds, Series 2019

FINAL Sold to Piper Jaffray on 09.10.19 Dated & Delivery 09.26.19

Proof of D/S for Arbitrage Purposes

Part 2 of 2

Date	Principal	Interest	Total
02/01/2034	-	30,000.00	30,000.00
08/01/2034	-	30,000.00	30,000.00
02/01/2035	-	30,000.00	30,000.00
08/01/2035	-	30,000.00	30,000.00
02/01/2036	-	30,000.00	30,000.00
08/01/2036	-	30,000.00	30,000.00
02/01/2037	-	30,000.00	30,000.00
08/01/2037	-	30,000.00	30,000.00
02/01/2038	-	30,000.00	30,000.00
08/01/2038	-	30,000.00	30,000.00
02/01/2039	-	30,000.00	30,000.00
08/01/2039	-	30,000.00	30,000.00
02/01/2040	-	30,000.00	30,000.00
08/01/2040	-	30,000.00	30,000.00
02/01/2041	-	30,000.00	30,000.00
08/01/2041	-	30,000.00	30,000.00
02/01/2042	-	30,000.00	30,000.00
08/01/2042	-	30,000.00	30,000.00
02/01/2043	985,000.00	30,000.00	1,015,000.00
08/01/2043	-	15,225.00	15,225.00
02/01/2044	1,015,000.00	15,225.00	1,030,225.00
Total	\$17,845,000.00	\$5,081,640.28	\$22,926,640.28

Northern Kentucky Water Service District

Revenue Bonds, Series 2019

FINAL Sold to Piper Jaffray on 09.10.19 Dated & Delivery 09.26.19

Proof of Bond Yield @ 0.0000000%

Part 1 of 3

Date	Cashflow	PV Factor	Present Value	Cumulative PV
09/26/2019	-	1.0000000x	-	-
02/01/2020	742,465.28	1.0000000x	742,465.28	742,465.28
08/01/2020	290,725.00	1.0000000x	290,725.00	1,033,190.28
02/01/2021	745,725.00	1.0000000x	745,725.00	1,778,915.28
08/01/2021	283,900.00	1.0000000x	283,900.00	2,062,815.28
02/01/2022	753,900.00	1.0000000x	753,900.00	2,816,715.28
08/01/2022	276,850.00	1.0000000x	276,850.00	3,093,565.28
02/01/2023	761,850.00	1.0000000x	761,850.00	3,855,415.28
08/01/2023	267,150.00	1.0000000x	267,150.00	4,122,565.28
02/01/2024	772,150.00	1.0000000x	772,150.00	4,894,715.28
08/01/2024	257,050.00	1.0000000x	257,050.00	5,151,765.28
02/01/2025	787,050.00	1.0000000x	787,050.00	5,938,815.28
08/01/2025	243,800.00	1.0000000x	243,800.00	6,182,615.28
02/01/2026	803,800.00	1.0000000x	803,800.00	6,986,415.28
08/01/2026	229,800.00	1.0000000x	229,800.00	7,216,215.28
02/01/2027	814,800.00	1.0000000x	814,800.00	8,031,015.28
08/01/2027	11,935,175.00	1.0000000x	11,935,175.00	19,966,190.28
02/01/2028	30,000.00	1.0000000x	30,000.00	19,996,190.28
08/01/2028	30,000.00	1.0000000x	30,000.00	20,026,190.28
02/01/2029	30,000.00	1.0000000x	30,000.00	20,056,190.28
08/01/2029	30,000.00	1.0000000x	30,000.00	20,086,190.28
02/01/2030	30,000.00	1.0000000x	30,000.00	20,116,190.28
08/01/2030	30,000.00	1.0000000x	30,000.00	20,146,190.28
02/01/2031	30,000.00	1.0000000x	30,000.00	20,176,190.28
08/01/2031	30,000.00	1.0000000x	30,000.00	20,206,190.28
02/01/2032	30,000.00	1.0000000x	30,000.00	20,236,190.28
08/01/2032	30,000.00	1.0000000x	30,000.00	20,266,190.28
02/01/2033	30,000.00	1.0000000x	30,000.00	20,296,190.28

