

Special Audit Committee Meeting Monday, June 21, 2021 at 8:00 a.m.

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GLWA Audit Committee Meeting

AGENDA

- 1. CALL TO ORDER
- 2. ROLL CALL
- 3. APPROVAL OF AGENDA
- 4. APPROVAL OF MINUTES
- 5. PUBLIC PARTICIPATION
- 6. OLD BUSINESS
- 7. NEW BUSINESS
 - A. FY 2021 Yearend Budget Amendments (Page 1)
 - i. Analysis of FY 2021 Personnel Costs (Page 42)
 - B. Resolution to Adopt the 96-inch Water Transmission Main (WTM) (Page 44) Relocation Project FY 2022 Drinking Water Revolving Fund Project Plan
 - C. Resolution to Adopt the Downriver Transmission Main Loop (Page 55)
 Project FY 2022 Drinking Water Revolving Fund Project Plan
 - D. Resolution to Adopt the Ypsilanti Pumping Station Improvements (Page 80) Project FY 2022 Drinking Water Revolving Fund Project Plan
 - E. Series Ordinance Authorizing Issuance and Sale of Water Supply (Page 90) System Revenue Bonds
 - F. Series Ordinance Authorizing Issuance and Sale of Sewage (Page 119) Disposal System Revenue Bonds
 - G. Proposed Contract Amendment with Wayne Metro Services for the Water Residential Assistance Program Administration (Page 144)
- 8. REPORTS
- 9. COMMUNICATIONS
- 10. LOOK AHEAD
 - A. Next Audit Committee Meeting: June 25, 2021 at 8:00 a.m.
- 11. OTHER MATTERS
- 12. ADJOURNMENT

Page 1 AGENDA ITEM #7A



Financial Services Audit Committee Communication

Date: June 21, 2021

To: Great Lakes Water Authority Audit Committee

From: Lisa L. Mancini, Financial Planning & Analysis Manager

Re: FY 2021 Fourth Quarter Budget Amendments through June 30, 2021 and Proposed

Budget Amendment Resolution

Background: In accordance with the budget amendment policy, articles, and by-laws for the Great Lakes Water Authority, a quarterly budget amendment report is presented for review by the Audit Committee. When budget amendments are required at the appropriation level as defined by the corresponding fiscal year budget adoption resolution, the Audit Committee will review the proposed budget amendments and forward to the Board of Directors with a recommendation.

Analysis: Highlights of the fourth quarter budget amendments include the following.

- A. There is a net increase to the Water System revenues of \$3.9 million. This is a combination of a \$6.9 million increase in revenues from water demand usage in April, May, and the first half of June offset by a \$3.0 million allowance for bad debt expense related to one wholesale member partner.
- B. Entity-wide, operations and maintenance expense of \$235.1 million through April 30, 2021 is 74% of the proposed amended total of \$316.4 million. The variance from a pro-rata benchmark of 83% allows for the expected trend of relatively higher fourth quarter expenses due to the seasonality of certain expenses and some year-end accruals at actual versus estimate.
- C. The Capital Spending Ratio for the sewer capital improvement plan has increased from 75.0% to 78.6% which equates to \$3.9 million. The Capital Spending Ratio for the water capital improvement plan decreased slightly from 92.0% to 91.4% which equates to a decrease of \$458,700.

The attached budget amendment report is organized in the following manner.

1. Appropriation Level - Revenue Requirement - Water and Sewer Systems

- A. Water System General Operating Fund
- B. Sewer System General Operating Fund
- C. Total Operating Fund Level Water System and Sewer System (Supplemental Information)
- D. Enterprise-wide Core Groups (Supplemental Information)
- E. Enterprise-wide Operations & Maintenance Account Type (Supplemental Information)
- F. Unallocated Reserve by Core Group (Supplemental Information)

2. Appropriation Level - Improvement & Extension Fund - Water and Sewer Systems

- A. Water System Improvement & Extension Fund
- B. Sewer System Improvement & Extension Fund

3. Appropriation Level - Construction Fund - Water and Sewer Systems

- A. Water System Construction Fund
- B. Sewer System Construction Fund

A budget amendment resolution reflecting the budget amendments is also attached.

Proposed Action: The Audit Committee recommends that the Board of Directors for the Great Lakes Water Authority adopt the proposed budget resolution for the fourth quarter FY 2021 budget amendments.



Table 1A - Appropriation Level - Revenue Requirement - Water System General Operating

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Water System		FY 2021 Board Adopted Budget		Total lst Quarter FY 2021 mendments	Total 2nd Quarter FY 2021 Amendments	3rd Q FY 2	otal Juarter 2021 dments		Total 4th Quarter FY 2021 Amendments		FY 2021 Amended Budget	Ac	FY 2021 ctivity Thru 4/30/2021
Revenues													
Suburban Wholesale Customer Charges	\$	314,252,200	\$	(1,118,600)	\$ -	\$	_	\$	3,900,000	\$	317,033,600	\$	262,033,400
Retail Service Charges	1	22,555,400	-	(629,900)	-	-	_	Ť	-	Ť	21.925.500	1	18,402,500
Investment Earnings		4,834,400		(3,564,800)	2,686,100		_		-		3,955,700		3,740,300
Other Revenues		-		-	229,000		_		-		229,000		228,200
Total Revenues	\$	341,642,000	\$	(5,313,300)		\$	-	\$	3,900,000	\$	343,143,800	\$	284,404,400
Revenue Requirements													
Operations & Maintenance Expense	\$	137,127,300	\$	(3,000,000)	\$ -	\$	_	\$	-	\$	134,127,300	\$	100,752,900
General Retirement System Legacy Pension		6,048,000		-	_		_		-		6,048,000		5,040,000
Debt Service		143,189,900		(5,753,900)	-		_		-		137,436,000		116,139,300
General Retirement System Accelerated													
Pension		6,268,300		-	-		-		-		6,268,300		5,223,600
Extraordinary Repair & Replacement Deposit		_		_	_		-		_		-		_
Water Residential Assistance Program													
Contribution		1,669,400		-	_		_		-		1,669,400		1,391,200
Lease Payment		22,500,000		-	-		-		-		22,500,000		18,750,000
Operating Reserve Deposit		876,600		(876,600)	-		-		-		-		-
DWSD Budget Shortfall/(Surplus) Pending		-		-	-		-		-		-		2,166,500
Improvement & Extension Fund													
Transfer Pending		23,962,500		4,317,200	2,915,100		-		3,900,000		35,094,800		25,315,500
Total Revenue Requirements	\$	341,642,000	\$	(5,313,300)	\$ 2,915,100	\$	-	\$	3,900,000	\$	343,143,800	\$	274,779,000
Net Actual to Date	\$	-	\$	-	\$ -	\$	-	\$	_	\$	-	\$	9,625,400



Appropriation Level - Revenue Requirement - Water System General Operating Budget Amendment Explanation								
Revenues								
Suburban Wholesale Customer	The increase to this category is due to the increase in water demand usage during April,							
Charges	May, and the first half of June as well as forecasted usage through the end of June 2021. A							
	portion of this \$6.9 million increase has been offset by a \$3.0 million allowance for bad							
	debt expense for Dearborn.							
Retail Services Charges	No budget amendment is required.							
Investment Earnings	No budget amendment is required.							
Other Revenues	No budget amendment is required.							
Revenue Requirements (Expenditur	es)							
Operations & Maintenance Expense	No budget amendment is required.							
General Retirement System Legacy	No budget amendment is required. Budget and funding are on a fixed schedule.							
Pension								
Debt Service	No budget amendment is required.							
General Retirement System Legacy	No budget amendment is required. Budget and funding are on a fixed schedule.							
Pension – Accelerated Payment								
Extraordinary Repair &	No budget amendment is required. This is a formulaic requirement in the Master Bond							
Replacement	Ordinance. Based on adopted and amended budget, no adjustment is required.							
Water Residential Assistance	No budget amendment is required. Budget is fixed at time of budget adoption.							
Program Contribution								
Lease Payment	No budget amendment is required. Lease payment is established in accordance with terms							
	of the lease.							
Operating Reserve Deposit	Based on further review and analysis, this operating reserve is no longer required.							



Appropriation Level - Revenue Rec	quirement - Water System General Operating Budget Amendment Explanation
DWSD Budget Shortfall Pending	No budget amendment is proposed at this time. Represents budget shortfall attributable
	to decline in collections since declaration of COVID-19 pandemic emergency. The 2018
	Memorandum of Understanding provides guidance related to repayment to the extent that
	the shortfall is not cured by other means before June 30 th of the subsequent year.
	Communication with DWSD Management indicates that plans are cautiously optimistic
	that the shortfall will be cured by year-end.
Improvement & Extension Fund	Represents annual funding for pay-as-you-go capital improvement program. Budget
Transfer Pending	amendments to revenues, investment earnings, debt service, and DWSD budget shortfall
	affect this line item.



Table 1B - Appropriation Level - Revenue Requirement - Sewer System General Operating

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	FY 2021 Board Adopted		Total 1st Quarter FY 2021	Total 2nd Quarter FY 2021		Total 3rd Quarter FY 2021	Total 4th Quarter FY 2021	FY 2021 Amended	FY 2021 Activity Thru
Sewer System	 Budget	A	Ame ndme nts	Amendments	F	Ame ndme nts	Ame ndme nts	 Budget	4/30/2021
Revenues									
Suburban Wholesale Customer Charges	\$ 277,011,800	\$	(2,958,300)	\$ -	\$	-	\$ (1,600,000)	\$ 272,453,500	\$ 225,120,000
Retail Service Charges	190,112,100		(2,152,400)	-		-	-	187,959,700	157,081,500
Industrial Waste Control Charges	8,775,400		(92,100)	-		(998,600)	-	7,684,700	6,656,000
Pollutant Surcharges	5,262,800		(55,200)	-		900,000	-	6,107,600	5,268,200
Investment Earnings	5,589,200		(4,602,300)	1,791,200		-	-	2,778,100	2,455,800
Other Revenues	-		-	574,000		(160,000)	1,781,300	2,195,300	387,500
Total Revenues	\$ 486,751,300	\$	(9,860,300)	\$ 2,365,200	\$	(258,600)	\$ 181,300	\$ 479,178,900	\$ 396,969,000
Revenue Requirements									
Operations & Maintenance Expense	\$ 184,946,100	\$	(2,650,100)	\$ -	\$	-	\$ -	\$ 182,296,000	\$ 134,382,300
General Retirement System Legacy Pension	10,824,000		-	-		-	-	10,824,000	9,020,000
Debt Service	209,739,900		(7,959,500)	-		-	-	201,780,400	170,269,600
General Retirement System Accelerated Pension	11,620,700		-	-		-	_	11,620,700	9,683,900
Extraordinary Repair & Replacement Deposit	-		-	-		-	_	-	-
Water Residential Assistance Program									
Contribution	2,415,100		-	-		-	-	2,415,100	2,012,600
Lease Payment	27,500,000		-	-		-	-	27,500,000	22,916,600
Operating Reserve Deposit	-		-	-		-	-	-	-
DWSD Budget Shortfall/(Surplus) Pending	-		-	-		-	-	-	7,694,900
Improvement & Extension Fund									
Transfer Pending	39,705,500		749,300	2,365,200		(258,600)	181,300	42,742,700	35,048,200
Total Revenue Requirements	\$ 486,751,300	\$	(9,860,300)	\$ 2,365,200	\$	(258,600)	\$ 181,300	\$ 479,178,900	\$ 391,028,100
Net Actual to Date	\$ -	\$	-	\$ -	\$	-	-	\$ -	\$ 5,940,900



Appropriation Level - Revenue Requirement - Sewer System General Operating Budget Amendment Explanation								
Revenues								
Suburban Wholesale Customer	The reduction to this category is the result of an adjustment to the allowance for bad debt							
Charges	expense for Highland Park.							
Retail Services Charges	No budget amendment is required.							
Industrial Waste Control Charges	No budget amendment is required.							
Pollutant Surcharges	No budget amendment is required.							
Investment Earnings	No budget amendment is required.							
Other Revenues	The primary increase to this category is the receipt of the insurance proceeds for the							
	wastewater fire damage claim (\$1.7 million). A minor adjustment was made to the							
	revenues from dump token receipts and energy rebates.							
Revenue Requirements (Expenditur	res)							
Operations & Maintenance Expense	No budget amendment is required.							
General Retirement System Legacy	No budget amendment is required. Budget and funding are on a fixed schedule.							
Pension								
Debt Service	No budget amendment is required.							
General Retirement System Legacy	No budget amendment is required. Budget and funding are on a fixed schedule.							
Pension – Accelerated Payment								
Extraordinary Repair &	No budget amendment is required. This is a formulaic requirement in the Master Bond							
Replacement	Ordinance. Based on adopted and amended budget, no adjustment is required.							
Water Residential Assistance	No budget amendment is required. Budget is fixed at time of budget adoption.							
Program Contribution								
Lease Payment	No budget amendment is required. Lease payment is established in accordance with terms							
	of the lease.							
Operating Reserve Deposit	Based on further review and analysis, this operating reserve is no longer required.							



Appropriation Level - Revenue Rec	Appropriation Level - Revenue Requirement - Sewer System General Operating Budget Amendment Explanation										
DWSD Budget Shortfall Pending	No budget amendment is proposed at this time. Represents budget shortfall attributable										
	to decline in collections since declaration of COVID-19 pandemic emergency. The 2018										
	Memorandum of Understanding provides guidance related to repayment to the extent that										
	the shortfall is not cured by other means before June 30 th of the subsequent year.										
	Communication with DWSD Management indicates that plans are cautiously optimistic										
	that the shortfall will be cured by year-end.										
Improvement & Extension Fund	Represents annual funding for pay-as-you-go capital improvement program. Budget										
Transfer Pending	amendments to revenues, investment earnings, debt service, and DWSD budget shortfall										
	affect this line item.										

Table 1C - Supplemental Information - Operating Fund Level - Water System and Sewer System

System	FY 2021 Board Adopted Budget	Total 1st Quarter FY 2021 Amendments	Total 2nd Quarter FY 2021 Amendments	Total 3rd Quarter FY 2021 Amendments	Total 4th Quarter FY 2021 Amendments	FY 2021 Amended Budget	Acti	Y 2021 vity Thru 30/2021
Water System Operations	\$ 137,127,300	\$ (3,000,000)	\$ -	\$ -	\$ -	\$ 134,127,300	\$ 1	00,752,900
Wastewater System Operations	184,946,100	(2,650,100)	-	-	-	182,296,000	1	34,382,300
Total	\$ 322,073,400	\$ (5,650,100)	\$ -	\$ -	\$ -	\$ 316,423,300	\$23	5,135,200

Totals may be off due to rounding.

As shown in the table above, there are no budget amendments for transfers of resources between the water and sewer funds. It is unforeseen that such an amendment would occur as each system is accounted for as a stand-alone entity. The purpose of this table is to transparently report that funds from one system do not provide budget support to the other system.

Table 1D - Supplemental Information - Enterprise-wide Core Groups

O&M Major Budget Categories (Core Groups)	FY 2021 Board Adopted Budget	Total 1st Quarter FY 2021 Amendments		Total 2nd Quarter FY 2021 Amendments	Total Brd Quarter FY 2021 .mendments	Total 4th Quarter FY 2021 Amendments			FY 2021 Amended Budget	FY 2021 Activity Thru 4/30/2021		
A Water System Operations	\$ 71,966,400	\$ (1,146,600)	\$	-	\$ -	\$	-	\$	70,819,800	\$	55,094,000	
B Wastewater System Operations	115,676,400	(701,300)		-	-		-		114,975,100		85,659,900	
C Centralized Services	102,721,300	(2,382,900)		-	-		-		100,338,400		71,941,800	
D Administrative & Other Services	31,709,300	(1,419,200)		-	-		-		30,290,100		22,439,500	
Total	\$ 322,073,400	\$ (5,650,000)	\$	-	\$ -	\$	-	\$3	316,423,400	\$2	35,135,200	

Totals may be off due to rounding.

