



Great Lakes Water Authority

Presentation to the Audit Committee Summary of 2020 Financing Results

July 22, 2020



Executive Summary

- Successfully refinanced \$366 million of Water System Bonds and issued \$85.6 million of new money water bonds for the Local Water System
 - Water system gross cashflow savings of \$103.1 million (\$66.5 million of present value savings, or 18.2%)
 - New money achieved a very favorable yield of 2.98% for 30-year debt and generating nearly \$100 million for Local System capital improvement
- In addition, successfully refinanced \$657 million of outstanding Sewer System Bonds
 - Sewer system net cashflow savings of \$221 million (\$123 million of present value savings, or 18.7%)
- Rating upgrades were achieved from all three rating agencies continuing the history of rating success since the stand up
 - Senior lien ratings of AA-/A1/A+ for Water and for Sewer
 - Second lien ratings of A+/A2/A for Water and for Sewer
- Extensive outreach to investors, with an electronic roadshow, investor meetings, and one on one investor calls
 - Over 80 investors reached in the outreach process
 - **Water System:** Nearly 50 different institutional investors placed orders totaling \$614 million for the tax-exempt Series 2020A&B Bonds and more than 30 different institutional investors placed orders totaling over \$1.0 billion for the taxable Series 2020C Bonds
 - **Sewer System:** Nearly 90 different institutional investors placed orders over \$4.3 billion for the \$687.5 million in bonds offered allowing for a significant tightening of spreads
 - Included multiple international investors based in Canada, Britain, Norway and Taiwan and represents the first international investor participation in a GLWA bond sale
- Achieved all necessary bondholder consents on the DSRF springing amendment for the potential future elimination of the Bond Reserve Funds once GLWA attains two AA category ratings (S&P has been achieved)
- Since 2014, the GLWA management team, either through GLWA or the predecessor debt obligor DWSD, has executed five refunding transactions (for the water and sewer system combined) that reached the **milestone of \$1 billion in debt service savings**

Financing Timeline

Date/Week of	Event
December 23	<ul style="list-style-type: none"> Kick Off Call
Week of March 2	<ul style="list-style-type: none"> Rating Meetings with Moody's, S&P and Fitch in NYC
March 10	<ul style="list-style-type: none"> POS and Investor Roadshow Posted
April 27	<ul style="list-style-type: none"> Update Calls with Moody's, S&P and Fitch Water System POS Supplement Posted
April 28-29	<ul style="list-style-type: none"> One-on-One Calls with Investors
April 30	<ul style="list-style-type: none"> Water System Pricing
May 12	<ul style="list-style-type: none"> Water System Closing
June 1	<ul style="list-style-type: none"> Update Calls with Moody's, S&P and Fitch Sewer System POS Supplement Posted
June 2 – June 3	<ul style="list-style-type: none"> One-on-One Calls with Investors
June 4	<ul style="list-style-type: none"> Sewer System Pricing
June 16	<ul style="list-style-type: none"> Sewer System Closing

Goals Set . . . Goals Met

The goals for the Series 2020 financings were achieved and provide the Authority with a strong base with which to weather the current COVID-19 crisis and achieve future financial goals.



Secure Rating Upgrades



Highlight Strong Financial Results and Expand the Investor Base for GLWA credits



Lock-in Favorable Interest Rates and Substantial Savings



Enhance GLWA's Financial Flexibility

Bond Rating Upgrades Attained Since GLWA's Stand Up

As part of the financing process, the Great Lakes Water Authority team sought and received rating improvements from all three rating agencies continuing a history of rating success since the stand up of the Authority.

Sewer System

S&P

Senior Lien **A-**
(Stable) 3 notch improvement **AA-**
(Stable)

Second Lien **BBB+**
(Stable) 3 notch improvement **A+**
(Stable)

Moody's

Senior Lien **Baa3**
(Positive) 5 notch improvement **A1**
(Stable)

Second Lien **Ba1**
(Positive) 5 notch improvement **A2**
(Stable)

Fitch

Senior Lien **BBB**
(Stable) 4 notch improvement **A+**
(Stable)

Second Lien **BBB-**
(Stable) 4 notch improvement **A**
(Stable)

Water System

S&P

Senior Lien **A-**
(Stable) 3 notch improvement **AA-**
(Stable)

Second Lien **BBB+**
(Stable) 3 notch improvement **A+**
(Stable)

Moody's

Senior Lien **Baa3**
(Positive) 5 notch improvement **A1**
(Stable)

Second Lien **Ba1**
(Positive) 5 notch improvement **A2**
(Stable)