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Public Finance

Northern Kentucky Water Service District

Revenue Bonds, Series 2019

FINAL Sold to Piper Jaffray on 09.10.19 Dated & Delivery 09.26.19

Proof of Bond Yield @ 0.0000000%

Part 2 of 3

Date	Cashflow	PV Factor	Present Value	Cumulative PV
08/01/2033	30,000.00	1.0000000x	30,000.00	20,326,190.28
02/01/2034	30,000.00	1.0000000x	30,000.00	20,356,190.28
08/01/2034	30,000.00	1.0000000x	30,000.00	20,386,190.28
02/01/2035	30,000.00	1.0000000x	30,000.00	20,416,190.28
08/01/2035	30,000.00	1.0000000x	30,000.00	20,446,190.28
02/01/2036	30,000.00	1.0000000x	30,000.00	20,476,190.28
08/01/2036	30,000.00	1.0000000x	30,000.00	20,506,190.28
02/01/2037	30,000.00	1.0000000x	30,000.00	20,536,190.28
08/01/2037	30,000.00	1.0000000x	30,000.00	20,566,190.28
02/01/2038	30,000.00	1.0000000x	30,000.00	20,596,190.28
08/01/2038	30,000.00	1.0000000x	30,000.00	20,626,190.28
02/01/2039	30,000.00	1.0000000x	30,000.00	20,656,190.28
08/01/2039	30,000.00	1.0000000x	30,000.00	20,686,190.28
02/01/2040	30,000.00	1.0000000x	30,000.00	20,716,190.28
08/01/2040	30,000.00	1.0000000x	30,000.00	20,746,190.28
02/01/2041	30,000.00	1.0000000x	30,000.00	20,776,190.28
08/01/2041	30,000.00	1.0000000x	30,000.00	20,806,190.28
02/01/2042	30,000.00	1.0000000x	30,000.00	20,836,190.28
08/01/2042	30,000.00	1.0000000x	30,000.00	20,866,190.28
02/01/2043	1,015,000.00	1.0000000x	1,015,000.00	21,881,190.28
08/01/2043	15,225.00	1.0000000x	15,225.00	21,896,415.28
02/01/2044	1,030,225.00	1.0000000x	1,030,225.00	22,926,640.28
Total	\$22,926,640.28	-	\$22,926,640.28	-

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Public Finance

Northern Kentucky Water Service District

Revenue Bonds, Series 2019

FINAL Sold to Piper Jaffray on 09.10.19 Dated & Delivery 09.26.19

Proof of Bond Yield @ 0.0000000%

Part 3 of 3

Derivation Of Target Amount

Par Amount of Bonds	\$17,845,000.00
Reoffering Premium or (Discount)	1,253,998.75
Original Issue Proceeds	\$19,098,998.75

Northern Kentucky Water Service District

Revenue Bonds, Series 2019

FINAL Sold to Piper Jaffray on 09.10.19 Dated & Delivery 09.26.19

Derivation Of Form 8038 Yield Statistics

Part 1 of 2

<u>Maturity</u>	<u>Issuance Value</u>	<u>Coupon</u>	<u>Price</u>	<u>Issuance Price</u>	<u>Exponent</u>	<u>Bond Years</u>
09/26/2019	-	-	-	-	-	-
02/01/2020	535,000.00	3.000%	100.637%	538,407.95	0.3472222x	186,947.20
02/01/2021	455,000.00	3.000%	102.451%	466,152.05	1.3472222x	628,010.40
02/01/2022	470,000.00	3.000%	104.200%	489,740.00	2.3472222x	1,149,528.61
02/01/2023	485,000.00	4.000%	109.158%	529,416.30	3.3472222x	1,772,074.00
02/01/2024	505,000.00	4.000%	111.689%	564,029.45	4.3472222x	2,451,961.36
02/01/2025	530,000.00	5.000%	119.165%	631,574.50	5.3472222x	3,377,169.20
02/01/2026	560,000.00	5.000%	122.333%	685,064.80	6.3472222x	4,348,258.52
02/01/2027	585,000.00	5.000%	125.208%	732,466.80	7.3472222x	5,381,596.35
02/01/2028	615,000.00	5.000%	126.239%	776,369.85	8.3472222x	6,480,531.66
02/01/2029	645,000.00	4.000%	117.228%	756,120.60	9.3472222x	7,067,627.28
02/01/2030	665,000.00	3.000%	108.286%	720,101.90	10.3472222x	7,451,054.38
02/01/2031	690,000.00	3.000%	107.453%	741,425.70	11.3472222x	8,413,122.18
02/01/2032	710,000.00	3.000%	106.777%	758,116.70	12.3472222x	9,360,635.37
02/01/2033	730,000.00	3.000%	105.735%	771,865.50	13.3472222x	10,302,260.35
02/01/2034	755,000.00	3.000%	105.071%	793,286.05	14.3472222x	11,381,451.25
02/01/2035	775,000.00	3.000%	104.412%	809,193.00	15.3472222x	12,418,864.79
02/01/2036	800,000.00	3.000%	104.048%	832,384.00	16.3472222x	13,607,166.22
02/01/2037	825,000.00	3.000%	103.468%	853,611.00	17.3472222x	14,807,779.71
02/01/2038	850,000.00	3.000%	103.180%	877,030.00	18.3472222x	16,091,064.31
02/01/2039	875,000.00	3.000%	102.892%	900,305.00	19.3472222x	17,418,400.90
02/01/2040	900,000.00	3.000%	102.248%	920,232.00	20.3472222x	18,724,165.00
02/01/2041	930,000.00	3.000%	102.035%	948,925.50	21.3472222x	20,256,923.52
02/01/2042	955,000.00	3.000%	101.822%	972,400.10	22.3472222x	21,730,441.12
02/01/2043	985,000.00	3.000%	101.539%	1,000,159.15	23.3472222x	23,350,937.93
02/01/2044	1,015,000.00	3.000%	101.539%	1,030,620.85	24.3472222x	25,092,754.86
Total	\$17,845,000.00	-	-	\$19,098,998.75	-	\$263,250,726.49