A subset of the operating funds are core groups that account for A) direct cost of water operations, B) direct cost of sewer operations, C) centralized services (E.g., field services, security, information technology, facilities, and fleet), D) administrative services (E.g., finance, public affairs, general counsel, and organizational development). The costs of the latter two categories are allocated to the water and sewer systems based upon an internal cost allocation plan that is performed on an annual basis.

Through the fourth quarter FY 2021, there are no amendments that cross the core groups. For more activity within these groups, see *Supplemental Information - Enterprise-wide Operations & Maintenance Department and Account Level Amendments* (Addendum 1).

Table 1E - Supplemental Information - Enterprise-wide Operations & Maintenance Account Type

O&M Expense Categories (Account Type)	FY 2021 Board Adopted Budget	Total 1st Quarte FY 2021 Amendmen		FY 2021		Total 3rd Quarter FY 2021 Amendments			Total 4th Quarter FY 2021 Amendments	FY 2021 Amended Budget			FY 2021 etivity Thru 4/30/2021
Personnel Costs	\$ 110,333,100	\$	(1,527,100)	\$	(123,800)	\$	(265,900)	\$	2,683,000	\$	111,099,300	\$	89,786,400
Utilities	51,937,000		-		-		-		445,600		52,382,600		42,879,200
Chemicals	13,419,800		-		-		-		942,400		14,362,200		11,626,300
Supplies & Other	38,620,800		400,000		(1,521,300)		(229,700)		(1,675,000)		35,594,800		23,165,100
Contractual Services	106,154,600		(1,372,200)		2,005,000		(572,600)		(6,237,700)		99,977,100		74,043,400
Capital Program Allocation	(3,447,700)		-		127,500		(8,500)		(117,900)		(3,446,600)		(2,575,000)
Shared Services	(3,412,900)		-		(1,117,100)		18,000		-		(4,512,000)		(3,790,200)
Unallocated Reserve	8,468,700		(3,150,800)		629,700		1,058,700		3,959,600		10,965,900		-
Total	\$ 322,073,400	\$	(5,650,100)	\$	-	\$	-	\$	-	\$	316,423,300	\$2	35,135,200

Totals may be off due to rounding.

The table above presents the Operations & Maintenance budget by the major expense categories (account type).

For additional detail and the explanation of the key changes to the FY 2021 budget within these categories, see *Supplemental Information - Enterprise-wide Operations & Maintenance Department and Account Level Amendments (Addendum 1).*

For an additional view of the Operations & Maintenance budget by expense category (account type) and by departmental level, see Supplemental Information - Enterprise-wide Operations & Maintenance Account Type and Departmental Level Amendments (Addendum 2).



Table 1F - Supplemental Information - Unallocated Reserve by Core Group

O&M Unallocated Reserves	FY 2021 Board Adopted Budget	Total st Quarter FY 2021 mendments	Total 2nd Quarter FY 2021 Amendments	Total rd Quarter FY 2021 mendments	Total th Quarter FY 2021 nendments	FY 2021 Amended Budget
Water System Operations	\$ 1,729,300	\$ (436,900)	\$ -	\$ -	\$ (920,300)	\$ 372,100
Wastewater System Operations	4,603,900	(1,701,300)	(584,000)	-	4,905,900	7,224,500
Centralized Services	1,637,200	(642,900)	1,089,600	8,500	441,600	2,534,000
Administrative & Other Services	498,300	(369,700)	124,100	1,050,200	(467,600)	835,300
Total	\$ 8,468,700	\$ (3,150,800)	\$ 629,700	\$ 1,058,700	\$ 3,959,600	\$ 10,965,900

An Unallocated Reserve account is established for each of the four core groups. Budget is assigned to these accounts to cover expenditures not known at the time the budget is developed (merit increases, fluctuations within maintenance contracts and usage of utilities and chemicals, projects and initiatives not planned at the time the initial budget was developed, etc.). It is GLWA's internal budget directive for each area, group, and team to manage their needs to an amount within the initial budget. If required, an amendment is made from the unallocated reserve. If an area does not require as much funding as was established in the original budget, that department's budgeted expenses are reduced, and the unallocated reserve is increased.

For additional information on the FY 2021 changes to the unallocated reserve, see *Supplemental Information - Enterprise-wide Operations & Maintenance Department and Account Level Amendments (Addendum 1).*



Table 2A - Appropriation Level - Improvement & Extension Fund - Water System

Water Improvement & Extension Fund	FY 2021 Board Adopted Budget	Total st Quarter FY 2021 nendments	Total 2nd Quarter FY 2021 mendments	Total Brd Quarter FY 2021 mendments	Total th Quarter FY 2021 mendments		FY 2021 Amended Budget		FY 2021 ctivity Thru 4/30/2021
Revenues									
Transfers In from General Operating	\$ 23,962,500	\$ 4,317,200	\$ 2,915,100	\$ -	\$ 3,900,000	\$	35,094,800	\$	25,315,500
Earnings on Investments (b)	-	-	3,048,400	-	-		3,048,400		3,166,100
Net Use of Reserves (a)	68,929,500	(4,317,200)	(937,100)	30,022,000	(3,232,900)		90,464,300		-
Total Revenues	\$ 92,892,000	\$ -	\$ 5,026,400	\$ 30,022,000	\$ 667,100	\$	128,607,500	\$	28,481,600
Expenditures									
Water System Revenue Transfers Out (b)	\$ -	\$ -	\$ 3,048,400	\$ -	\$ -	\$	3,048,400	\$	3,290,700
Capital Spending - Other	-	-	-	4,977,600	(54,800)		4,922,800		4,293,300
Capital Outlay	17,892,000	-	-	(8,000,000)	667,100		10,559,100		8,037,500
Revenue Financed Capital - Operating									
Transfer to Construction Fund	75,000,000	-	1,978,000	33,044,400	54,800		110,077,200		48,408,900
Total Expenditures	\$ 92,892,000	\$ -	\$ 5,026,400	\$ 30,022,000	\$ 667,100	\$	128,607,500	\$	64,030,400
(a) Basimaina Nat Basidan						ø	200 752 600		
(a) Beginning Net Position						-	288,752,600		
Net Use of Reserves						_	(90,464,300)		
Projected Ending Net Position						\$	198,288,300		

⁽b) Note: As outlined in the Master Bond Ordinance, the investment earnings in the I&E Fund are transferred to the Receiving Fund. The impact is to reduce revenue required from charges when calculating the annual Revenue Requirement budget.



Appropriation Level - Improvement & Extension Fund - Water System Budget Amendment Explanation							
Revenues							
Transfers In from General Operating	The proposed budget amendment is to match the amount available for transfer from the						
	FY 2021 revenue requirement based upon general operating fund performance. (see I&E						
	Fund Transfer Pending line on the Appropriation Level-Revenue Requirement-Water						
	System General Operating table).						
Earnings on Investments	No budget amendment is required. Earnings on Investments is budgeted at zero as there						
	is a corresponding transfer of earnings back to general operating fund as allowed by the						
	Master Bond Ordinance. The net effect on the I&E Fund is zero as the earnings are						
	budgeted and accounted for in the operating fund to lower revenue requirement for						
	charges.						
Net Use (Source) of Reserves	This amount represents the net amount of revenues less expenses. A negative amount						
	represents an increase in reserves from current year activity rather than a use of reserves.						
Expenditures							
Water System Revenue Transfers	No budget amendment is required. This line offsets Earnings on Investments and						
Out (Earnings on Investments)	represents the transfer of earnings back to the general operating fund as allowed by the						
	Master Bond Ordinance. Any variance between the two lines represents a timing						
	difference.						
Capital Spending - Other	The proposed budget amendment represents an adjustment to the projects in the Board						
	adopted capital improvement plan (CIP) that do not meet the criteria for debt financing.						
Capital Outlay	The proposed budget amendment reflects the increase in spending of capital outlay.						
Revenue Financed Capital – Transfer	The proposed budget amendment reflects the change in funding that is anticipated to be						
to Construction Fund	needed based on the adjustment to the projects in the CIP that do not meet the criteria for						
	debt financing (will be funded out of I&E instead of Construction funds – see 'Capital						
	Spending – Other' above).						



Table 2B - Appropriation Level - Improvement & Extension Fund - Sewer System

Sewer Improvement & Extension Fund		FY 2021 Board Adopted Budget]	Total t Quarter FY 2021 nendments	Total 2nd Quarter FY 2021 .mendments	Total 3rd Quarter FY 2021 mendments	Total h Quarter FY 2021 nendments	FY 2021 Amended Budget	Ac	FY 2021 etivity Thru 4/30/2021
Revenues										
Transfers In from General Operating	\$	39,705,500	\$	749,300	\$ 2,365,200	\$ (258,600)	\$ 181,300	\$ 42,742,700	\$	35,048,200
Receipt of DWSD Shortfall Loan		19,288,300		-	-	-	-	19,288,300		15,701,400
Earnings on Investments (b)		-		-	1,401,300	-	-	1,401,300		1,313,100
Net Use of Reserves (a)		3,987,300		(749,300)	(343,600)	(4,513,000)	289,800	(1,328,800)		-
Total Revenues	\$	62,981,100	\$	-	\$ 3,422,900	\$ (4,771,600)	\$ 471,100	\$ 62,103,500	\$	52,062,700
Expenditures										
Sewer System Revenue Transfers Out (b)	\$	-	\$	-	\$ 1,401,300	\$ -	\$ -	\$ 1,401,300	\$	1,288,100
Capital Spending - Other		-		-	-	1,020,800	1,439,900	2,460,700		3,164,500
Capital Outlay		20,481,100		-	-	(2,750,000)	(3,460,800)	14,270,300	\$	6,542,100
Revenue Financed Capital - Operating										
Transfer to Construction Fund		42,500,000		-	2,021,600	(3,042,400)	2,492,000	43,971,200		22,715,000
Total Expenditures	\$	62,981,100	\$	-	\$ 3,422,900	\$ (4,771,600)	\$ 471,100	\$ 62,103,500	\$	33,709,700
(a) Beginning Net Position (excludes Sho	ortfo	ıll Loan Princi	pal)					\$ 135,520,700		
Net Use of Reserves								1,328,800		
Projected Ending Net Position								\$ 136,849,500		

⁽b) Note: As outlined in the Master Bond Ordinance, the investment earnings in the I&E Fund are transferred to the Receiving Fund. The impact is to reduce revenue required from charges when calculating the annual Revenue Requirement budget.



Appropriation Level - Improvement & Extension Fund - Sewer System Budget Amendment Explanations								
Revenues								
Transfers In from General Operating	The proposed budget amendment is to match the amount available for transfer from F							
	2021 revenue requirement based upon general operating fund performance. (see I&E							
	Fund Transfer Pending line on the Appropriation Level-Revenue Requirement-Sewer							
	System General Operating table).							
Earnings on Investments	No budget amendment is required. Earnings on Investments is budgeted at zero as there							
	is a corresponding transfer of earnings back to general operating fund as allowed by the							
	Master Bond Ordinance. The net effect on the I&E Fund is zero as the earnings are							
	budgeted and accounted for in the operating fund to lower revenue requirement for							
	charges.							
Net Use (Source) of Reserves	This amount represents the net amount of revenues less expenditures. A negative amount							
	represents an increase in reserves from current year activity rather than a use of reserves.							
Expenditures								
Sewer System Revenue Transfers	No budget amendment is required. This line offsets Earnings on Investments and							
Out (Earnings on Investments)	represents the transfer of earnings back to the general operating fund as allowed by the							
	Master Bond Ordinance. Any variance between the two lines represents a timing							
	difference.							
Capital Spending – Other	The proposed budget amendment represents an adjustment to the projects in the Board							
	adopted capital improvement plan (CIP) that do not meet the criteria for debt financing.							
Capital Outlay	The proposed budget amendment reflects the decrease in spending which is partially							
	driven by the shift in organizational priorities resulting from the COVID-19 pandemic.							
Revenue Financed Capital – Transfer	The proposed budget amendment reflects the additional funding that is anticipated to be							
to Construction Fund	needed based on a) the increase in the Capital spend rate, and b) the adjustment to the							
	projects in the CIP that do not meet the criteria for debt financing (will be funded out of							
	I&E instead of Construction funds – see 'Capital Spending – Other' above).							



Table 3A - Appropriation Level - Construction Fund - Water System

Table 3A - Appropriation Level -	CU		ΙΓU		eı			7D . 1		m . 1			
		FY 2021 Board	18	Total st Quarter	2	Total nd Quarter	3	Total Brd Quarter	4	Total th Quarter	FY 2021		FY 2021
Water		Adopted		FY 2021		FY 2021		FY 2021		FY 2021	Amended	A	ctivity Thru
Construction Fund		Budget	An	ne ndme nts	Aı	me ndme nts	A	mendments	A	mendments	Budget		4/30/2021
Revenues											 		
Transfer from Improvement & Extension Fund	\$	75,000,000	\$	-	\$	1,978,000	\$	33,044,400	\$	54,800	\$ 110,077,200	\$	48,408,900
Bond Proceeds		-		-		-		-		-	-		-
Grant Revenues (SRF Loans)		12,365,800		-		-		-		-	12,365,800		16,666,500
Earnings on Investments		820,400		(639,900)		(153,700)		-		-	26,800		19,100
Net Use of Reserves (a)		22,486,800		639,900		153,700		(15,307,100)		(458,700)	7,514,600		-
Total Revenues	\$	110,673,000	\$	-	\$	1,978,000	\$	17,737,300	\$	(403,900)	\$ 129,984,400	\$	65,094,500
Expenditures													
Capital Improvement Plan (b)	\$	147,564,000	\$	-	\$	-	\$	(4,977,600)	\$	54,800	\$ 142,641,200	\$	102,896,900
Capital Spend Rate Adjustment		(36,891,000)		-		1,978,000		22,714,900		(458,700)	(12,656,800)		-
Total Expenditures (b)	\$	110,673,000	\$	-	\$	1,978,000	\$	17,737,300	\$	(403,900)	\$ 129,984,400	\$	102,896,900
(a) Beginning Net Position											\$ 20,806,300		
Net Use of Reserves											(7,514,600)		
Projected Ending Net Position											\$ 13,291,700		
(b) Plus Direct I&E Projects		-									4,922,800		
Total CIP Expenditures		110,673,000									134,907,200		
Total Published Capital Improvement Plan		147,564,000									147,564,000		
Capital Spending Ratio		75.0%									91.4%		



Appropriation Level - Construction Fund - Water System Budget Amendment Explanations							
Revenues							
Transfers from Improvement	The proposed budget amendment is to match the amount available for transfer from the FY 2021						
& Extension Fund	Improvement & Extension Fund (see Revenue Financed Capital-Operating Transfer to						
	Construction Fund line on the Appropriation Level-Improvement & Extension Fund-Water						
	System table). The amount is based on the adjustment to the projects in the CIP that do not meet						
	the criteria for debt financing.						
Bond Proceeds	No budget amendment is required.						
Grant Revenues	No budget amendment is required. State revolving fund loan disbursements are on a						
(State Revolving Fund Loans)	reimbursement basis. The amount and timing of funds fluctuates with project expenditures						
	incurred. Details related to the SRF projects are presented in the quarterly debt report. The most						
	recent quarterly debt report is presented in the May 2021 Audit Committee binder which						
	provides details related to the SRF funding and associated projects.						
Earnings on Investments	No budget amendment is required.						
Net Use (Source) of Reserves	This amount represents the net amount of revenues less expenditures. A "use of reserves"						
	indicates a spend down of prior year reserves. The amount has been amended to reflect the						
	anticipated decrease in the Capital spend rate from 92.0% to 91.4%.						
Expenditures							
Capital Improvement Plan	The proposed budget amendment represents an adjustment to the projects in the Board						
	adopted capital improvement plan (CIP) that do not meet the criteria for debt financing. This						
	amount is reflected on the 'Capital Spending – Other' line on the Water Improvement&						
	Extension Fund table.						