Fitch

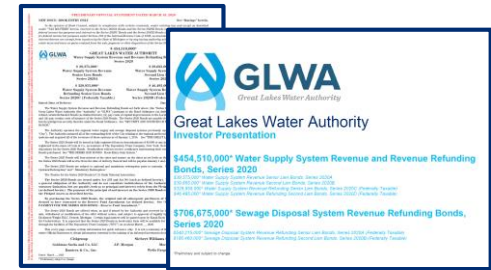
Senior Lien **BBB**
(Stable) 4 notch improvement **A+**
(Stable)

Second Lien **BBB-**
(Stable) 4 notch improvement **A**
(Stable)

Although a traditional in person roadshow as not possible in light of the COVID-19 crisis, Citi and Siebert utilized an internet roadshow presentation and one-on-one investor calls to educate investors and explain the transactions.

Marketing Outreach

1. Preliminary Official Statement Posted (March 10th)
2. Internet Roadshow (March 10th – June 4th)
 - 84 distinct investors viewed the electronic roadshow
3. Preliminary Official Statement Supplement Posted (April 27th for Water, June 1st for Sewer)
 - Provided additional information to potential investors with respect to the impact of COVID-19 on the Authority's operations and financial performance
4. One-on-One Calls with Investors (March 10th – April 30th for Water, June 2nd – June 3rd for Sewer)
 - Multiple individual one-on-one calls with key investors to address their questions ahead of pricing



Water System Results

- Over \$617 million of orders were received for the tax-exempt Series 2020A&B Bonds and \$1.0 billion of orders for the taxable Series 2020C Bonds
- 48 distinct institutional investors placed orders on the Series 2020A&B Bonds and 31 distinct institutional investors placed orders on the taxable Series 2020C Bonds
 - Existing holders added to positions
 - New investors came in to buy the Water System's bonds for the 1st time
 - Variety of account types participated including asset managers, mutual funds, insurance companies, SMAs, and relative value funds

Sewer System Results

- Over \$4.3 billion of orders were received for the taxable Series 2020A&B Bonds (6.3x oversubscribed)
- Nearly 90 distinct institutional investors placed orders on the Series 2020A&B Bonds
 - Existing holders added to positions
 - New investors came in to buy the Sewer System's bonds for the 1st time
 - Variety of account types participated including asset managers, mutual funds, insurance companies, SMAs, and relative value funds
 - International investors from Canada, Norway, Britain and Taiwan also participated; the first international participation in GLWA's sales

Summary of Water System Financing Results

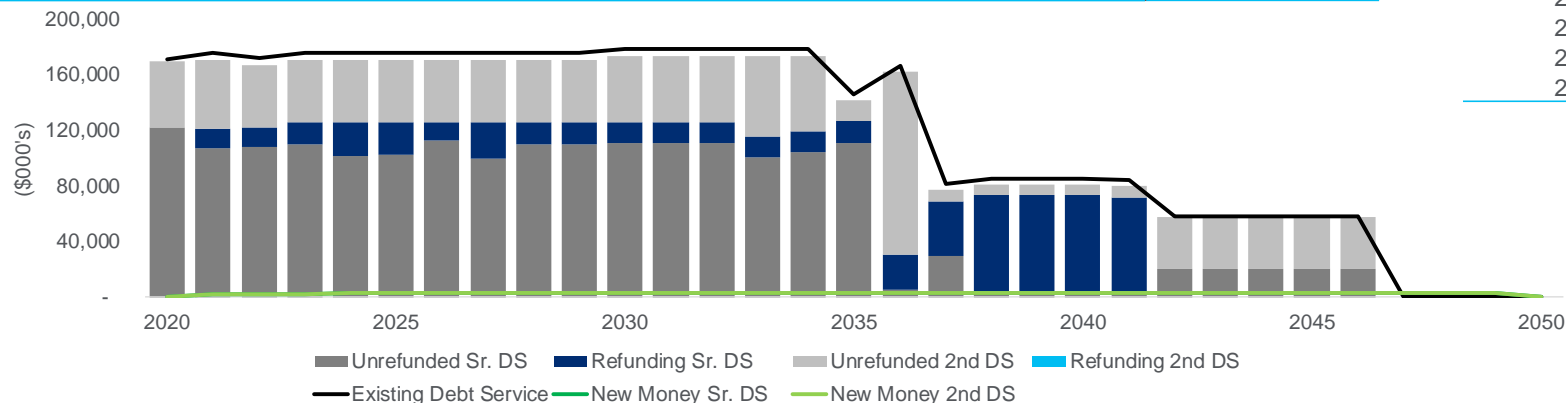
The Series 2020 Bonds were sold at an attractive all-in interest rate and produced a significant amount of debt service savings for the Water System while also funding Local System projects.