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Northern Kentucky Water Service District

Revenue Bonds, Series 2019

FINAL Sold to Piper Jaffray on 09.10.19 Dated & Delivery 09.26.19

Derivation Of Form 8038 Yield Statistics

Part 2 of 2

Description of Bonds

Final Maturity Date	2/01/2044
Issue price of entire issue	19,098,998.75
Stated Redemption at Maturity	17,845,000.00
Weighted Average Maturity = Bond Years/Issue Price	13.783 Years
Bond Yield for Arbitrage Purposes	-

Uses of Proceeds of Issue

Proceeds used for accrued interest	-
Proceeds used for bond issuance costs (including underwriters' discount)	236,150.28
Proceeds used for credit enhancement	-
Proceeds allocated to reasonably required reserve or replacement fund	-

Description of Refunded Bonds

Proceeds used to currently refund prior issue	17,825,002.23
Proceeds used to advance refund prior issue	-
Remaining weighted average maturity of the bonds to be currently refunded	0.514 Years
Remaining weighted average maturity of the bonds to be advance refunded	-
Last date on which the refunded bonds will be called	10/01/2019

SERIES 2019 BONDS FINAL | SINGLE PURPOSE | 9/10/2019 | 12:50 PM



Public Finance

Northern Kentucky Water Service District

Revenue Bonds, Series 2019

FINAL Sold to Piper Jaffray on 09.10.19 Dated & Delivery 09.26.19

Form 8038 Refunded Bonds

Date	Type of Bond	Coupon	FV Principal	Price	Issue Price
SERIES 2019 BAN FINAL REVISED					
04/01/2020	Serial Coupon	2.290%	17,621,000.00	100.000%	17,621,000.00
Subtotal		-	\$17,621,000.00	-	\$17,621,000.00
Total		-	\$17,621,000.00	-	\$17,621,000.00

Northern Kentucky Water Service District

Revenue Bonds, Series 2019

FINAL Sold to Piper Jaffray on 09.10.19 Dated & Delivery 09.26.19

Proof of Reserve Fund Requirement

Part 1 of 2

Date	Principal	Interest	TOTAL P+I
12/31/2019	-	-	-
12/31/2020	535,000.00	498,190.28	1,033,190.28
12/31/2021	455,000.00	574,625.00	1,029,625.00
12/31/2022	470,000.00	560,750.00	1,030,750.00
12/31/2023	485,000.00	544,000.00	1,029,000.00
12/31/2024	505,000.00	524,200.00	1,029,200.00
12/31/2025	530,000.00	500,850.00	1,030,850.00
12/31/2026	560,000.00	473,600.00	1,033,600.00
12/31/2027	585,000.00	444,975.00	1,029,975.00
12/31/2028	615,000.00	414,975.00	1,029,975.00
12/31/2029	645,000.00	386,700.00	1,031,700.00
12/31/2030	665,000.00	363,825.00	1,028,825.00
12/31/2031	690,000.00	343,500.00	1,033,500.00
12/31/2032	710,000.00	322,500.00	1,032,500.00
12/31/2033	730,000.00	300,900.00	1,030,900.00
12/31/2034	755,000.00	278,625.00	1,033,625.00
12/31/2035	775,000.00	255,675.00	1,030,675.00
12/31/2036	800,000.00	232,050.00	1,032,050.00
12/31/2037	825,000.00	207,675.00	1,032,675.00
12/31/2038	850,000.00	182,550.00	1,032,550.00
12/31/2039	875,000.00	156,675.00	1,031,675.00
12/31/2040	900,000.00	130,050.00	1,030,050.00
12/31/2041	930,000.00	102,600.00	1,032,600.00
12/31/2042	955,000.00	74,325.00	1,029,325.00
12/31/2043	985,000.00	45,225.00	1,030,225.00
12/31/2044	1,015,000.00	15,225.00	1,030,225.00
Total	\$17,845,000.00	\$7,934,265.28	\$25,779,265.28