Appropriation Level - Construction Fund - Water System Budget Amendment Explanations

Capital Spend Rate Assumption Adjustment The proposed budget amendment represents the decrease in the projected Capital spend rate for the Water CIP from 92.0% (3rd quarter FY 2021 projection) to 91.4%. The Board of Directors adopts a capital spending ratio assumption (SRA) which allows the realities of capital program delivery to align with the financial plan. The SRA is an analytical approach to bridge the total dollar amount of projects in the CIP with what can realistically be spent due to limitations beyond GLWA's control and/or delayed for nonbudgetary reasons. Those limitations, whether financial or non-financial, necessitate the SRA for budgetary purposes, despite the prioritization established. Amendments to the spend rate assumption are made to align the projected financial use of resources with revised capital improvement plan spending forecasts. The most recent quarterly construction work-in-progress report is presented in the March 2021 Audit Committee binder.



Table 3B - Appropriation Level - Construction Fund - Sewer System

					<u> </u>							
a.	FY 2021 Board		Total st Quarter		Total nd Quarter	3	Total 3rd Quarter	4	Total th Quarter	FY 2021		FY 2021
Sewer	Adopted		FY 2021		FY 2021		FY 2021		FY 2021	Amended		ctivity Thru
Construction Fund	Budget	Aı	mendments	Aı	me ndme nts	A	ame ndme nts	A	me ndme nts	Budget	•	4/30/2021
Revenues												
Transfer from Improvement & Extension Fund	\$ 42,500,000	\$	-	\$	2,021,600	\$	(3,042,400)	\$	2,492,000	\$ 43,971,200	\$	22,715,000
Bond Proceeds	-		-		-		-		-	-		-
Grant Revenues (SRF Loans)	33,200,000		-		-		-		-	33,200,000		15,523,100
Earnings on Investments	497,700		(388,200)		(81,900)		-		-	27,600		22,500
Net Use of Reserves (a)	6,781,300		388,200		81,900		9,500		-	7,260,900		-
Total Revenues	\$ 82,979,000	\$	-	\$	2,021,600	\$	(3,032,900)	\$	2,492,000	\$ 84,459,700	\$	38,260,600
Expenditures												
Capital Improvement Plan (b)	\$ 110,638,000	\$	-	\$	-	\$	(1,020,800)	\$	(1,439,900)	\$ 108,177,300	\$	68,413,200
Capital Spend Rate Adjustment	(27,659,000)		-		2,021,600		(2,012,100)		3,931,900	(23,717,600)		-
Total Expenditures (b)	\$ 82,979,000	\$	-	\$	2,021,600	\$	(3,032,900)	\$	2,492,000	\$ 84,459,700	\$	68,413,200
(a) Beginning Net Position										\$ 23,311,100		
Net Use of Reserves										(7,260,900)		
Projected Ending Net Position										\$ 16,050,200		
(b) Plus Direct I&E Projects	-									2,460,700		
Total CIP Expenditures	82,979,000									86,920,400		
Total Published Capital Improvement Plan	110,638,000									110,638,000		
Capital Spending Ratio	75.0%									78.6%		



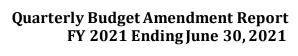
Appropriation Level - Constructio	n Fund - Sewer System Budget Amendment Explanations
Revenues	
Transfers from Improvement &	The proposed budget amendment is to match the amount available for transfer from the
Extension Fund	FY 2021 Improvement & Extension Fund (see Revenue Financed Capital-Operating
	Transfer to Construction Fund line on the Appropriation Level-Improvement & Extension
	Fund-Sewer System table). The amount is based on the change in the Capital spend rate
	and the adjustment to the projects in the CIP that do not meet the criteria for debt
	financing.
Bond Proceeds	No budget amendment is required.
Grant Revenues	No budget amendment is required. State revolving fund loan disbursements are on a
(State Revolving Fund Loans)	reimbursement basis. The amount and timing of funds fluctuates with project
	expenditures incurred. Details related to the SRF projects are presented in the quarterly
	debt report. The most recent quarterly debt report is presented in the May 2021 Audit
	Committee binder which provides details related to the SRF funding and associated
	projects.
Earnings on Investments	No budget amendment is required.
Net Use (Source) of Reserves	No budget amendment is required. This amount represents the net amount of revenues
	less expenditures. A "use of reserves" indicates a spend down of prior year reserves.
Expenditures	
Capital Improvement Plan	The proposed budget amendment represents an adjustment to the projects in the Board
	adopted capital improvement plan (CIP) that do not meet the criteria for debt financing.
	This amount is reflected on the 'Capital Spending – Other' line on the Sewer Improvement
	& Extension Fund table.



Appropriation Level - Construction Fund - Sewer System Budget Amendment Explanations

Capital Spend Rate Adjustment

The proposed budget amendment represents the increase in the projected Capital spend rate for the Sewer CIP from 75.0% to 78.6%. The Board of Directors adopts a capital spending ratio assumption (SRA) which allows the realities of capital program delivery to align with the financial plan. The SRA is an analytical approach to bridge the total dollar amount of projects in the CIP with what can realistically be spent due to limitations beyond GLWA's control and/or delayed for nonbudgetary reasons. Those limitations, whether financial or non-financial, necessitate the SRA for budgetary purposes, despite the prioritization established. Amendments to the spend rate assumption are made to align the projected financial use of resources with revised capital improvement plan spending forecasts. The most recent quarterly construction work-in-progress report is presented in the March 2021 Audit Committee binder.





Supplemental Information –

Enterprise-wide Operations & Maintenance Department and Account Level Amendments

The summary of budget amendments for operations & maintenance (department and account level amendments) are organized by the four core groups. The FY 2021 fourth quarter budget amendments result in a net zero change to all categories: A - Water System Operations, B - Sewer System Operations, C - Centralized Services, and D - Administrative & Other Services.

GLWA's internal budget directive is for each area, group, and team to manage their needs to an amount within the initial budget. To the extent that is not possible, an amendment is made from the unallocated reserve. If savings are incurred, or an area appears to not require as much funding as established in the original budget, that department's budgeted expenses are reduced, and the unallocated reserve is increased. In administering the budget, there are several refinements to departments and account categories. An explanation of larger items (greater than \$500,000) is included in the table in Addendum 1.

	Total	
	4th Quarter	
	FY 2021	
Departmental and Account Level Amendments	Amendments	Explanation of Key Items
Administrative Services	0	_
Administrative Services Unallocated Reserve	(467,600)	
Unallocated Reserve	(467,600)	
Chief Administrative Officer Contractual Services	(248,200) (265,200)	
Personnel	(263,200) 8,800	
Supplies & Other	8,200	
Chief Executive Officer	900	
Personnel	900	
Chief Financial Officer	1,800	
Personnel	1,800	
Data Analytics & Internal Audit	3,400	
Personnel	3,400	
Enterprise Risk Management and Safety	(288,800)	
Contractual Services	(274,100)	
Personnel	2,300	
Supplies & Other	(17,000)	
Enterprise Risk Mgt. Insurance Fund	674,200	Dudget adjustment based on a voice of the assessment and account to the second
Contractual Services Financial Planning & Analysis	674,200 34,700	Budget adjustment based on a review of the property and casualty insurance claims.
Contractual Services	12,000	
Personnel	23,500	
Supplies & Other	(800)	
Financial Reporting & Accounting	39,600	
Personnel	38,400	
Supplies & Other	1,200	
General Counsel	2,700	
Personnel	57,700	
Supplies & Other	(55,000)	
Logistics and Materials	304,900	
Contractual Services	6,700	
Personnel	114,300	
Supplies & Other	183,900	
OD Administration	(3,447,100)	
Contractual Services Personnel	(199,700)	
Personner	(2,040,000)	Reallocate budget between new OD cost centers from 883201 OD Training to 883211 OD Talent Mgmt, 883221 OD Organization Wellness; 883231 OD Training, 883241 OD Performance, 88325:
		OD Recruiting, 883261 OD Compensation
Supplies & Other	(399,400)	
OD Compensation	242,000	
Contractual Services	52,800	
Personnel	189,200	
OD Organizational Wellness	473,400	
Contractual Services	111,800	
Personnel	342,100	
Supplies & Other	19,500	
OD Performance	425,800	
Contractual Services	98,200	
Personnel	324,100	
Supplies & Other OD Recruiting	3,500 424,400	
Contractual Services	63,800	
Personnel	345,800	
Supplies & Other	14,800	
OD Talent Management	569,300	
Contractual Services	101,700	
Personnel	461,300	
Supplies & Other	6,300	
OD Training	1,420,200	
Contractual Services	73,800	
Personnel	1,157,400	The budget for the cost center OD Training (12 FTE's salary/wages and employee benefits) was
		originally in 883201 OD Administration.
Supplies & Other	189,000	
Owners' Representative	(88,600)	
Capital Program Allocation	72,100	

	Total	
	4th Quarter	
Departmental and Account Level Amendments	FY 2021 Amendments	Explanation of Key Items
Contractual Services	(57,800)	
Personnel	(88,600)	
Supplies & Other	(14,300)	
Procurement Director	203,300	
Contractual Services	41,000	
Personnel	201,300	
Supplies & Other	(39,000)	
Public Affairs	(297,300)	
Contractual Services	(100,000)	
Personnel	2,700	
Supplies & Other	(200,000)	
Public Finance	(2,100)	
Contractual Services	16,000	
Personnel	(18,200)	
Supplies & Other	100	
Reporting and Compliance	11,600	
Personnel	11,600	
Transformation	5,000	
Personnel	5,000	
Treasury	2,500	
Personnel	2,400	
Supplies & Other	100	
Centralized Services	(4.374.500)	
Asset Management Contractual Services	(1,374,500) (1,281,600)	Linear System Integrity Program (LSIP) delayed until FY 2022 (\$1.2M); reduction in activity with CH2M Hill - Asset Master Plan (\$81k)
Personnel	(63,700)	
Supplies & Other	(29,200)	
Capital Improvement Planning	1,581,300	
Contractual Services	1,648,100	AECOM Capital Program Management services - FY 2021 utilization of the contract is higher tha projected. The overall spend on the project is still on target.
Personnel	(62,200)	
Supplies & Other	(4,600)	
Centralized Services Unallocated Reserve	441,600	
Unallocated Reserve	441,600	
Chief Planning Officer	(56,400)	
Contractual Services	26,500	
Personnel	(73,600)	
Supplies & Other	(9,300)	
Energy, Research & Innovation Contractual Services	(344,700) (400,000)	
Personnel	2,300	
Supplies & Other	53,000	
Facility Operations	584,000	
Contractual Services		Increase in GDI contract for facility cleaning services and increase in usage of various facility maintenance contracts.
Personnel	(205,500)	
Supplies & Other	(195,500)	
Field Service Operations	694,200	
Contractual Services	(325,000)	
Personnel	847,200	Adjustment for increase in overtime, apprentices, and benefits.
Supplies & Other	172,000	
Fleet Operations	(153,100)	
Contractual Services	(250,000)	
Personnel	85,900	
Supplies & Other	11,000	
HazMat	12,000	
Personnel	57,000	
Supplies & Other	(45,000)	
Info Technology Business Applications	(122,700)	
Contractual Services	(230,400)	
Personnel	7,700	
Supplied V. Other	100,000	
Supplies & Other Info Technology Enterprise Applications	134,500	

Explanation of Key Items O Reallocation from Supplies & Other to cover the increase in telecom expenses (Frontier and AT&T). O The Microsoft Enterprise Agreement budget was higher than the negotiated contract amount (the monthly expense is 40% less than the budget). O O O O O O O O O O O O O
0 Reallocation from Supplies & Other to cover the increase in telecom expenses (Frontier and AT&T). 1 The Microsoft Enterprise Agreement budget was higher than the negotiated contract amount (the monthly expense is 40% less than the budget). 1 O O O O O O O O O O O O O O O O O O
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 Dye Testing contract renegotiated with Applied Science (CS-236) and had activity this year (\$675K). Lower than projected volumes for Good Sewer Metering, CDM Smith (\$400K).
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	Total	
	4th Quarter	
	FY 2021	
Departmental and Account Level Amendments	Amendments	Explanation of Key Items
Supplies & Other	(45,200)	
Conner Pumping Station	(100,000)	
Contractual Services	(10,000)	
Supplies & Other	(40,000)	
Utilities	(50,000)	
Connor Creek Combined Sewer Overflow	935,700	
Contractual Services	130,600	
Supplies & Other	805,100	Increased pace of maintenance projects realized through utilization of Job Order Contracts and
Faiming Domina Chatian	435.000	Meter maintenance contract.
Fairview Pumping Station	425,000	
Supplies & Other Utilities	(35,000)	
	460,000	
Freud Pumping Station	180,000 60,000	
Supplies & Other Utilities	120,000	
Hubble Southfield CSO	411,400	
Chemicals	(12,000)	
Contractual Services	45,100	
Supplies & Other	378,300	
Industrial Waste Control	251,700	
Chemicals	200	
Personnel	264,700	
Supplies & Other	(13,200)	
Leib Combined Sewer Overflow	625,000	
Chemicals	12,000	
Contractual Services	26,800	
Supplies & Other	586,200	Increased pace of maintenance projects realized through utilization of Job Order Contracts and
		Meter maintenance contract.
Northeast Pumping Station	417,000	
Supplies & Other	327,000	
Utilities	90,000	
Oakwood Combined Sewer Overflow	247,000	
Contractual Services	22,000	
Supplies & Other	225,000	
Oakwood Pumping Station	(120,000)	
Contractual Services	(40,000)	
Supplies & Other	(100,000)	
Utilities	20,000	
Puritan Fenkell Combined Sewer Overflow	22,400	
Contractual Services	22,600	
Supplies & Other	(200)	
St Aubin Combined Sewer Overflow Contractual Services	208,600	
Supplies & Other	20,200 188,400	
Wastewater Dewatering Process	153,900	
Chemicals	110,000	
Contractual Services	65,200	
Personnel	67,000	
Supplies & Other	(88,300)	
Wastewater Director	348,800	
Contractual Services	149,000	
Personnel	213,700	
Supplies & Other	(13,900)	
Wastewater Engineering	123,100	
Capital Program Allocation	36,000	
Personnel	90,800	
Supplies & Other	(3,700)	
Wastewater Fire Damage	(560,000)	
Supplies & Other	(560,000)	Adjustment for the portion of the insurance deductible that will be expended in FY 2022.
Wastewater Incineration Process	128,500	
Chemicals	60,000	
Contractual Services	(148,900)	
Personnel	130,400	
Supplies & Other Wastewater Laboratories	87,000 (418,300)	