- Issued \$463 million of total bonds including \$85.6 million of tax-exempt new money bonds for Local System capital improvements and \$377.5 million of taxable refunding bonds to achieve debt service savings
 - Bond yield of 2.98% for the tax-exempt Series 2020A&B Bonds
 - Bond yield of 3.36% for the taxable Series 2020C Bonds
 - Overall cost of funds, including costs of issuance, was an attractive 3.48%
- Issued \$85.6 million of new money water bonds for the Local System, achieving a very favorable interest costs for 30-year debt and generating nearly \$100 million for Local System capital improvement
- \$103 million in debt service savings generated to provide future financial flexibility
 - Savings structured for approximately level annual savings with a slight emphasis for near-term years
- Increased debt service coverage levels on the Water System
- Released \$10.5 million of Bond Reserve Funds to reduce the amount of refunding bonds issued
- Achieved all necessary bondholder consents on the DSRF springing amendment for the potential future elimination of the Water System Bond Reserve Funds once GLWA attains two AA category ratings (S&P achieved)

Water System 2020 Financing Results and Cash Flow Savings

Through a combination of refunding structure optimization and aggressive pricing, the refunding was able to achieve \$103 million of total debt service savings for the Water System.

	Series 2020A Sr. Lien Tax-Exempt	Series 2020B 2nd Lien Tax-Exempt	Series 2020C Sr. Lien Taxable	Aggregate Series 2020 Issuance	Fiscal Year	Refunding Savings (\$000's)
Sources					Total	103,080
Par	42,445,000	43,135,000	377,515,000	463,095,000	2020	1,591
Premium	7,554,692	6,851,324	-	14,406,016	2021	5,229
Debt Service Fund Release	-	-	7,954,734	7,954,734	2022	5,225
Debt Service Reserve Fund Release	-	-	10,548,456	10,548,456	2023	5,229
Total Sources	49,999,692	49,986,324	396,018,190	496,004,207	2024	5,034
Uses					2025	5,036
Deposit to Escrow Fund	-	-	394,014,099	394,014,099	2026	5,034
Deposit for New Money	49,774,335	49,757,320	-	99,531,655	2027	5,030
Deposit to Debt Service Reserve Fund	-	-	-	-	2028	5,036
Costs of Issuance (inc. UW Disc.)	225,357	229,004	2,004,091	2,458,453	2029	5,032
Total Uses	49,999,692	49,986,324	396,018,190	496,004,207	2030	5,034
Call Provisions and Refunding Statistics					2031	5,034
Call Provisions	10 Year Par Call	10 Year Par Call	10 Year Par Call		2032	5,033
Refunded Principal			366,025,000		2033	5,034
Cashflow Savings			103,077,566		2034	5,036
Net PV Savings (@ 3%)			66,489,475		2035	4,345
Net PV Savings % Ref. Par (@ 3%)			18.17%		2036	4,349
					2037	4,347
					2038	4,346
					2039	4,345
					2040	4,349
					2041	4,349



Note: For purposes of this analysis reserve releases are treated as an upfront adjustment (reduction) to PV savings

Summary of Sewer System Financing Results

The Sewage System Series 2020 Bonds produced a significant amount of savings for GLWA that brings the total across both Water and Sewage Systems to **over \$1 billion in debt service savings since 2014.**

- Issued \$687.5 million of total bonds including \$594.9 million of Senior Lien Bonds and \$92.5mm of Second Lien Bonds to achieve \$221 million in debt service savings
 - Present Value Savings was \$122.9 million (or 18.7% of the refunded par amount)
 - Overall cost of funds, including costs of issuance, was an attractive 3.04%
 - In addition to targeting a good market to issue debt in, GLWA also utilized insurance from Assured Guaranty on a portion of the Second Lien Bonds to further lower the cost of funds
- The \$221 million in savings were structured to significantly reduce the prior aggregate Maximum Annual Debt Service of the Sewage System from \$223.7 million to \$206.5 million
 - In addition to the annual debt service smoothing, the structure also generated \$24 million in cash flow savings over the next three years
 - Increased debt service coverage levels on the Sewage System
- Released \$33.6 million from the Bond Reserve Funds to reduce the amount of refunding bonds issued and increase future cash flow savings
- Achieved all necessary bondholder consents on the DSRF springing amendment for the potential future elimination of the Sewage System Bond Reserve Funds once GLWA attains two AA category ratings (S&P achieved)