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Public Finance

Northern Kentucky Water Service District

Revenue Bonds, Series 2019

FINAL Sold to Piper Jaffray on 09.10.19 Dated & Delivery 09.26.19

Proof of Reserve Fund Requirement

Part 2 of 2

PROOF OF RESERVE FUND

MAXIMUM PERIODIC DEBT SERVICE

100 % of the Maximum Periodic Debt Service 1,033,625.00

AVERAGE PERIODIC DEBT SERVICE

Total P+I 25,779,265.28

Bond Years (Delivery Date) 24.35

125 % of the Average Periodic Debt Service 1,323,521.89

PERCENT OF PAR

10 % of Par 1,784,500.00

RESERVE REQUIREMENT

Computed Requirement 1,033,625.00

Proof's Requirement 1,033,625.00

Northern Kentucky Water Service District

Revenue Bond Anticipation Notes, Series 2019

Sold to Regions on 03.01.19 Dated & Delivery 03.29.19

Debt Service To Maturity And To Call

Date	Refunded Bonds	Refunded Interest	D/S To Call	Principal	Coupon	Interest	Refunded D/S
09/26/2019	-	-	-	-	-	-	-
10/01/2019	17,621,000.00	204,002.23	17,825,002.23	-	-	204,002.23	204,002.23
04/01/2020	-	-	-	17,621,000.00	2.290%	201,760.45	17,822,760.45
Total	\$17,621,000.00	\$204,002.23	\$17,825,002.23	\$17,621,000.00	-	\$405,762.68	\$18,026,762.68

Yield Statistics

Base date for Avg. Life & Avg. Coupon Calculation	9/26/2019
Average Life	0.514 Years
Average Coupon	2.2900000%
Weighted Average Maturity (Par Basis)	0.514 Years
Weighted Average Maturity (Original Price Basis)	0.514 Years

Refunding Bond Information

Refunding Dated Date	9/26/2019
Refunding Delivery Date	9/26/2019

Debt Capsule Summary Report

Bond Series	Original Par Amount	Amount Outstanding	Interest Rate Range	Final Maturity	Call Information
2000 USDA	\$2,287,000	\$1,692,000	5.000%	05/01/39	N/A
2008KIA F08-07	\$4,000,000	\$2,786,450	1.000%	12/01/32	N/A
2010KIA F09-02	\$24,000,000	\$17,773,724	2.000%	06/01/33	N/A
2011	\$30,830,000	\$22,435,000	3.000 - 5.000%	02/01/35	Feb 2021 @ 100%
2012-Ref	\$54,840,000	\$37,825,000	4.000 - 5.000%	02/01/28	Feb 2022 @ 100%
2013	\$26,400,000	\$22,440,000	2.000 - 5.000%	02/01/38	Feb 2023 @ 100%
2013-REF	\$24,120,000	\$14,135,000	5.000 - 4.000%	02/01/28	Aug 2023 @ 100%
2014-REF	\$15,805,000	\$6,155,000	3.125 - 5.000%	02/01/29	Aug 2023 @ 100%
2016-REF	\$41,905,000	\$35,535,000	5.000 - 3.000%	02/01/31	Feb 2026 @ 100%
USDA Loan 91-03	\$1,733,000	\$1,733,000	2.750%	02/01/57	N/A
KIA Fund B 15-003	\$1,392,195	\$1,296,292	0.750%	12/01/37	N/A
KIA Loan F15-011	\$3,535,094	\$3,386,058	1.750%	06/01/38	N/A
KIA Loan F14-015	\$3,545,910	\$3,396,417	1.750%	06/01/38	N/A
Series 2019 Bonds	\$17,845,000	\$17,845,000	3.000 - 5.000%	02/01/44	Feb 2027 @ 100%
Totals:	\$252,238,199	\$188,433,940			
<i><u>Proposed Debt*</u></i>					
KIA Loan F13-012	\$8,000,000	\$4,523,000	2.000%		
KIA Loan F16-027	\$2,850,000	\$0	2.000%		
Total Proposed:	\$10,850,000	\$4,523,000	---	---	---
Total Existing + Proposed	\$263,088,199	\$192,956,940			