	Total 4th Quarter	
	4th Quarter FY 2021	
Departmental and Account Level Amendments	Amendments	Explanation of Key Items
Chemicals	(27,800)	
Contractual Services	(89,400)	
Personnel	(336,600)	
Supplies & Other	35,500	
Wastewater Operations	(5,191,900)	
Contractual Services	(1,489,000)	A higher percentage of the skilled labor contract was applied to Contractual Transition Services (Personnel) than was planned when the FY 2021 budget was developed.
Personnel	(252,700)	
Supplies & Other		Facilities maintenance reduced for HVAC and concrete repairs
Utilities		Operational changes as well as repairs resulted in significant savings for Water & Natural Gas
Wastewater Primary Process	241,400	
Chemicals	155,000	
Contractual Services	(133,300)	
Personnel	20,100	
Supplies & Other	199,600	
Wastewater Process Control	(1,366,700)	
Chemicals	700	
Contractual Services	(1,070,000)	The use of contract services has been reduced as GLWA staff has taken on more responsibility.
Personnel	(15,500)	
Supplies & Other	(281,900)	
Wastewater Secondary Process	(446,200)	
Chemicals	(325,700)	
Personnel	291,700	
Supplies & Other	(412,200)	
Wastewater System Operations Unallocated Reserve	4,905,900	
Unallocated Reserve		The increase is primarily due to savings realized in Utilities and Contractual Services.
Woodmere Pumping Station	(30,000)	
Supplies & Other	(30,000)	
Water System Operations	0	
Adams Road Pumping Station	90,000	
Supplies & Other	(50,000)	
Utilities	140,000	
COO - Water Operations & Field Services	3,400	
Contractual Services	(10,000)	
Personnel	1,400	
Supplies & Other	12,000	
Franklin Road Pumping Station	51,000	
Supplies & Other	(60,000)	
Utilities	111,000	
Haggerty Road Pumping Station	70,000	
Utilities	70,000	
Imlay Pumping Station	50,000	
Supplies & Other	50,000	
Joy Road Pumping Station	(10,000)	
Supplies & Other	(50,000)	
Utilities	40,000	
Lake Huron Water Plant	(160,300)	
Chemicals	120,000	Delaying the ground and ground of the leases of the control of the first of the fir
Contractual Services	(580,000)	Delay in the request and renewal of the lagoon sludge removal contract. Expenses related to the contract are projected to be higher in FY 2022.
Personnel	129,300	
Supplies & Other	20,400	
Utilities	150,000	
Michigan Ave Pumping Station	14,000	
Utilities	14,000	
North Service Center Pumping Station	(90,000)	
Supplies & Other	(230,000)	
Utilities	140,000	
Northeast Water Plant	150,700	
Capital Program Allocation	60,000	
Chemicals	220,000	

	Total	
	4th Quarter	
	FY 2021	
Departmental and Account Level Amendments	Amendments	Explanation of Key Items
Contractual Services	(755,000)	Alum sludge hauling and removal contract experienced a delay in the estimated start date for
		change order number 3 which will cause a fluctuation of expenses for the upcoming fiscal year.
Personnel	166,700	
Supplies & Other	114,000	
Utilities	345,000	
Northwest Pumping Station	30,000	
Utilities	30,000	
Rochester Pumping Station	120,000	
Utilities	120,000	
Schoolcraft Pumping Station	70,000	
Supplies & Other	20,000	
Utilities	50,000	
Southwest Water Plant	(917,100)	
Chemicals	320,000	Alice alicelate have been assessed assessed a section and a state assessed at the section at all at all at the section at all at all at the section at all at all at the section at all
Contractual Services	(1,500,000)	Alum sludge hauling and removal contract experienced a delay in the estimated start date for change order number 3 which will cause a fluctuation of expenses for the upcoming fiscal year.
		change order number 5 which will cause a nucluation of expenses for the upcoming fiscal year.
Personnel	92,900	
Supplies & Other	(140,000)	
Utilities	310,000	
Springwells Water Plant	1,049,400	
Chemicals	170,000	
Contractual Services	120,000	
Personnel	288,400	
Supplies & Other	(169,000)	
Utilities	640,000	Budget added for electrical and gas usage based on review of historical spend and projected FY
		2021 utilization.
Water Director	(59,500)	
Contractual Services	(13,000)	
Personnel Supplies & Other	(15,100) (31,400)	
Water Engineering	(139,200)	
Capital Program Allocation	(250,000)	
Contractual Services	115,000	
Personnel	11,800	
Supplies & Other	(16,000)	
Water Quality	262,700	
Chemicals	80,000	
Contractual Services	(20,000)	
Personnel	231,700	
Supplies & Other	(29,000)	
Water System Operations Unallocated Reserve	(920,300)	
Unallocated Reserve	(920,300)	Unallocated Reserve was used for the refinement of various account categories within the Water
		Operations area, primarily Chemicals and Utilities in which usage which can vary from year to
Water Works Park	45,200	year.
Chemicals	60,000	
Contractual Services	230,000	
Personnel	4,200	
Supplies & Other	(179,000)	
Utilities	(70,000)	
West Service Center Pumping Station	40,000	
Supplies & Other	(50,000)	
Utilities	90,000	
Wick Road Pumping Station	140,000	
Supplies & Other	20,000	
Utilities Vacilanti Rumping Station	120,000	
Ypsilanti Pumping Station Contractual Services	110,000 (40,000)	
Utilities	150,000	
Grand Total	150,000	1
Totals may be off due to rounding		



ADDENDUM 2

Supplemental Information -

Enterprise-wide Operations & Maintenance Account Type and Department Level Amendments

The table in Addendum 2 summarizes the FY 2021 fourth quarter budget amendments for operations & maintenance by the major expense categories (account type). The explanations for the larger items can be found in Addendum 1.

	Total 4th Quarter FY 2021
Expense Categories and Departmental Level Amendments	Amendments
Capital Program Allocation	(117,900)
Chief Operating Officer Wastewater	(36,000)
Northeast Water Plant	60,000
Owners' Representative	72,100
Wastewater Engineering	36,000
Water Engineering	(250,000)
Chemicals	942,400
Hubble Southfield CSO	(12,000)
Industrial Waste Control	200
Lake Huron Water Plant	120,000
Leib Combined Sewer Overflow	12,000
Northeast Water Plant	220,000
Southwest Water Plant	320,000
Springwells Water Plant	170,000
Wastewater Dewatering Process	110,000
Wastewater Incineration Process	60,000
Wastewater Laboratories	(27,800)
Wastewater Primary Process	155,000
Wastewater Process Control	700
Wastewater Secondary Process	(325,700)
Water Quality	80,000
Water Works Park	60,000
Contractual Services	(6,237,700)
7 Mile Combined Sewer Overflow	9,600
Asset Management	(1,281,600)
Baby Creek Combined Sewer Overflow	23,600
Belle Isle Combined Sewer Overflow	5,900

	Total
	4th Quarter
	FY 2021
Expense Categories and Departmental Level Amendments	Amendments
Capital Improvement Planning	1,648,100
Chief Administrative Officer	(265,200)
Chief Operating Officer Wastewater	(844,000)
Chief Planning Officer	26,500
Conner Pumping Station	(10,000)
Connor Creek Combined Sewer Overflow	130,600
COO - Water Operations & Field Services	(10,000)
Energy, Research & Innovation	(400,000)
Enterprise Risk Management and Safety	(274,100)
Enterprise Risk Mgt. Insurance Fund	674,200
Facility Operations	985,000
Field Service Operations	(325,000)
Financial Planning & Analysis	12,000
Fleet Operations	(250,000)
Hubble Southfield CSO	45,100
Info Technology Business Applications	(230,400)
Info Technology Enterprise Applications	82,100
Info Technology Infrastructure	1,010,000
Info Technology Service Delivery	295,000
InfoTechnology Project Management Office	600
Lake Huron Water Plant	(580,000)
Leib Combined Sewer Overflow	26,800
Logistics and Materials	6,700
Northeast Water Plant	(755,000)
Oakwood Combined Sewer Overflow	22,000
Oakwood Pumping Station	(40,000)
OD Administration	(199,700)
OD Compensation	52,800
OD Organizational Wellness	111,800
OD Performance	98,200
OD Recruiting	63,800
OD Talent Management	101,700
OD Training	73,800
Office of the CIO	(50,000)
Owners' Representative	(57,800)

	Total 4th Quarter
	FY 2021
Expense Categories and Departmental Level Amendments	Amendments
Procurement Director	41,000
Public Affairs	(100,000)
Public Finance	16,000
Puritan Fenkell Combined Sewer Overflow	22,600
Security and Integrity	(100,000)
Southwest Water Plant	(1,500,000)
Springwells Water Plant	120,000
St Aubin Combined Sewer Overflow	20,200
Systems Analytics	(1,081,700)
Systems Operations Control	(700,000)
Systems Planning	(464,500)
Wastewater Dewatering Process	65,200
Wastewater Director	149,000
Wastewater Incineration Process	(148,900)
Wastewater Laboratories	(89,400)
Wastewater Operations	(1,489,000)
Wastewater Primary Process	(133,300)
Wastewater Process Control	(1,070,000)
Water Director	(13,000)
Water Engineering	115,000
Water Quality	(20,000)
Water Works Park	230,000
Ypsilanti Pumping Station	(40,000)
Personnel	2,683,000
Asset Management	(63,700)
BDF, COF & Hauling	(134,000)
Capital Improvement Planning	(62,200)
Chief Administrative Officer	8,800
Chief Executive Officer	900
Chief Financial Officer	1,800
Chief Operating Officer Wastewater	(61,200)
Chief Planning Officer	(73,600)
Combined Sewer Overflow	(387,300)
COO - Water Operations & Field Services	1,400
Data Analytics & Internal Audit	3,400

	Total 4th Quarter
Expense Categories and Departmental Level Amendments	FY 2021 Amendments
Energy, Research & Innovation	2,300
Enterprise Risk Management and Safety	2,300
Facility Operations	(205,500)
Field Service Operations	847,200
Financial Planning & Analysis	23,500
Financial Reporting & Accounting	38,400
Fleet Operations	85,900 57,700
General Counsel	57,700
HazMat	57,000
Industrial Waste Control	264,700
Info Technology Business Applications	7,700
Info Technology Enterprise Applications	(70,900)
Info Technology Infrastructure	11,500
Info Technology Security & Risk	900
Info Technology Service Delivery	92,200
InfoTechnology Project Management Office	4,100
Lake Huron Water Plant	129,300
Logistics and Materials	114,300
Northeast Water Plant	166,700
OD Administration	(2,848,000)
OD Compensation	189,200
OD Organizational Wellness	342,100
OD Performance	324,100
OD Recruiting	345,800
OD Talent Management	461,300
OD Training	1,157,400
Office of the CIO	51,800
Owners' Representative	(88,600)
Procurement Director	201,300
Public Affairs	2,700
Public Finance	(18,200)
Reporting and Compliance	11,600
Security and Integrity	495,700
Southwest Water Plant	92,900
Springwells Water Plant	288,400

	Total 4th Quarter FY 2021
Expense Categories and Departmental Level Amendments	Amendments
Systems Analytics	(2,100)
Systems Operations Control	457,800
Systems Planning	(94,700)
Transformation	5,000
Treasury	2,400
Wastewater Dewatering Process	67,000
Wastewater Director	213,700
Wastewater Engineering	90,800
Wastewater Incineration Process	130,400
Wastewater Laboratories	(336,600)
Wastewater Operations	(252,700)
Wastewater Primary Process	20,100
Wastewater Process Control	(15,500)
Wastewater Secondary Process	291,700
Water Director	(15,100)
Water Engineering	11,800
Water Quality	231,700
Water Works Park	4,200
Supplies & Other	(1,675,000)
7 Mile Combined Sewer Overflow	95,700
Adams Road Pumping Station	(50,000)
Asset Management	(29,200)
Baby Creek Combined Sewer Overflow	1,300
Belle Isle Combined Sewer Overflow	43,000
Belle Isle Pumping Station	(20,000)
Blue Hill Pumping Station	(60,000)
Capital Improvement Planning	(4,600)
Chief Administrative Officer	8,200
Chief Operating Officer Wastewater	54,300
Chief Planning Officer	(9,300)
Combined Sewer Overflow	(45,200)
Conner Pumping Station	(40,000)
Connor Creek Combined Sewer Overflow	805,100
COO - Water Operations & Field Services	12,000
Energy, Research & Innovation	53,000

ADDENDUM 2

Supplemental Information Enterprise-wide Operations & Maintenance Account Type and Department Level Amendments

	Total 4th Quarter
	FY 2021
Expense Categories and Departmental Level Amendments	Amendments
Enterprise Risk Management and Safety	(17,000)
Facility Operations	(195,500)
Fairview Pumping Station	(35,000)
Field Service Operations	172,000
Financial Planning & Analysis	(800)
Financial Reporting & Accounting	1,200
Fleet Operations	11,000
Franklin Road Pumping Station	(60,000)
Freud Pumping Station	60,000
General Counsel	(55,000)
HazMat	(45,000)
Hubble Southfield CSO	378,300
Imlay Pumping Station	50,000
Industrial Waste Control	(13,200)
Info Technology Business Applications	100,000
Info Technology Enterprise Applications	123,300
Info Technology Infrastructure	(1,010,000)
Info Technology Service Delivery	(380,400)
InfoTechnology Project Management Office	(600)
Joy Road Pumping Station	(50,000)
Lake Huron Water Plant	20,400
Leib Combined Sewer Overflow	586,200
Logistics and Materials	183,900
North Service Center Pumping Station	(230,000)
Northeast Pumping Station	327,000
Northeast Water Plant	114,000
Oakwood Combined Sewer Overflow	225,000
Oakwood Pumping Station	(100,000)
OD Administration	(399,400)
OD Organizational Wellness	19,500
OD Performance	3,500
OD Recruiting	14,800
OD Talent Management	6,300
OD Training	189,000
Owners' Representative	(14,300)

ADDENDUM 2

Supplemental Information Enterprise-wide Operations & Maintenance Account Type and Department Level Amendments

	Total 4th Quarter FY 2021
Expense Categories and Departmental Level Amendments	Amendments
Procurement Director	(39,000)
Public Affairs	(200,000)
Public Finance	100
Puritan Fenkell Combined Sewer Overflow	(200)
Schoolcraft Pumping Station	20,000
Security and Integrity	(57,600)
Southwest Water Plant	(140,000)
Springwells Water Plant	(169,000)
St Aubin Combined Sewer Overflow	188,400
Systems Analytics	(2,800)
Systems Operations Control	200,000
Systems Planning	(75,000)
Treasury	100
Wastewater Dewatering Process	(88,300)
Wastewater Director	(13,900)
Wastewater Engineering	(3,700)
Wastewater Fire Damage	(560,000)
Wastewater Incineration Process	87,000
Wastewater Laboratories	35,500
Wastewater Operations	(840,200)
Wastewater Primary Process	199,600
Wastewater Process Control	(281,900)
Wastewater Secondary Process	(412,200)
Water Director	(31,400)
Water Engineering	(16,000)
Water Quality	(29,000)
Water Works Park	(179,000)
West Service Center Pumping Station	(50,000)
Wick Road Pumping Station	20,000
Woodmere Pumping Station	(30,000)
Unallocated Reserve	3,959,600
Administrative Services Unallocated Res	(467,600)
Centralized Services Unallocated Res	441,600
Wastewater System Operations Unallocated	4,905,900
Water System Operations Unallocated	(920,300)

ADDENDUM 2

Supplemental Information Enterprise-wide Operations & Maintenance Account Type and Department Level Amendments

	Total 4th Quarter
	FY 2021
Expense Categories and Departmental Level Amendments	Amendments
Utilities	445,600
Adams Road Pumping Station	140,000
BDF, COF & Hauling	(38,000)
Conner Pumping Station	(50,000)
Fairview Pumping Station	460,000
Franklin Road Pumping Station	111,000
Freud Pumping Station	120,000
Haggerty Road Pumping Station	70,000
Joy Road Pumping Station	40,000
Lake Huron Water Plant	150,000
Michigan Ave Pumping Station	14,000
North Service Center Pumping Station	140,000
Northeast Pumping Station	90,000
Northeast Water Plant	345,000
Northwest Pumping Station	30,000
Oakwood Pumping Station	20,000
Rochester Pumping Station	120,000
Schoolcraft Pumping Station	50,000
Southwest Water Plant	310,000
Springwells Water Plant	640,000
Systems Analytics	3,600
Wastewater Operations	(2,610,000)
Water Works Park	(70,000)
West Service Center Pumping Station	90,000
Wick Road Pumping Station	120,000
Ypsilanti Pumping Station	150,000
Grand Total	0