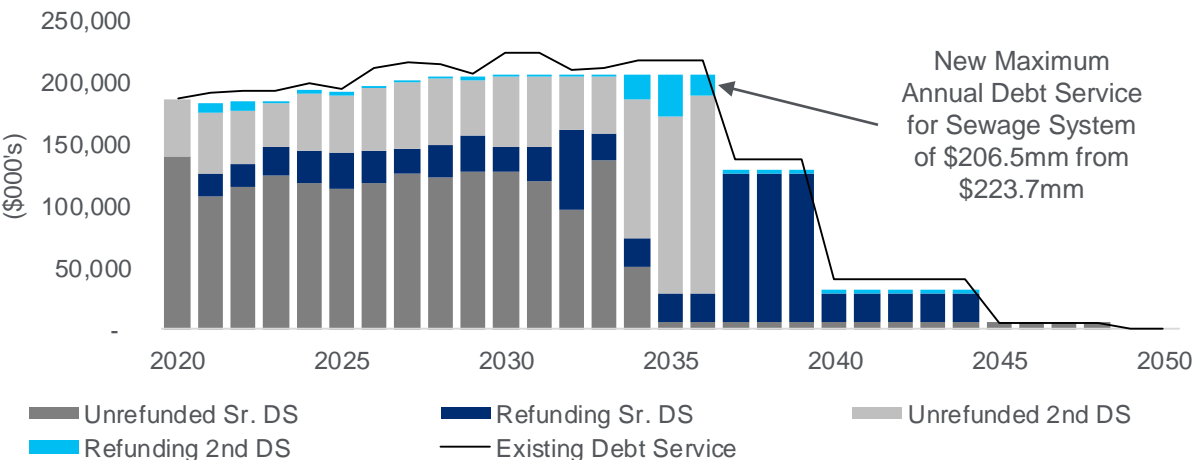
Sewer System 2020 Financing Results and Cash Flow Savings

Through a combination of refunding structure optimization and aggressive pricing, the refunding was able to achieve \$221 million of total debt service savings for the Sewage System.

	Series 2020A Sr. Lien Taxable	Series 2020A 2nd Lien Taxable	Aggregate Series 2020 Issuance
Sources			
Par	594,930,000	92,525,000	687,455,000
Debt Service Fund Release	14,641,931	2,169,625	16,811,556
Debt Service Reserve Fund Release	8,454,576	25,142,779	33,597,356
Total Sources	618,026,507	119,837,404	737,863,912
Uses			
Deposit to Escrow Fund	615,473,376	118,896,293	734,369,669
Insurance Premium	-	537,493	537,493
Costs of Issuance (incl. UW Discount)	2,553,132	403,618	2,956,750
Total Uses	618,026,507	119,837,404	737,863,912
Refunding Statistics			
Refunded Principal	570,460,000	86,785,000	657,245,000
Cash Flow Savings	161,792,310	59,247,445	221,039,756
Net PV Savings (@ 3%)	103,976,431	18,904,434	122,880,865
Net PV Savings % of Ref. Par (@ 3%)	18.23%	21.78%	18.70%

	Debt Service Savings		
Fiscal Year	Sr. Lien Savings	2nd Lien Savings	Aggregate Savings
Total	161,792,310	59,247,445	221,039,756
2021	5,551,321	2,527,137	8,078,458
2022	5,549,641	2,599,621	8,149,262
2023	5,545,431	2,599,621	8,145,052
2024	3,822,857	2,599,621	6,422,478
2025	10,223	2,599,621	2,609,844
2026	12,216,504	2,599,621	14,816,126
2027	11,469,967	2,599,621	14,069,588
2028	7,786,783	2,599,621	10,386,405
2029	14,102	2,599,621	2,613,723
2030	14,594,830	2,599,621	17,194,452
2031	14,507,536	2,599,621	17,107,157
2032	446,556	2,599,621	3,046,177
2033	3,329,506	2,599,621	5,929,127
2034	3,111,294	8,504,621	11,615,915
2035	3,059,870	8,512,593	11,572,462
2036	2,993,203	8,507,640	11,500,843
2037	8,471,808	-	8,471,808
2038	8,471,988	-	8,471,988
2039	8,473,782	-	8,473,782
2040	8,475,103	-	8,475,103
2041	8,469,982	-	8,469,982
2042	8,469,278	-	8,469,278
2043	8,475,368	-	8,475,368
2044	8,475,377	-	8,475,377

Note: For purposes of this analysis reserve releases are treated as an upfront adjustment (reduction) to PV savings



History of Debt Service Savings Achieved Since 2014

Through the leadership of the Authority's management team, the financing team has been able to achieve **over \$1 billion of debt service savings** for the Systems since the tender and refunding transaction in 2014.