*Assumes KIA Loans funded as of 06/01/19

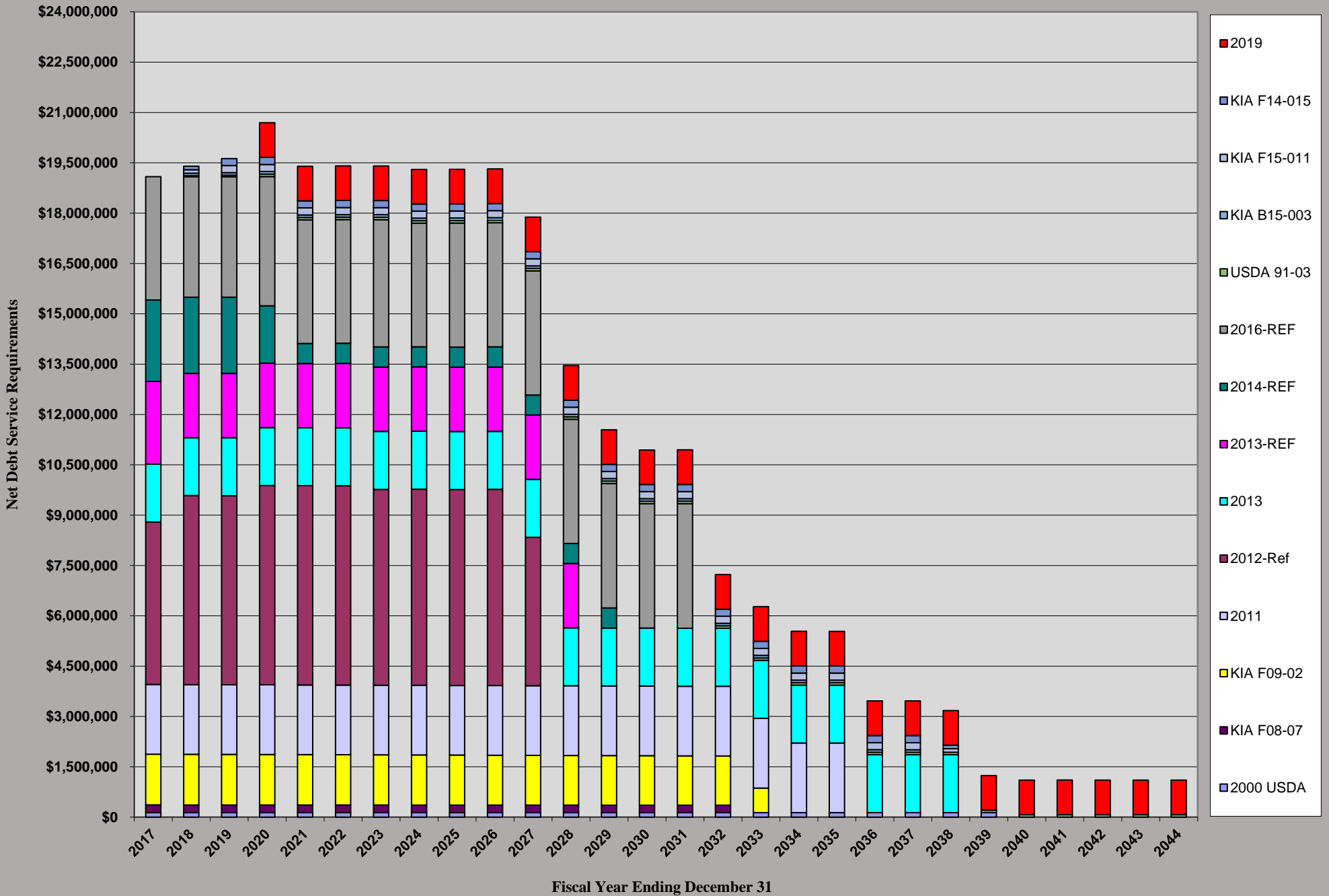
*KIA Loans outstanding balance TBD

Gross Debt Service Structure Report

FY Ending Dec 31st	Series 2000 USDA Loan	KIA F08-07 Loan	KIA F09-02 Loan	Series 2011 Bonds	Series 2012-Ref Bonds	Series 2013 Bonds	Series 2013-REF Bonds	Series 2014-REF Bonds	Series 2016-REF Bonds	USDA 91-03 Loan	KIA B15-003 Loan	KIA F15-011 Loan	KIA F14-015 Loan	Series 2019 Bonds	Debt Service
2017	\$134,450	\$229,203	\$1,512,357	\$2,078,163	\$4,840,750	\$1,728,400	\$2,463,825	\$2,425,638	\$3,673,831	\$0	\$0	\$0	\$0	\$0	\$19,086,616
2018	\$134,200	\$228,729	\$1,509,699	\$2,073,988	\$5,635,625	\$1,724,725	\$1,918,450	\$2,270,138	\$3,590,400	\$30,619	\$73,364	\$104,439	\$104,241	\$0	\$19,398,616
2019	\$134,825	\$228,251	\$1,506,988	\$2,073,988	\$5,632,500	\$1,728,025	\$1,918,450	\$2,273,638	\$3,587,525	\$47,658	\$75,174	\$210,252	\$210,895	\$0	\$19,628,167
2020	\$134,325	\$227,767	\$1,504,222	\$2,077,663	\$5,937,500	\$1,726,150	\$1,920,325	\$1,711,513	\$3,852,900	\$73,793	\$75,174	\$210,252	\$210,895	\$1,033,190	\$20,695,669
2021	\$134,700	\$227,279	\$1,501,400	\$2,074,663	\$5,939,625	\$1,727,400	\$1,914,075	\$597,888	\$3,680,275	\$73,558	\$75,174	\$210,252	\$210,895	\$1,029,625	\$19,396,808
2022	\$133,950	\$226,786	\$1,498,522	\$2,074,963	\$5,940,750	\$1,726,650	\$1,919,450	\$600,263	\$3,685,900	\$73,801	\$75,174	\$210,252	\$210,895	\$1,030,750	\$19,408,106
2023	\$134,075	\$226,288	\$1,495,585	\$2,073,463	\$5,838,000	\$1,728,775	\$1,916,200	\$601,363	\$3,792,525	\$73,524	\$75,174	\$210,252	\$210,895	\$1,029,000	\$19,405,119
2024	\$134,050	\$225,785	\$1,492,590	\$2,075,063	\$5,845,750	\$1,728,650	\$1,917,300	\$596,663	\$3,687,525	\$73,727	\$75,174	\$210,252	\$210,895	\$1,029,200	\$19,302,624
2025	\$133,875	\$225,277	\$1,489,535	\$2,074,663	\$5,841,000	\$1,726,275	\$1,918,200	\$598,938	\$3,698,025	\$73,902	\$75,174	\$210,252	\$210,895	\$1,030,850	\$19,306,860
2026	\$133,550	\$224,764	\$1,486,418	\$2,076,325	\$5,848,125	\$1,726,525	\$1,916,500	\$602,838	\$3,701,025	\$73,556	\$75,174	\$210,252	\$210,895	\$1,033,600	\$19,319,547
2027	\$134,050	\$224,246	\$1,483,238	\$2,074,044	\$4,422,875	\$1,729,625	\$1,918,000	\$593,788	\$3,701,400	\$73,690	\$75,174	\$210,252	\$210,895	\$1,029,975	\$17,881,252
2028	\$133,375	\$223,723	\$1,479,995	\$2,078,375		\$1,726,025	\$1,916,750	\$596,988	\$3,702,650	\$73,796	\$75,174	\$210,252	\$210,895	\$1,029,975	\$13,457,973