Totals may be off due to rounding

Great Lakes Water Authority

Resolution 2021 - 245

Resolution Adopting the Budget Amendments through the Fourth Quarter of FY 2021

By Board Member:

- WHEREAS The Great Lakes Water Authority ("GLWA" or the "Authority") assumed the operation of the regional water and sewer systems on January 1, 2016 (the "Effective Date") pursuant to Water System and Sewer System Lease Agreements between the GLWA and the City of Detroit dated June 12, 2015; and
- WHEREAS In accordance with the by-laws of the GLWA, further defined by its budget amendment policy, the Board shall amend the budget as needed based upon a quarterly report from the Chief Financial Officer; and
- **WHEREAS** The GLWA Board adopted the FY 2021 budget on March 11, 2020 for the twelvemonth fiscal year beginning July 1, 2020;
- WHEREAS Following a review of the budget amendment report through the FY 2021 Fourth Quarter, the appropriations established with the adoption of the general operating budget for the water system and the sewer system are amended as shown in the table below;

General Operating				
Appropriation Category	Water	System	Sewer S	ystem
Revenues	Adopted	Ame nde d	Adopted	Amended
Suburban Wholesale Customer Charges	\$ 314,252,200	\$ 317,033,600	\$ 277,011,800	\$ 272,453,500
Retail Service Charges	22,555,400	21,925,500	190,112,100	187,959,700
Industrial Waste Control Charges	-	-	8,775,400	7,684,700
Pollutant Surcharges	-	-	5,262,800	6,107,600
Investment Earnings	4,834,400	3,955,700	5,589,200	2,778,100
Other Revenues	-	229,000	-	2,195,300
Total Revenues	\$ 341,642,000	\$ 343,143,800	\$ 486,751,300	\$479,178,900
Revenue Requirements				
Operations & Maintenance Expense	\$ 137,127,300	\$ 134,127,300	\$ 184,946,100	\$ 182,296,000
General Retirement System Legacy Pension	6,048,000	No Change	10,824,000	No Change
Debt Service	143,189,900	137,436,000	209,739,900	201,780,400
General Retirement System Accelerated Pension	6,268,300	No Change	11,620,700	No Change
Extraordinary Repair & Replacement Deposit	-	-	-	-
Water Residential Assistance Program Contributi	1,669,400	No Change	2,415,100	No Change
Lease Payment	22,500,000	No Change	27,500,000	No Change
Operating Reserve Deposit	876,600	-	-	-
DWSD Budget Shortfall Pending	-	-	-	-
Improvement & Extension Fund Transfer	23,962,500	35,094,800	 39,705,500	42,742,700
Total Revenue Requirements	\$ 341,642,000	\$ 343,143,800	\$ 486,751,300	\$479,178,900

WHEREAS Following a review of the budget amendment report through the FY 2021 Fourth Quarter, the appropriations established with the adoption of the improvement and extension fund budget for the water system and the sewer system are amended as shown in the table below;

Improvement & Extension Fund										
Appropriation Category		Water	Sys	stem		Sewer System				
Revenues	1	Adopte d		Ame nde d			Adopted	1	Ame nde d	
Transfers In from General Operating	\$	23,962,500	\$	35,094,800		\$	39,705,500	\$	42,742,700	
Receipt of DWSD Shortfall Loan		-		-			19,288,300	N	o Change	
Earnings on Investments		-		3,048,400			-		1,401,300	
Net Use of Reserves		68,929,500		90,464,300	_		3,987,300		(1,328,800)	
Total Revenues	\$	92,892,000	\$	128,607,500		\$	62,981,100	\$	62,103,500	
Expenditures					•					
Water/Sewer System Revenue Transfers Out	\$	-	\$	3,048,400		\$	-	\$	1,401,300	
Capital Spending - Other		-		4,922,800			-		2,460,700	
Capital Outlay		17,892,000		10,559,100			20,481,100		14,270,300	
Revenue Financed Capital - Opoerating										
Transfer to Construction Fund		75,000,000		110,077,200	_		42,500,000		43,971,200	
Total Expenditures	\$	92,892,000	\$	128,607,500	•	\$	62,981,100	\$	62,103,500	

WHEREAS Following a review of the budget amendment report through the FY 2021 Fourth Quarter, the appropriations established with the adoption of the construction fund budget for the water system and the sewer system are amended as shown in the table below;

Construction Fund								
Appropriation Category	Water	System	Sewer System					
Revenues	Adopted	Amended	Adopted	Ame nde d				
Transfer from Improvement & Extension Fund	\$ 75,000,000	110,077,200	\$ 42,500,000	43,971,200				
Bond Proceeds	-	-	-	-				
Grant Revenues (SRF Loans)	12,365,800	No Change	33,200,000	No Change				
Earnings on Investments	820,400	26,800	497,700	27,600				
Net Use of Reserves	22,486,800	7,514,600	 6,781,300	7,260,900				
Total Revenues	\$110,673,000	\$ 129,984,400	\$ 82,979,000	\$ 84,459,700				
Expenditures								
Project Expenditures	\$ 110,673,000	129,984,400	\$ 82,979,000	84,459,700				
Total Expenditures	\$ 110,673,000	\$ 129,984,400	\$ 82,979,000	\$ 84,459,700				
Capital Spending Ratio	75.0%	91.4%	75.0%	78.6%				

WHEREAS The GLWA Audit Committee reviewed the budget amendments at its meetings on June 21, 2021; and

WHEREAS An affirmative vote of 5 Board Members is necessary for the adoption of this Resolution,

NOW THEREFORE BE IT:

RESOLVED That the GLWA Board approves the FY 2021 Fourth Quarter Budget Amendments; and be it finally

RESOLVED That the Chief Executive Officer, and the Chief Financial Officer/Treasurer are authorized to take such other action as may be necessary to accomplish the intent of this resolution.

Page 42 AGENDA ITEM #7Ai



Financial Services Audit Committee Communication

Date: June 21, 2021

To: Great Lakes Water Authority Audit Committee

From: Lisa L Mancini, Financial Planning & Analysis Manager

Re: FY 2021 Fourth Quarter Budget Amendments through June 30, 2021 –

Analysis of FY 2021 Personnel Costs

Background: A report of the FY 2021 Fourth Quarter Budget Amendments has been prepared for presentation at the June 21, 2021 Audit Committee meeting. In addition to the appropriation level budget amendments, which require approval from the Board of Directors, the report includes supplemental tables related to the operations and maintenance (O&M) budget amendments. These tables are for informational purposes and are not covered in the resolution for the quarterly budget amendments.

Analysis: Included in the FY 2021 Fourth Quarter Budget Amendments report is **Table 1E** - **Supplemental Information** - **Enterprise-wide Operations & Maintenance Account Type**. This table presents the operations & maintenance budget by the major expense categories.

Table 1E - Supplemental Information - Enterprise-wide Operations & Maintenance Account Type

O&M Expense Categories	FY 2021 Board Adopted	Total 1st Quarter FY 2021	Total 2nd Quarter FY 2021	Total 3rd Quarter FY 2021		Total 4th Quarter FY 2021		FY 2021 Amended	Δ.	FY 2021
(Account Type)	Budget	Amendments	Amendments	Amendments		Amendments		Budget		4/30/2021
Personnel Costs	\$ 110,333,100	\$ (1,527,100)	\$ (123,800)	\$ (265,900)	5	\$ 2,683,000	\$	111,099,300	\$	89,786,400
Utilities	51,937,000	-	-	-		445,600		52,382,600		42,879,200
Chemicals	13,419,800	-	-	-		942,400		14,362,200		11,626,300
Supplies & Other	38,620,800	400,000	(1,521,300)	(229,700)		(1,675,000)		35,594,800		23,165,100
Contractual Services	106,154,600	(1,372,200)	2,005,000	(572,600)		(6,237,700)		99,977,100		74,043,400
Capital Program Allocation	(3,447,700)	-	127,500	(8,500)		(117,900)		(3,446,600)		(2,575,000)
Shared Services	(3,412,900)	-	(1,117,100)	18,000		-		(4,512,000)		(3,790,200)
Unallocated Reserve	8,468,700	(3,150,800)	629,700	1,058,700		3,959,600		10,965,900		-
Total Per	\$ 322,073,400	\$ (5,650,100)	\$ -	\$ -	5	§ -	\$.	316,423,300	\$2	35,135,200

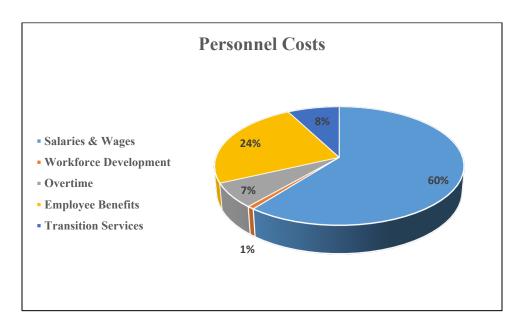
One of the expense categories represented in Table 1E is *Personnel Costs*. The following table and pie chart provide a breakdown of the account types that are included in the *Personnel Costs* expense category.

The table below shows the amount budgeted for each account type and the related budget amendments for each quarter of FY 2021. The total overall Personnel Costs expense, through April 30, 2021, is at 81% of the FY 2021 amended budget. This is on target with the pro-rata benchmark of 83% (10 of 12 months of the fiscal year).

Personnel Costs by Account Type

Personnel Costs	FY 2021 Board Adopted Budget	Total st Quarter FY 2021 mendments	Total and Quarter FY 2021 mendments	Total Ord Quarter FY 2021 .mendments	Total 4th Quarter FY 2021 Amendments	FY 2021 Amended Budget	FY 2021 ctivity Thru 4/30/2021	Percent Year-to- Date
Salaries & Wages	\$ 70,761,000	\$ (933,100)	\$ 1,200	\$ 285,400	\$ (2,808,600)	\$ 67,305,900	\$ 54,160,900	80%
Workforce Development	948,400	-	-	(12,800)	(40,900)	894,700	695,200	78%
Overtime	6,988,000	-	25,200	57,600	416,500	7,487,300	6,194,400	83%
Employee Benefits	24,475,400	(294,000)	49,800	177,100	2,446,600	26,854,900	21,878,700	81%
Transition Services	7,160,300	(300,000)	(200,000)	(773,200)	2,669,400	8,556,500	6,857,200	80%
Total Personnel Costs	\$ 110,333,100	\$ (1,527,100)	\$ (123,800)	\$ (265,900)	\$ 2,683,000	\$ 111,099,300	\$ 89,786,400	81%

The chart below shows the percentage of each account type as it relates to the total personnel amended budget.



Page 44 AGENDA ITEM #7B



Financial Services Audit Committee Communication

Date: June 21, 2021

To: Great Lakes Water Authority Audit Committee

From: Kim Garland, CPA, Reporting & Compliance Manager

Re: Resolution to Adopt the 96-inch Water Transmission Main (WTM) Relocation Project

FY 2022 Drinking Water State Revolving Fund Project Plan

Background: The Great Lakes Water Authority (the "GLWA") has identified the 96-inch Water Transmission Main Relocation Project for submittal to the Michigan Department of Environment, Great Lakes and Energy (EGLE) for the State Revolving Fund financing program for funding in the state's 2022 fiscal year. The deadline for submitting all Drinking Water State Revolving Fund (DWSRF) project plans to EGLE is July 1, 2021. Prior to submitting the project plan, GLWA will hold the required public hearing for the 96-inch Water Transmission Main Relocation Project Plan on June 23, 2021, at 2:00 pm.

The project is comprised of the relocation of approximately 2.4 miles of 96-inch WTM around the closed G&H industrial landfill (Landfill) located south of 23 Mile Road and west of Ryan Road. The new, relocated 96-inch WTM will connect to the existing water transmission system near the intersection of 24 Mile Road and the Macomb Orchard Trail to the north and at the intersection of Dequindre Road and Hamlin Road to the south. Included in the project is the installation of several isolation valves and the abandonment of a portion of existing 96-inch WTM under the landfill. The total cost of this project is currently estimated at \$170,361,000.

Justification: This project is necessary because the Landfill was placed on the United States Environmental Protection Agency (USEPA) Superfund National Priorities List in 1983, and approximately 1,660 feet of the existing 96-inch WTM falls within its limits.

GLWA is seeking low interest loan assistance through the DWSRF program for this project. Although the EGLE interest rate for FY 2022 will not be determined until October 2021, the current year's interest rate of 1.875% is less than the present conventional revenue bond interest rates. Based on the estimated project amount of \$170 million, GLWA could save an estimated \$66 million in interest costs and avoided issuance costs, based on a similar open

market revenue bond with a 30-year term and 3.50% interest rate, over the life of the 30-year bond issue. This will offer savings to both GLWA and its members.

Budget Impact: Debt service for this project is anticipated to begin in FY 2023 and will be included as part of the FY 2023 financial plan.

Proposed Action: Audit Committee recommends that the Great Lakes Water Authority Board of Directors approve the attached Resolution to Adopt the 96-inch Water Transmission Main Relocation Project - FY 2022 Drinking Water State Revolving Fund Project Plan at its regularly scheduled meeting on June 23, 2021.

..Title

Resolution to Adopt the 96-inch Water Transmission Main (WTM) Relocation Project FY 2022 Drinking Water Revolving Fund (DWSRF) Project Plan

..Body

Agenda of: June 23, 2021

Item No.: 2021-240

Amount: N/A

TO: The Honorable

Board of Directors

Great Lakes Water Authority

FROM: Sue F. McCormick

Chief Executive Officer

DATE: June 23, 2021

RE: Resolution to Adopt the 96-inch Water Transmission Main (WTM)

Relocation Project FY 2022 Drinking Water Revolving Fund (DWSRF)

Project Plan

MOTION

Upon recommendation of Nicolette Bateson, Chief Financial Officer/Treasurer, and Cheryl Porter, Chief Operating Officer-Water & Field Services, the Board of Directors of the Great Lakes Water Authority, approves the attached Resolution to Adopt the 96-inch Water Transmission Main (WTM) Relocation Project FY 2022 Drinking Water Revolving Fund (DWSRF) Project Plan; and authorizes the CEO to take such action as may be necessary to accomplish the intent of this vote.

BACKGROUND

The existing 96-inch WTM is part of GLWA's overall drinking water transmission system that conveys treated water from the Lake Huron Water Treatment Plant (LHWTP) to several member partner communities in Lapeer, Macomb, and Oakland Counties. The 96-inch WTM was constructed in the mid-1960s and was placed into service in December 1967. It is over 32 miles long and is constructed of prestressed concrete cylinder pipe (PCCP). The main purpose of the project is to relocate the portion of the existing 96-inch

WTM that is currently located within the closed G&H Industrial Landfill property near the intersection of 23 Mile Road and Ryan Road. The Landfill was placed on the USEPA Superfund National Priorities List in 1983, and approximately 1,660 feet of the existing 96-inch WTM falls within its limits. The new, relocated 96-inch WTM will connect to the existing water transmission system near the intersection of 24 Mile Road and the Macomb Orchard Trail to the north and at the intersection of Dequindre Road and Hamlin Road to the south. Included in the project is the installation of several isolation valves and the abandonment of a portion of existing 96-inch WTM under the landfill. The total cost of this project is currently estimated at \$170,361,000.

GLWA wishes to utilize loans available under the State of Michigan Drinking Water Revolving Fund (DWSRF) for this project. A public hearing on the project plan was held on June 23, 2021, at 2:00 pm. The attached Resolution approves the project plan, directs GLWA staff to address all public comments, prepare a responsiveness summary, and publish the final Project Plan; authorizes GLWA's CEO to transmit the final FY 2022 DWSRF Project Plan to the Michigan Department of Environment, Great Lakes, and Energy (EGLE); and to secure a DWSRF loan for the project.

JUSTIFICATION

The presence of the 96-inch WTM through the Landfill prevents possible containment at the site. To protect water quality and help alleviate ongoing environmental impacts, GLWA plans to relocate the 96-inch WTM to outside the Landfill boundary. GLWA is seeking low interest loan assistance through the DWSRF program for these projects. Although the EGLE interest rate for FY 2022 will not be determined until October 2021, the current year's interest rate of 1.875% is less than the present conventional revenue bond interest rates. Based on the estimated project amount of \$170 million, GLWA could save an estimated \$66 million in interest costs and avoided issuance costs, based on a similar open market revenue bond with a 30-year term and 3.50% interest rate, over the life of the 30-year bond issue. This will offer savings to both GLWA and its members.

BUDGET IMPACT

Debt service is anticipated to begin in FY 2023 for this project and will be included as part of the FY 2023 financial plan.

COMMITTEE REVIEW

This matter was presented to the GLWA Audit Committee at its June 21, 2021 meeting. The Audit Committee [insert action] that the Great Lakes Water Authority Board of

Director approve the attached Resolution to Adopt the 96-inch Water Transmission Main Relocation Project - FY 2022 Drinking Water State Revolving Fund Project Plan at its regularly scheduled meeting on June 23, 2021.

SHARED SERVICES IMPACT

This item does not impact the shared services agreement between GLWA and DWSD.

Great Lakes Water Authority Resolution 2021-240

RE: Resolution for the 96-inch Water Transmission Main (WTM) Relocation Project FY 2022 Drinking Water State Revolving Fund (DWSRF) Project Plan

By Board M	Member:
Whereas:	The 96-inch Water Transmission Main Relocation Project Plan for the FY 2022 Drinking Water State Revolving Fund has been prepared by GLWA;
Whereas:	The project is comprised of the relocation of approximately 2.5 miles of 96-inch WTM around the closed G&H industrial landfill located south of 23 Mile Road and west of Ryan;
Whereas:	The 96-inch Water Transmission Main Relocation Project is necessary since the landfill was placed on the USEPA Superfund National Priorities list in 1983, and approximately 1,660 feet of the existing 96-inch WTM falls within its limits;
Whereas:	The project includes the installation of several isolation valves and the abandonment of a portion of the existing WTM under the landfill;
Whereas:	The FY 2022 DWSRF Project Plan has been placed on public notice and a Public Hearing was held on June 23, 2021 at 2:00 p.m. where comments on the recommended project were solicited;
Whereas:	It is the desire of the GLWA Board of Directors to secure low interest loan assistance through the DWSRF program; and
Whereas:	Formal action by the GLWA Board of Directors is needed to adopt the recommended FY 2022 DWSRF Project Plan for the 96-inch Water Transmission Main Relocation Project, as a requirement for participation in the State of Michigan's DWSRF program.
Now There	efore Be It:
Resolved	That this Board hereby accepts the FY 2022 96-inch Water Transmission Main Relocation Project, dated June 23, 2021, and as directs staff members of the GLWA to address all public comments, prepares the responsiveness summary, and publish the final Project Plan; and Be It Further
Resolved	That the Chief Executive Officer (CEO) is authorized to transmit the final FY 2022

DWSRF Project Plan for the 96-inch Water Transmission Main Relocation Project to the Michigan Department of Environment, Great Lakes, and Energy on behalf of the GLWA Board of Directors and take all appropriate steps to secure approval of a low interest loan in accordance with the State of Michigan's DWSRF procedures so that

Adopted by the Great Lakes Water Authority Board on:

the project can proceed expeditiously to construction.

Great Lakes Water Authority 96-inch Water Transmission Main Relocation Project Drinking Water State Revolving Fund Project Plan PUBLIC HEARING June 23, 2021







Proposed Improvements

Great Lakes Water Authority (GLWA) is proposing to relocate approximately 2.5 miles of 96-inch Water Transmission Main (WTM) around the closed G&H industrial landfill (Landfill) located south of 23 Mile Road and west of Ryan Road. The new, relocated 96-inch WTM will connect to the existing water transmission system near the intersection of 24 Mile Road and the Macomb Orchard Trail to the north and at the intersection of Dequindre Road and Hamlin Road to the south. Included in the project is the installation of several isolation valves and the abandonment of a portion of existing 96-inch WTM under the landfill.

Summary of Project Need

The main purpose of the project is to relocate the portion of the existing 96-inch WTM that is currently located within the closed Landfill property near the intersection of 23 Mile Road and Ryan Road. The Landfill was placed on the USEPA Superfund National Priorities List in 1983, and approximately 1,660 feet of the existing 96-inch WTM falls within its limits.

Implementation Alternatives

Eleven implementation alternatives were developed that were narrowed to 4 alternatives (Alternatives 2, 7, 10, 11) considered for final selection.

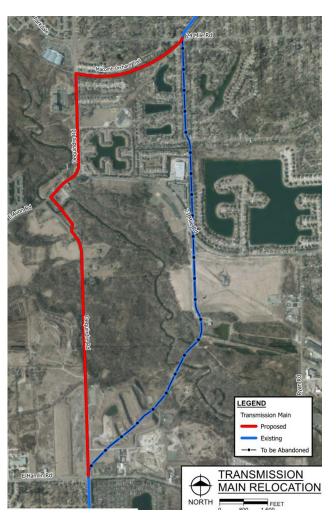


Table 1 – Implementation Alternatives Considered for Final Selection

Component	Alternative 2	Alternative 7	Alternative 10	Alternative 11
Relocate 96-inch WTM	Х	Х	Х	Х
Abandon Existing 96-inch WTM	Х	Х	Х	Х
96-Inch Main Appurtenances Rehabilitation	Х	Х	Х	Х
East Pond Creek Discharge Facility (EPCDF)	Х		Х	Х
Plumbrook Drain Discharge Facility (PDDF)	Х	Х	Х	Х
72-inch WTM Discharge Facility	Х	Х	Х	Х
Temporary Chesterfield Loop Booster Station		Х	Х	
Permanent Chesterfield Loop Booster Station	Х			
Isolation Valve: Romeo	Х	Х	Х	Х
Isolation Valve: 26 Mile Road	Х		Х	Х
Isolation Valve: North Service Center	Х	Х	Х	Х
Full Parallel Main - Rochester BPS to BU-01		Х		
Rochester Loop/Adams Rd Pipeline				Х
Rochester West and WG-02 Laterals-Main				Х

Alternative 2 - CLBPS with 26 Mile Road Pump Station

The concept is to install a new 25-mgd capacity pump station on the Chesterfield Loop Water Main between the Clinton River and Hall Road (M-59, or approximately 20 Mile Road). An existing 42-inch WTM in 24 Mile Road connects to the Rochester Booster Pump Station, which will allow the new Chesterfield Loop Booster Station to supply flows to the Rochester Booster Pump Station during non-growing season shutdown periods.

Alternative 7 - Parallel Main

The concept is to construct the parallel main from 33 Mile Road to the Rochester Booster Pump Station and the new 24 Mile Road Isolation Valve bypass piping before the relocated section of the 96-inch WTM is tied into the existing system. That way, drinking water could be supplied to all member partners using the new 36-inch parallel main while the existing 96-inch WTM is taken out of service to make the connections to the relocated 96-inch WTM.

Alternative 10 - 96-inch Relocated Main "North Service Center Feed"

This alternative is identical to Alternative 2 except the Chesterfield Loop Booster Pump Station is a temporary versus a permanent pumping facility. All other aspects of this alternative are identical to Alternative 2.

Alternative 11 - Extended Adams to Rochester Loop

The concept is to install a new 36-inch pipeline to supply backup flow to the Rochester Booster Pump Station from the existing GLWA water transmission system served by the Adams Road Booster Pump Station, located several miles to the west. The new 36-inch pipeline would extend east along Walton Boulevard from an interconnection with an existing GLWA water main at Waltonshire Court and Walton Boulevard. The pipeline would jog north through Rochester and return to 24 Mile Road and then lead to the Rochester Booster Pump Station.

Table 2. Project Costs of Final Implementation Alternatives

Category	Alternative 2	Alternative 7	Alternative 10	Alternative 11
Total Project Cost	\$186,803,000	\$253,921,000	\$170,361,000	\$269,262,000
Selected Alternative	No	No	Yes	No

Table 3. Estimated Planning-level Cost of Selected Implementation Alternative

Item	Estimated Planning-level Cost (\$)
Member Partner Backup Systems	\$2,169,000
Design, Permitting, Assistance During Construction	\$26,635,000
CMAR Pre-Construction Services	\$500,000
Opinion of Probable Construction Cost	\$141,057,000
Total Project Cost	\$170,361,000

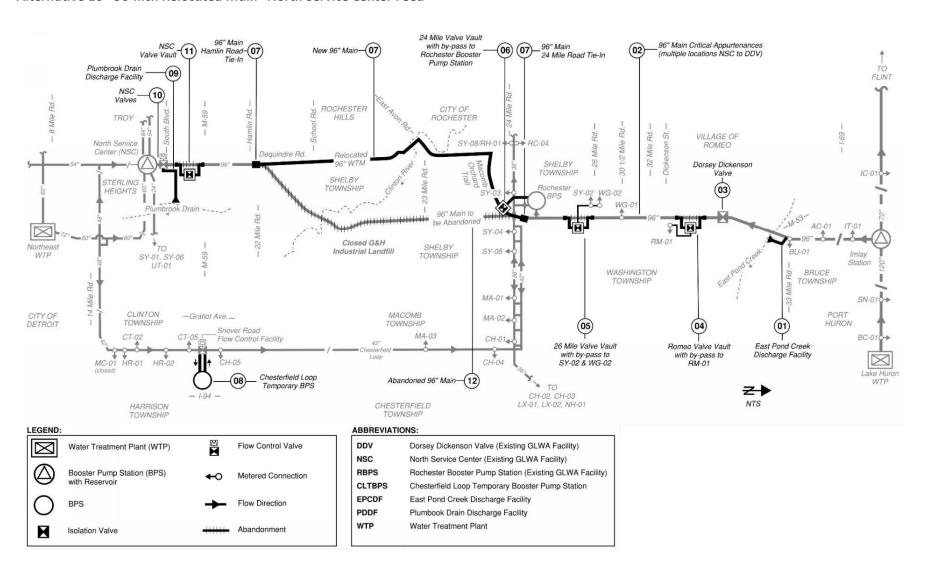
Table 4. User Cost Impact

Item	Cost
Total Cost of Project	\$170,361,000
Annualized Cost of Project (using DWSRF interest rate of 1.875% over 20 years)	\$10,293,500
Service Area Households	1,136,500
Estimated Household User Cost Per Year	+/- \$9.06 / household

Selected Alternative Analysis

The selected alternative, Alternative 10, is shown in the figure below.

Alternative 10 - 96-inch Relocated Main "North Service Center Feed"



Environmental Evaluation

The Project is unlikely to have any adverse impacts on any adjacent properties surrounding the WTM route.

- Precautions will be taken during construction to address traffic, dust, noise, and safety concerns.
- Discussion with environmental agencies are underway to ensure that this project does not impact water quality or affect any state or federally protected species in the area.
- Detailed plans are being incorporated into the design to maintain uninterrupted drinking water to the surrounding communities during construction.

Implementation Schedule

The Project is currently in the design phase.

GLWA has decided to proceed with a Construction Manager At Risk (CMAR) project delivery method using a single prime contracting approach to minimize risks. GLWA plans to select a CMAR Firm to deliver the project in 2021. The CMAR Firm will be contracted during the design phase to provide pre-construction services and to provide a guaranteed maximum price at 90% Design. A portion of the construction will begin in January 2022 while the design is ongoing.

Following is list of key project milestones:

Award of Construction Contract (CMAR): Q3 2021
 Pipeline Construction Start: January 2022
 Final Design Package to GLWA: Q1 2022

Start First Pipeline Shutdown: October 15, 2024
 New, Relocated Pipeline in Full Service: April 15, 2025

Contract Completion: November 2027 (includes 1 year of project closeout)

Page 55 AGENDA ITEM #7C



Financial Services Audit Committee Communication

Date: June 21, 2021

To: Great Lakes Water Authority Audit Committee

From: Kim Garland, CPA, Reporting & Compliance Manager

Re: Resolution to Adopt the Downriver Transmission Main Loop Project FY 2022

Drinking Water State Revolving Fund Project Plan

Background: The Great Lakes Water Authority (the "GLWA") has identified the Downriver Transmission Main Loop Project for submittal to the Michigan Department of Environment, Great Lakes and Energy (EGLE) for the State Revolving Fund financing program for funding in the state's 2022 fiscal year. The deadline for submitting all Drinking Water State Revolving Fund (DWSRF) project plans to EGLE is July 1, 2021. Prior to submitting the project plan, GLWA will hold the required public hearing for the Downriver Transmission Main Loop Project Plan on June 23, 2021, at 2:00 pm.

The Downriver Transmission Main is a single transmission main which services the Downriver population. The project involves the construction of a new transmission main along Inkster Road from Wick Road to Pennsylvania Road, a parallel transmission main along Allen Road and Dixie Highway from Pennsylvania Road to Ready Road, modifications at Trenton Service Meters TN-01 and TN-03, and the removal of two reservoirs at the Electric Avenue Pump Station. The total cost of this project is currently estimated at \$60,900,000.

Justification: The project will increase redundancy and reliability in the Downriver portion of the GLWA water system. A single transmission main currently serves the Downriver Communities' population. A break anywhere along the Allen Road transmission main would result in several communities losing pressure and result in boil water advisories until a repair could be made.

GLWA is seeking low interest loan assistance through the DWSRF program for these projects. Although the EGLE interest rate for FY 2022 will not be determined until October 2021, the current year's interest rate of 1.875% is less than the present conventional revenue bond interest rates. Based on the estimated project amount of \$60.9 million, GLWA could save an estimated \$23.2 million in interest costs and avoided issuance costs, based on a similar open

market revenue bond with a 30-year term and 3.50% interest rate, over the life of the 30-year bond issue. This will offer savings to both GLWA and its members.

Budget Impact: Debt service for this project is anticipated to begin in FY 2023 and will be included as part of the FY 2023 financial plan.

Proposed Action: Audit Committee recommends that the Great Lakes Water Authority Board of Directors approve the attached Resolution to Adopt the Downriver Transmission Main Loop Project - FY 2022 Drinking Water State Revolving Fund Project Plan at its regularly scheduled meeting on June 23, 2021.

..Title

Resolution Adopt the Downriver Transmission Main Loop Project FY 2022 Drinking Water Revolving Fund (DWSRF) Project Plan

..Body

Agenda of: June 23, 2021

Item No.: **2021-241**

Amount: N/A

TO: The Honorable

Board of Directors

Great Lakes Water Authority

FROM: Sue F. McCormick

Chief Executive Officer

DATE: June 23, 2021

RE: Resolution to Adopt the Downriver Transmission Main Loop Project FY

2022 Drinking Water Revolving Fund (DWSRF) Project Plan

MOTION

Upon recommendation of Nicolette Bateson, Chief Financial Officer/Treasurer, and Cheryl Porter, Chief Operating Officer-Water & Field Services, the Board of Directors of the Great Lakes Water Authority, approves the attached Resolution to Adopt the Downriver Transmission Main Loop Project FY 2022 Drinking Water Revolving Fund (DWSRF) Project Plan; and authorizes the CEO to take such action as may be necessary to accomplish the intent of this vote.