2029	\$133,525	\$223,194	\$1,476,686	\$2,075,050		\$1,725,725		\$599,219	\$3,709,650	\$73,382	\$75,174	\$210,252	\$210,895	\$1,031,700	\$11,544,452
2030	\$133,475	\$222,660	\$1,473,311	\$2,076,975		\$1,728,525			\$3,707,975	\$73,447	\$75,174	\$210,252	\$210,895	\$1,028,825	\$10,941,515
2031	\$133,225	\$222,121	\$1,469,868	\$2,073,850		\$1,728,541			\$3,714,900	\$73,484	\$75,174	\$210,252	\$210,895	\$1,033,500	\$10,945,811
2032	\$133,750	\$221,576	\$1,466,356	\$2,077,875		\$1,728,181				\$73,494	\$75,174	\$210,252	\$210,895	\$1,032,500	\$7,230,054
2033	\$133,050		\$731,839	\$2,078,375		\$1,727,881				\$73,477	\$75,174	\$210,252	\$210,895	\$1,030,900	\$6,271,844
2034	\$134,100			\$2,074,375		\$1,726,669				\$73,432	\$75,174	\$210,252	\$210,895	\$1,033,625	\$5,538,522
2035	\$133,875			\$2,075,625		\$1,725,550				\$73,359	\$75,174	\$210,252	\$210,895	\$1,030,675	\$5,535,406
2036	\$133,400					\$1,727,747				\$73,753	\$75,174	\$210,252	\$210,895	\$1,032,050	\$3,463,271
2037	\$133,650					\$1,726,250				\$73,611	\$75,174	\$210,252	\$210,895	\$1,032,675	\$3,462,507
2038	\$133,600					\$1,725,913				\$73,443		\$105,126	\$105,448	\$1,032,550	\$3,176,078
2039	\$133,250									\$73,246				\$1,031,675	\$1,238,171
2040										\$73,516				\$1,030,050	\$1,103,566
2041										\$73,251				\$1,032,600	\$1,105,851
2042										\$73,451				\$1,029,325	\$1,102,776
2043										\$73,611				\$1,030,225	\$1,103,836
2044										\$73,236				\$1,030,225	\$1,103,461
2045										\$73,326					\$73,326
2046										\$73,376					\$73,376
2047										\$73,384					\$73,384
2048										\$73,351					\$73,351
2049										\$73,276					\$73,276
2050										\$73,161					\$73,161
2051										\$73,004					\$73,004
2052										\$73,299					\$73,299
2053										\$73,046					\$73,046
2054										\$73,244					\$73,244
2055										\$73,388					\$73,388
2056										\$72,984					\$72,984
2057										\$74,511					\$74,511
Totals:	\$3,078,325	\$3,607,650	\$24,578,610	\$39,437,481	\$61,722,500	\$37,998,206	\$23,557,525	\$14,068,869	\$55,486,506	\$2,870,164	\$1,501,677	\$4,204,350	\$4,216,696	\$25,779,265	\$302,107,825

Note: KIA Loan debt service does not include servicing fee

Northern Kentucky Water District Gross Debt Service Structure Graph Through Fiscal 2044