BACKGROUND

The Downriver Transmission Main is a single transmission main which services the Downriver population. The project involves the construction of a new transmission main along Inkster Road from Wick Road to Pennsylvania Road, a parallel transmission main along Allen Road and Dixie Highway from Pennsylvania Road to Ready Road, modifications at Trenton Service Meters TN-01 and TN-03, and the removal of two reservoirs at the Electric Avenue Pump Station. The total cost of this project is currently estimated at \$60,900,000.

GLWA wishes to utilize loans available under the State of Michigan Drinking Water Revolving Fund (DWSRF) for this project. A public hearing on the project plan was held on June 23, 2021, at 2:00 pm. The attached Resolution approves the project plan, directs GLWA staff to address all public comments, prepare a responsiveness summary, and publish the final Project Plan; authorizes GLWA's CEO to transmit the final FY 2022 DWSRF Project Plan to the Michigan Department of Environment, Great Lakes, and Energy (EGLE); and to secure a DWSRF loan for the project.

JUSTIFICATION

The project will increase redundancy and reliability in the Downriver portion of the GLWA water system. A single transmission main currently serves the Downriver Communities' population. A break anywhere along the Allen Road transmission main would result in several communities losing pressure and result in boil water advisories until a repair could be made. GLWA is seeking low interest loan assistance through the DWSRF program for these projects. Although the EGLE interest rate for FY 2022 will not be determined until October 2021, the current year's interest rate of 1.875% is less than the present conventional revenue bond interest rates. Based on the estimated project amount of \$60.9 million, GLWA could save an estimated \$23.2 million in interest costs and avoided issuance costs, based on a similar open market revenue bond with a 30-year term and 3.50% interest rate, over the life of the 30-year bond issue. This will offer savings to both GLWA and its members.

BUDGET IMPACT

Debt service is anticipated to begin in FY 2023 for this project and will be included as part of the FY 2023 financial plan.

COMMITTEE REVIEW

This matter was presented to the GLWA Audit Committee at its June 21, 2021 meeting. The Audit Committee {insert action} that the Great Lakes Water Authority Board of Director approve the attached Resolution to Adopt the Downriver Transmission Main Loop Project - FY 2022 Drinking Water State Revolving Fund Project Plan at its regularly scheduled meeting on June 23, 2021.

SHARED SERVICES IMPACT

This item does not impact the shared services agreement between GLWA and DWSD.

Great Lakes Water Authority Resolution 2021-241

RE: Resolution for the Downriver Transmission Main Project FY 2022 Drinking Water State Revolving Fund (DWSRF) Project Plan

By Board Member:	
Whereas:	The Downriver Transmission Main Project Plan for the FY 2022 Drinking Water State Revolving Fund has been prepared by GLWA;
Whereas:	The project involves the construction of a new transmission main along Inkster Road from Wick Road to Pennsylvania Road to Ready Road, a parallel transmission main along Allen Road and Dixie Highway from Pennsylvania Road to Ready Road, replacement of meters and removal of check valves at Trenton service meters TN-01 and TN-3, and the removal of two reservoirs at the Electric Avenue Pump Station;
Whereas:	The proposed project will increase redundancy and reliability in the Downriver portion of the GLWA water system;
Whereas:	The FY 2022 DWSRF Project Plan has been placed on public notice and a Public Hearing was held on June 23, 2021 at 2:00 p.m. where comments on the recommended project were solicited;
Whereas:	It is the desire of the GLWA Board of Directors to secure low interest loan assistance through the DWSRF program; and
Whereas:	Formal action by the GLWA Board of Directors is needed to adopt the recommended FY 2022 DWSRF Project Plan for the Downriver Transmission Project, as a requirement for participation in the State of Michigan's DWSRF program.
Now Therefore Be It:	
Resolved	That this Board hereby accepts the FY 2022 Downriver Transmission Main Project, dated June 23, 2021, and as directs staff members of the GLWA to address all public comments, prepares the responsiveness summary, and publish the final Project Plan; and Be It Further
Resolved	That the Chief Executive Officer (CEO) is authorized to transmit the final FY 2022 DWSRF Project Plan for the Downriver Transmission Main Project to the Michigan Department of Environment, Great Lakes, and Energy on behalf of the GLWA Board of Directors and take all appropriate steps to secure approval of a low interest loan in

accordance with the State of Michigan's DWSRF procedures so that the project can

Adopted by the Great Lakes Water Authority Board on:

proceed expeditiously to construction.

GLWA Downriver Transmission Main Drinking Water State Revolving Fund (DWSRF) Project Plan

Public Hearing June 23, 2021





Drinking Water State Revolving Fund (DWSRF)

- Jointly administered loan program:
 - A) Michigan Department of Environment, Great Lakes, and Energy (EGLE)
 - B) Michigan Municipal Bond Authority
- Funding for water infrastructure projects to resolve current needs
- 20-year loan with interest rate of approximately 1.875%





Downriver Communities – Need for DWSRF Project

- Benefitting communities:
 - Flat Rock, Gibraltar, Riverview, Rockwood, Romulus, Southgate, Taylor, Trenton, and Woodhaven; Charter Township of Berlin, Brownstown, and Huron; Grosse Ile Township; and Village of South Rockwood
 - Transmission main serving a population of approximately 236,500
 - Additional communities located to the west, including Van Buren Township, Sumpter Township, Belleville, and the YCUA service area will also benefit from the additional redundancy in the system. This includes an additional 157,000 people.
- Aging infrastructure could result in water main breaks
- A break along the Allen Road transmission main would result in communities losing pressure and boil water advisories until a repair could be made
- Need for redundancy to prevent disruption of service





Downriver Communities – Previous Planning Efforts

- 2015: Detroit Water and Sewerage Department (DWSD) Water Master Plan
 - Redundancy issue raised by a Technical Advisory Committee Analytical Work Group in 2012
- 2021: Capital Improvement Plan (CIP)





Downriver Communities – DWSRF Proposed Projects

The proposed projects consist of the following transmission main and system improvements:

- Adding a loop to provide redundancy on Inkster Road between Wick Road and Pennsylvania Road
- Adding parallel mains to provide redundancy along Allen Road and Dixie Highway
- Improvements at two Trenton meter vaults including replacing meters and check valves, as well as modifications to the bypass at TN-03 to allow the Allen Main to be backfed during emergencies.
- Demolishing two reservoirs at the Electric Avenue Pump Station



Improve System Redundancy – New Transmission Main

The following alternatives were evaluated:

- Regional alternative Not a viable alternative
- Optimal performance of existing facilities Would not increase redundancy
- Transmission main and related system improvements
 - Alternative pipe materials and methods of construction considered

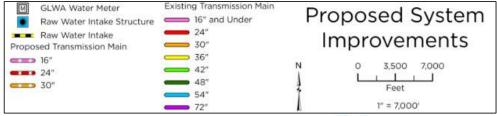




A JOINT VENTURE

Selected Alternative – Overview of Project Areas

- Inkster Transmission Main Loop
- North Allen Parallel Main
- South Allen Parallel Main
- Dixie Highway Parallel Main
- Trenton Meter Upgrades
- Electric Avenue Pump Station Reservoirs Demolition

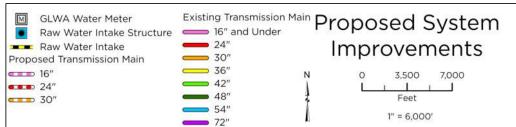






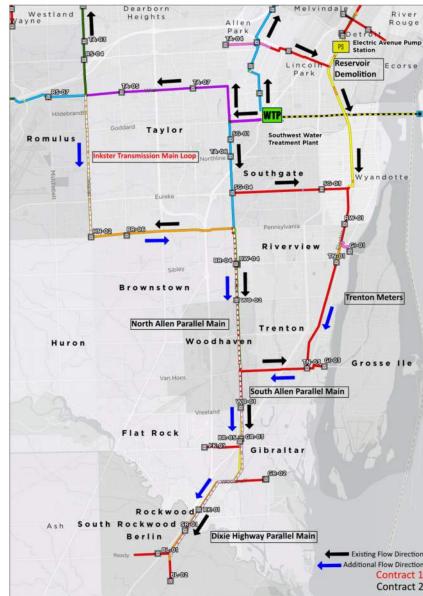
New Water Main Improvements Provides Multiple Paths for Water Delivery

- New transmission mains and Trenton meter modifications
- Black arrows: Existing flow direction of water
- Blue arrows: Additional flow direction of water



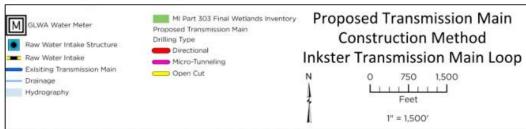






Inkster Transmission Main Loop

- Along Inkster Road from Wick Road to Pennsylvania Ave
- 30-inch water main along west side of Inkster Road
- Open cut and trenchless installation proposed
 - Trenchless installation under major road intersections
 - Trenchless installation under water courses
- Threatened species could be in project area.
 Measures will be taken to protect them during construction.



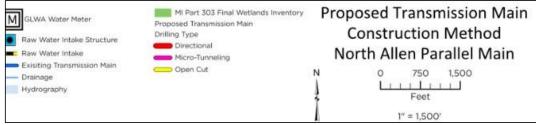






North Allen Parallel Main

- Along Allen Road from Pennsylvania Avenue to Van Horn Road
- 24-inch water main on west side of road
- Open cut and trenchless installation proposed
 - Trenchless installation under major road intersections
 - Trenchless installation under water courses
- Endangered and threatened species could be in project area. Measures will be taken to protect them during construction.
- Historic Site: Our Lady of Hope Cemetery on east side of Allen.



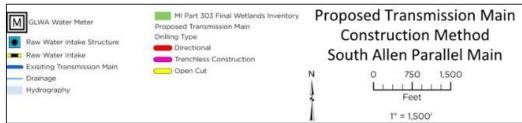






South Allen Parallel Main

- Along Allen Road from Pennsylvania Avenue to Woodruff Road
- 24 and 16-inch water main
- Open cut and trenchless installation proposed
 - Trenchless installation under major road intersections
 - Trenchless installation under water courses
- Endangered and threatened species could be in project area. Measures will be taken to protect them during construction.
- Historic Site: Woodhaven Free Will Baptist Church on east side of road



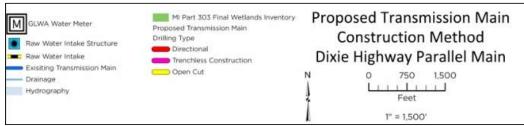






Dixie Highway Parallel Main

- Along Dixie Highway from Woodruff Road to Ready Road
- 16-inch water main
- Open cut and trenchless installation proposed
 - Trenchless installation under water courses
 - Huron River will use jack and bore or microtunneling
- Endangered and threatened species could be in project area. Measures will be taken to protect them during construction.
- Historic Sites include the Huron River Inn, Rockwood Railroad Bridge, and a Queen Anne style house.









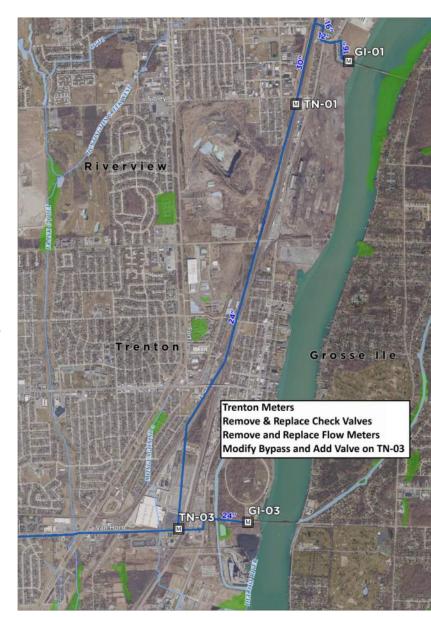
Trenton Meter Upgrades

- Upgrades to existing TN-01 and TN-03 meters
 - Replace meters
 - Replace check valves
 - TN-03 will include bypass modifications with an actuated valve to allow backfeed of the Allen main under emergency conditions
- Work will take place within vicinity of the meter vaults
 - No traffic disruptions
- Endangered and threatened species are located within 1.5 miles of TN-01 and TN-03. The area to be disturbed will be observed to identify species present. Measures will be taken to protect identified species during construction.



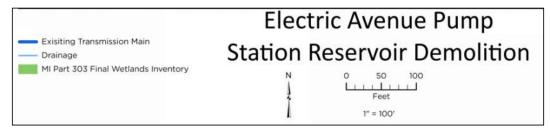






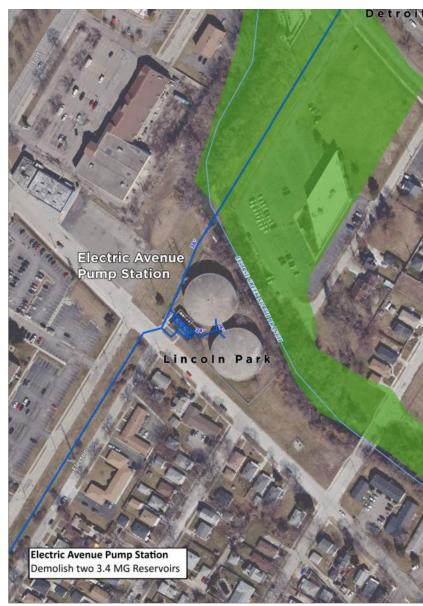
Electric Avenue Pump Station Reservoir Demolition

- Demolition of two deteriorating 3.4 MG water reservoirs that were removed from service in 2017 and associated piping connections
- No service disruptions expected









DWRF Project Cost Opinion and User Cost

Inkster Transmission Main Loop	\$17,400,000
North Allen Parallel Main	\$19,000,000
South Allen Parallel Main	\$12,000,000
Dixie Highway Parallel Main	\$11,300,000
Trenton Meter Upgrades	\$800,000
Electric Avenue Reservoir Demolition	\$400,000
Total Project Cost	\$60,900,000
Annual Payment at 1.875% Interest	\$3,680,000
Service Area Households	1,400,000
Annual Estimated User Cost for Households	\$2.63





Project Schedule

			Dates		
Project	Planning	EGLE Approved Design	Permitting	Loan Closing	Construction
DWSRF Project Plan	July 1, 2021	_	_	_	_
		Cont	ract 1		
Inkster Transmission Main	_	May 2022	August/September	Q4:	Notice to Proceed
Loop			2022	August 29, 2022	October 28, 2022
Contract 2					
North Allen Road Parallel	_	May 2022	August/September	Q4:	Notice to Proceed
Transmission Main			2022	August 29, 2022	October 28, 2022
South Allen Road Parallel	_	May 2022	August/September	Q4:	Notice to Proceed
Transmission Main			2022	August 29, 2022	October 28, 2022
Dixie Highway Parallel	_	May 2022	August/September	Q4:	Notice to Proceed
Transmission Main			2022	August 29, 2022	October 28, 2022
Trenton Meters	_	May 2022	August/September	Q4:	Notice to Proceed
			2022	August 29, 2022	October 28, 2022
Electric Avenue Pump	_	May 2022	August/September	Q4:	Notice to Proceed
Station Reservoirs			2022	August 29, 2022	October 28, 2022
Demolition					





Environmental Impacts and Mitigation

- There will be no anticipated impact on Tribal, Historical, or Archeological resources
- The project crosses through wetlands, floodplains, and streams
- Minimal impact anticipated on streams and wetlands
- Endangered and threatened species may be located in the study area. Surveys will be performed to determine if species are present.

Mitigation

- Trenchless installation proposed to minimize impact on streams, drains, Huron River, and wetlands
- EGLE/United States Army Corps of Engineers Joint Permit Application will be completed prior to construction
- Efforts will be made to reduce the likelihood of negative impacts on endangered and threatened species that are confirmed to be present in study area. Actions will be identified as part of the final design.