Gross Debt Service Structure Report - Senior Debt Only

FY Ending Dec 31st	Series 2000 USDA Loan	Series 2011 Bonds	Series 2012-Ref Bonds	Series 2013 Bonds	Series 2013-REF Bonds	Series 2014-REF Bonds	Series 2016-REF Bonds	USDA 91-03 Loan	Series 2019 Bonds	Debt Service
2017	\$134,450	\$2,078,163	\$4,840,750	\$1,728,400	\$2,463,825	\$2,425,638	\$3,673,831	\$0		\$17,345,056
2018	\$134,200	\$2,073,988	\$5,635,625	\$1,724,725	\$1,918,450	\$2,270,138	\$3,590,400	\$30,619		\$17,378,144
2019	\$134,825	\$2,073,988	\$5,632,500	\$1,728,025	\$1,918,450	\$2,273,638	\$3,587,525	\$47,658		\$17,396,608
2020	\$134,325	\$2,077,663	\$5,937,500	\$1,726,150	\$1,920,325	\$1,711,513	\$3,852,900	\$73,793	\$1,033,190	\$18,467,358
2021	\$134,700	\$2,074,663	\$5,939,625	\$1,727,400	\$1,914,075	\$597,888	\$3,680,275	\$73,558	\$1,029,625	\$17,171,808
2022	\$133,950	\$2,074,963	\$5,940,750	\$1,726,650	\$1,919,450	\$600,263	\$3,685,900	\$73,801	\$1,030,750	\$17,186,476
2023	\$134,075	\$2,073,463	\$5,838,000	\$1,728,775	\$1,916,200	\$601,363	\$3,792,525	\$73,524	\$1,029,000	\$17,186,924
2024	\$134,050	\$2,075,063	\$5,845,750	\$1,728,650	\$1,917,300	\$596,663	\$3,687,525	\$73,727	\$1,029,200	\$17,087,927
2025	\$133,875	\$2,074,663	\$5,841,000	\$1,726,275	\$1,918,200	\$598,938	\$3,698,025	\$73,902	\$1,030,850	\$17,095,727
2026	\$133,550	\$2,076,325	\$5,848,125	\$1,726,525	\$1,916,500	\$602,838	\$3,701,025	\$73,556	\$1,033,600	\$17,112,044
2027	\$134,050	\$2,074,044	\$4,422,875	\$1,729,625	\$1,918,000	\$593,788	\$3,701,400	\$73,690	\$1,029,975	\$15,677,446
2028	\$133,375	\$2,078,375		\$1,726,025	\$1,916,750	\$596,988	\$3,702,650	\$73,796	\$1,029,975	\$11,257,934
2029	\$133,525	\$2,075,050		\$1,725,725		\$599,219	\$3,709,650	\$73,382	\$1,031,700	\$9,348,251
2030	\$133,475	\$2,076,975		\$1,728,525			\$3,707,975	\$73,447	\$1,028,825	\$8,749,222
2031	\$133,225	\$2,073,850		\$1,728,541			\$3,714,900	\$73,484	\$1,033,500	\$8,757,500
2032	\$133,750	\$2,077,875		\$1,728,181				\$73,494	\$1,032,500	\$5,045,801
2033	\$133,050	\$2,078,375		\$1,727,881				\$73,477	\$1,030,900	\$5,043,683
2034	\$134,100	\$2,074,375		\$1,726,669				\$73,432	\$1,033,625	\$5,042,201
2035	\$133,875	\$2,075,625		\$1,725,550				\$73,359	\$1,030,675	\$5,039,084
2036	\$133,400			\$1,727,747				\$73,753	\$1,032,050	\$2,966,949
2037	\$133,650			\$1,726,250				\$73,611	\$1,032,675	\$2,966,186
2038	\$133,600							\$73,443	\$1,032,550	\$1,239,593
2039	\$133,250							\$73,246	\$1,031,675	\$1,238,171
2040								\$73,516	\$1,030,050	\$1,103,566
2041								\$73,251	\$1,032,600	\$1,105,851
2042								\$73,451	\$1,029,325	\$1,102,776
2043								\$73,611	\$1,030,225	\$1,103,836
2044								\$73,236	\$1,030,225	\$1,103,461
2045								\$73,326		\$73,326
2046								\$73,376		\$73,376
2047								\$73,384		\$73,384
2048								\$73,351		\$73,351
2049								\$73,276		\$73,276
2050								\$73,161		\$73,161
2051								\$73,004		\$73,004
2052								\$73,299		\$73,299
2053								\$73,046		\$73,046
2054								\$73,244		\$73,244
2055								\$73,388		\$73,388
2056								\$72,984		\$72,984
2057								\$74,511		\$74,511
Totals:	\$3,078,325	\$39,437,481	\$61,722,500	\$36,272,294	\$23,557,525	\$14,068,869	\$55,486,506	\$2,870,164	\$25,779,265	\$262,272,929

Principal Reduction Report -- Senior Debt Only

FY Ending Dec 31st	Series 2000 USDA Loan	Series 2011 Bonds	Series 2012-Ref Bonds	Series 2013 Bonds	Series 2013-REF Bonds	Series 2014-REF Bonds	Series 2016-REF Bonds	USDA 91-03 Loan	Series 2019 Bonds	Outstanding Principal	Debt Retirement (10 Years)
2017	\$44,000	\$960,000	\$2,530,000	\$665,000	\$1,645,000	\$1,940,000	\$2,455,000	\$0	\$0	\$181,650,000	65.68%
2018	\$46,000	\$985,000	\$3,475,000	\$685,000	\$1,170,000	\$1,880,000	\$1,910,000	\$0	\$0	\$171,499,000	68.92%
2019	\$49,000	\$1,015,000	\$3,650,000	\$720,000	\$1,230,000	\$1,980,000	\$2,005,000	\$0	\$0	\$160,850,000	71.49%
2020	\$51,000	\$1,055,000	\$4,150,000	\$755,000	\$1,295,000	\$1,505,000	\$2,380,000	\$26,500	\$535,000	\$149,097,500	74.02%
2021	\$54,000	\$1,095,000	\$4,365,000	\$795,000	\$1,355,000	\$440,000	\$2,325,000	\$27,000	\$455,000	\$138,186,500	77.32%
2022	\$56,000	\$1,140,000	\$4,590,000	\$835,000	\$1,430,000	\$465,000	\$2,450,000	\$28,000	\$470,000	\$126,722,500	78.34%
2023	\$59,000	\$1,185,000	\$4,720,000	\$880,000	\$1,500,000	\$485,000	\$2,685,000	\$28,500	\$485,000	\$114,695,000	79.61%
2024	\$62,000	\$1,235,000	\$4,970,000	\$925,000	\$1,570,000	\$495,000	\$2,715,000	\$29,500	\$505,000	\$102,188,500	81.28%
2025	\$65,000	\$1,285,000	\$5,220,000	\$970,000	\$1,635,000	\$515,000	\$2,865,000	\$30,500	\$530,000	\$89,073,000	83.50%
2026	\$68,000	\$1,340,000	\$5,495,000	\$1,020,000	\$1,700,000	\$540,000	\$3,015,000	\$31,000	\$560,000	\$75,304,000	83.82%
2027	\$72,000	\$1,395,000	\$4,315,000	\$1,070,000	\$1,780,000	\$550,000	\$3,170,000	\$32,000	\$585,000	\$62,335,000	84.63%
2028	\$75,000	\$1,460,000		\$1,110,000	\$1,870,000	\$570,000	\$3,300,000	\$33,000	\$615,000	\$53,302,000	87.10%
2029	\$79,000	\$1,520,000		\$1,155,000		\$590,000	\$3,425,000	\$33,500	\$645,000	\$45,854,500	87.29%
2030	\$83,000	\$1,590,000		\$1,205,000			\$3,545,000	\$34,500	\$665,000	\$38,732,000	87.40%
2031	\$87,000	\$1,660,000		\$1,255,000			\$3,660,000	\$35,500	\$690,000	\$31,344,500	87.54%
2032	\$92,000	\$1,745,000		\$1,310,000				\$36,500	\$710,000	\$27,451,000	89.43%
2033	\$96,000	\$1,835,000		\$1,370,000				\$37,500	\$730,000	\$23,382,500	92.02%
2034	\$102,000	\$1,925,000		\$1,430,000				\$38,500	\$755,000	\$19,132,000	95.81%
2035	\$107,000	\$2,025,000		\$1,490,000				\$39,500	\$775,000	\$14,695,500	94.90%
2036	\$112,000			\$1,555,000				\$41,000	\$800,000	\$12,187,500	94.29%
2037	\$118,000			\$1,620,000				\$42,000	\$825,000	\$9,582,500	93.31%
2038	\$124,000			\$1,690,000				\$43,000	\$850,000	\$6,875,500	91.50%
2039	\$130,000							\$44,000	\$875,000	\$5,826,500	90.96%
2040								\$45,500	\$900,000	\$4,881,000	90.43%
2041								\$46,500	\$930,000	\$3,904,500	89.60%
2042								\$48,000	\$955,000	\$2,901,500	88.18%
2043								\$49,500	\$985,000	\$1,867,000	85.08%
2044								\$50,500	\$1,015,000	\$801,500	73.55%
2045								\$52,000		\$749,500	80.85%
2046								\$53,500		\$696,000	89.44%
2047								\$55,000		\$641,000	100.00%
2048								\$56,500		\$584,500	
2049								\$58,000		\$526,500	
2050								\$59,500		\$467,000	
2051								\$61,000		\$406,000	
2052								\$63,000		\$343,000	
2053								\$64,500		\$278,500	
2054								\$66,500		\$212,000	
2055								\$68,500		\$143,500	
2056								\$70,000		\$73,500	
2057								\$73,500		\$0	
Totals:	\$1,831,000	\$26,450,000	\$47,480,000	\$24,510,000	\$18,180,000	\$11,955,000	\$41,905,000	\$1,733,000	\$17,845,000		---