Construction/Operational Impact

- Impacts During Construction
 - Traffic disruption/delays and lane closures
 - Temporary noise and dust
 - Potential short term water service disruptions during connections
 - Pavement removal and surface disruptions
- Mitigation During Construction
 - Traffic control via alternate routes and detours.
 - Typical work hours (7 am to 7 pm) and dust control measures via water trucks.
 - Notices to communities and residents prior to water connections and back up water supply plan.
 - Soil erosion control measures and associated surface restoration (i.e., grass seed and new pavement)





Benefits of DWSRF Project

- Recycling of existing materials to reduce cost and environmental impact
- Positive benefits to the communities due to increased reliability of service
- Decrease likelihood of boil-water advisories and pressure loss





Questions?







Photo credit: https://trenchlesstechnology.com/constrained-hdd-foot-rocky-mountains-uses-restrained-joint-pvc/

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Page 80 AGENDA ITEM #7D



Financial Services Audit Committee Communication

Date: June 21, 2021

To: Great Lakes Water Authority Audit Committee

From: Kim Garland, CPA, Reporting & Compliance Manager

Re: Resolution to Adopt the Ypsilanti Pumping Station Improvements Project FY 2022

Drinking Water State Revolving Fund Project Plan

Background: The Great Lakes Water Authority (the "GLWA") has identified the Ypsilanti Pumping Station Improvements Project for submittal to the Michigan Department of Environment, Great Lakes and Energy (EGLE) for the State Revolving Fund financing program for funding in the state's 2022 fiscal year. The deadline for submitting all Drinking Water State Revolving Fund (DWSRF) project plans to EGLE is July 1, 2021. Prior to submitting the project plan, GLWA will hold the required public hearing for the Ypsilanti Pumping Station Improvements Project Plan on June 23, 2021, at 2:00 pm.

The project is comprised of the evaluation, design, and construction of the full replacement of the Ypsilanti Pumping Station (YPS). The existing YPS is an in-line booster pumping station located in Van Buren Township adjacent to the Willow Run Airport. It was constructed in the mid 1980's to replace an older temporary pumping station to boost the pressure of water supplied from the Wick Road Pumping Station. In the mid-1990's the City of Ypsilanti decommissioned their aging water treatment plant and switched to what is now the GLWA water system. During this time, a connection to a transmission main supplied by the Joy Road Pump Station was added to the YPS to provide a continuous supply of water to the YPS service area. The total cost of this project is currently estimated at \$35,500,000.

Justification: This project is necessary to ensure the GLWA can maintain supplying drinking water with high reliability and efficiency to the City of Ypsilanti, Ypsilanti Township, Augusta Township, Pittsfield Township, and Superior Township. The proposed project will construct a new pump station. The existing pump station will be decommissioned and demolished.

GLWA is seeking low interest loan assistance through the DWSRF program for these projects. Although the EGLE interest rate for FY 2022 will not be determined until October 2021, the current year's interest rate of 1.875% is less than the present conventional revenue bond interest rates. Based on the estimated project amount of \$35.5 million, GLWA could save an

estimated \$15.7 million in interest costs and avoided issuance costs, based on a similar open market revenue bond with a 30-year term and 3.50% interest rate, over the life of the 30-year bond issue. This will offer savings to both GLWA and its members.

Budget Impact: Debt service for this project is anticipated to begin in FY 2023 and will be included as part of the FY 2023 financial plan.

Proposed Action: Audit Committee recommends that the Great Lakes Water Authority Board of Directors approve the attached Resolution to Adopt the Ypsilanti Pumping Station Improvements Project - FY 2022 Drinking Water State Revolving Fund Project Plan at its regularly scheduled meeting on June 23, 2021.

..Title

Resolution Adopt the Ypsilanti Pumping Station Improvements Project FY 2022 Drinking Water Revolving Fund (DWSRF) Project Plan

..Body

Agenda of: June 23, 2021

Item No.: **2021-242**

Amount: N/A

TO: The Honorable

Board of Directors

Great Lakes Water Authority

FROM: Sue F. McCormick

Chief Executive Officer

DATE: June 23, 2021

RE: Resolution to Adopt the Ypsilanti Pumping Station Improvements

Project FY 2022 Drinking Water Revolving Fund (DWSRF) Project Plan

MOTION

Upon recommendation of Nicolette Bateson, Chief Financial Officer/Treasurer, and Cheryl Porter, Chief Operating Officer-Water & Field Services, the Board of Directors of the Great Lakes Water Authority, approves the attached Resolution to Adopt the Ypsilanti Pumping Station Improvements Project FY 2022 Drinking Water Revolving Fund (DWSRF) Project Plan; and authorizes the CEO to take such action as may be necessary to accomplish the intent of this vote.

BACKGROUND

The project is comprised of the evaluation, design, and construction of the full replacement of the Ypsilanti Pumping Station. The existing YPS is an in-line booster pumping station located in Van Buren Township adjacent to the Willow Run Airport. It was constructed in the mid 1980's to replace an older temporary pumping station to boost the pressure of water supplied from the Wick Road Pumping Station. In the mid-1990's the City of Ypsilanti decommissioned their aging water treatment plant and switched to what is now the GLWA water system. During this time, a connection to a transmission main

supplied by the Joy Road Pump Station was added to the YPS to provide a continuous supply of water to the YPS service area. The total cost of this project is currently estimated at \$35,500,000.

GLWA wishes to utilize loans available under the State of Michigan Drinking Water Revolving Fund (DWSRF) for this project. A public hearing on the project plan was held on June 23, 2021, at 2:00 pm. The attached Resolution approves the project plan, directs GLWA staff to address all public comments, prepare a responsiveness summary, and publish the final Project Plan; authorizes GLWA's CEO to transmit the final FY 2022 DWSRF Project Plan to the Michigan Department of Environment, Great Lakes, and Energy (EGLE); and to secure a DWSRF loan for the project.

JUSTIFICATION

This project is necessary to ensure the GLWA can maintain supplying drinking water with high reliability and efficiency to the City of Ypsilanti, Ypsilanti Township, Augusta Township, Pittsfield Township, and Superior Township. The proposed project will construct a new pump station. The existing pump station will be decommissioned and demolished. GLWA is seeking low interest loan assistance through the DWSRF program for these projects. Although the EGLE interest rate for FY 2022 will not be determined until October 2021, the current year's interest rate of 1.875% is less than the present conventional revenue bond interest rates. Based on the estimated project amount of \$35.5 million, GLWA could save an estimated \$15.7 million in interest costs and avoided issuance costs, based on a similar open market revenue bond with a 30-year term and 3.50% interest rate, over the life of the 30-year bond issue. This will offer savings to both GLWA and its members.

BUDGET IMPACT

Debt service is anticipated to begin in FY 2023 for this project and will be included as part of the FY 2023 financial plan.

COMMITTEE REVIEW

This matter was presented to the GLWA Audit Committee at its June 21, 2021 meeting. The Audit Committee {insert action} that the Great Lakes Water Authority Board of Director approve the attached Resolution to Adopt the Ypsilanti Pumping Station Improvements Project - FY 2022 Drinking Water State Revolving Fund Project Plan at its regularly scheduled meeting on June 23, 2021.

SHARED SERVICES IMPACT

This item does not impact the shared services agreement between GLWA and DWSD.

Great Lakes Water Authority Resolution 2021-242

RE: Resolution for the Ypsilanti Pumping Station Improvements Project FY 2022 Drinking Water State Revolving Fund (DWSRF) Project Plan

By Board N	/lember:
Whereas:	The Ypsilanti Pumping Station Project Plan for the FY 2022 Drinking Water State Revolving Fund has been prepared by GLWA;
Whereas:	The project is comprised of the evaluation, design, and construction of the full replacement of the Ypsilanti Pumping Station;
Whereas:	The project is necessary to ensure the GLWA can maintain supplying drinking water with reliability and efficiency to the city of Ypsilanti, Ypsilanti Township, Augusta Township, Pittsfield Township and Superior Township;
Whereas:	The proposed project will construct a new pump station;
Whereas:	The FY 2022 DWSRF Project Plan has been placed on public notice and a Public Hearing was held on June 23, 2021, at 2:00 p.m. where comments on the recommended project were solicited;
Whereas:	It is the desire of the GLWA Board of Directors to secure low interest loan assistance through the DWSRF program; and
Whereas:	Formal action by the GLWA Board of Directors is needed to adopt the recommended FY 2022 DWSRF Project Plan for the Ypsilanti Pumping Station Project, as a requirement for participation in the State of Michigan's DWSRF program.
Now There	efore Be It:
Resolved	That this Board hereby accepts the FY 2022 Ypsilanti Pumping Station Project, dated June 23, 2021, and as directs staff members of the GLWA to address all public comments, prepares the responsiveness summary, and publish the final Project Plan; and Be It Further
Resolved	That the Chief Executive Officer (CEO) is authorized to transmit the final FY 2022

DWSRF Project Plan for the Ypsilanti Pumping Station Project to the Michigan Department of Environment, Great Lakes, and Energy on behalf of the GLWA Board of Directors and take all appropriate steps to secure approval of a low interest loan in accordance with the State of Michigan's DWSRF procedures so that the project can

Adopted by the Great Lakes Water Authority Board on:

proceed expeditiously to construction.

GREAT LAKES WATER AUTHORITY





DWn and Caldwell Page 86



Plan View of Existing Ypsilanti Pump Station

Proposed Improvements

GLWA identified and evaluated alternatives that best suited replacing the existing Ypsilanti Pumping Station (YPS). The recommended alternative builds a new pump station in new location with the ability to be expanded at some future time. The major components of the project are:

- Construction of a new pumping station
- Construction of new connections to the existing transmission system
- Demolition of existing YPS facilities
- Provisions for future expansion and reservoirs

YPS Systems

The YPS system consists of:

- Transmission lines
- Booster Pumps
- Control Systems
- Pump Buildings
- Yard Piping and associated Vaults

Summary of Project Need

Currently, much of the major equipment in the YPS is near or beyond its useful life and needs to be replaced/refurbished. Additionally, separate planning and needs assessment investigations conducted in the last five years have identified major elements requiring correction, including stand-by generator replacement, pumping unit replacement, and major electrical equipment replacement. In addition, the site septic system needs to be replaced with a connection to a local sewer system which is about ½ mile away. The purpose of the project is to provide improvements that enhance the reliability, maintainability, and operability of the facility for the long-term

Potential Alternatives

Three Alternatives were evaluated:

Alternative 1 – "No Action": This alternative would not rehabilitate or improve the existing YPS or associated ancillary systems. This alternative is not carried forward.

Alternative 2 – Replace Existing YPS on current Site: This alternative would replace the existing YPS within the existing property. This alternative is not carried forward since the new PS would impact wetland and is not be expandable at a future time.

Alternative 3 – Replace YPS near Wick Road PS: This alternative would replace both the YPS and WICK PS with a new pump station. This alternative is not carried forward because it limits GLWA's ability to provide water for future customers and it limits the flow pressures to current customers.

Alternative 4 – Replace Existing YPS on a new site: This alternative would replace the YPS on a portion of Willow Run airport which is in process of being acquired. A new PS will be built with the ability for expandability and future reservoirs. This is the selected alternative

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Estimate Project Costs

Based on the ability to meet the functional requirements for the project GLWA identified Alternative 4 as the selected alternative. A summary of the costs is presented below:

Table 1-1 Summary of Cost	
Cost Item	Alternative 4:
	Construct New YPS at D Street and Beck Road
Construction Cost*	\$35 Million
Estimate Range*	\$17.5 - \$70 Million
Design/Planning Cost	\$3,000,000
Construction Administration	\$700,000

^{*}Based on a AACE Class 5 estimate with an accuracy range of -50% to +100%.

User Cost Impact for the YPS Improvements Project

Table 1-2. User Cost Impact for the Ypsilanti Pumping Station Improvements Project	
Item	Improvements (\$)
Total Cost of Project	\$38,700,000.00
Annualized Cost of Project (Assuming DWRF Interest Rate of 2% Over 20 Years)	\$2,338,311.00
Service Area Households (Customers Serviced by GLWA as of the 2010 Census without including Genesee County)*	1,538,000
Estimated Household User Cost (per Year)	\$1.52

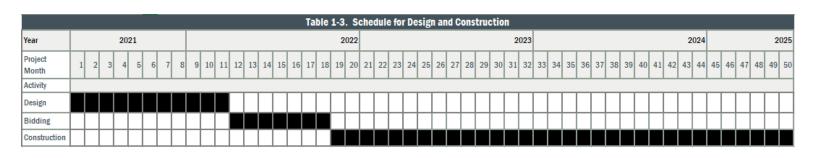
^{*}Service Area Households is determined by the population serviced by GLWA (3.8M) divided by the average number of persons per household which is 2.47 per the US Census.

Environmental Evaluation

- Construction of the proposed project is not expected to have an adverse effect on historical, archaeological, geographic, or cultural areas.
- It is not anticipated that GLWA's proposed improvements to the Ypsilanti Pumping Station alter the ongoing pattern of growth and development in the study area.
- The improvements resulting in the improved reliability and efficiency, both in the present and in the long-term future, of the YPS as it relates to the GLWA water supply system are the primary cumulative beneficial impacts anticipated from the implementation of the proposed project.

Implementation Schedule

The following schedule is anticipated for the YPS Improvements Project:



nn and Caldwell Page 88







Brown and Caldwell, Inc 100 W. Big Beaver Rd Suite 540 Troy, MI 48084

Brown and Caldwell Page 89

Page 90 AGENDA ITEM #7E



Financial Services Audit Committee Communication

Date: June 21, 2021

To: Great Lakes Water Authority Audit Committee

From: Kim Garland, CPA, Reporting & Compliance Manager

Re: Resolution Regarding Approval of Series Ordinance Authorizing Issuance and Sale of

Water Supply System Revenue Bonds in an Amount Not to Exceed \$128,000,000

(Ordinance 2021-03)

Background: Attached is the draft Great Lakes Water Authority ("GLWA") Board letter for the June 23, 2021 Board meeting regarding the Series Ordinance for the proposed Water Supply System State Revolving Fund (SRF) bond issues. The series of bonds authorized by this ordinance will be sold through the state of Michigan's Drinking Water Revolving Fund program. There are two projects associated with this Series Ordinance.

14 Mile Road Transmission Main Loop-Phase II (7461-02) is a Regional Water System project involving the construction of approximately eight miles of new 54-inch transmission main to connect the 8 Mile Road transmission system with the 14 Mile Road transmission system. This project also includes yard piping and reservoir fill line improvements at the Haggerty Pumping Station, and the construction of a control valve to regulate flows to and from the 14 Mile Road Transmission system.

Water Main Replacement (7484-01) is a Local Water System project comprising the replacement of aging water mains in the Jefferson Chalmers area within the city of Detroit. Construction will include excavation of existing water mains, installation of new pipes, rehabilitation of pipes, replacement of lead service lines between the water main and the water meter, pressure testing, backfill, and right-of-way.

Key Provisions:

- Not to Exceed Par Amount: \$128,000,000
- Maximum Coupon Rate: 2.50% (Current program rate is 1.875% for 20-year loans and 2.125% for 30-year loans)
- Bonds will be designated 2021 SRF-2/3 Junior Lien Bonds
- Bonds will be sold to the Michigan Finance Authority (MFA)

Proposed Action: Audit Committee recommends that the Great Lakes Water Authority Board approve the resolution Approval of Series Ordinance Authorizing Issuance and Sale of Water Supply System Revenue Bonds in an Amount Not to Exceed \$128,000,000 as presented, at its regular meeting on June 23, 2021.

..Title

Resolution Regarding Approval of Series Ordinance Authorizing Issuance and Sale of Water Supply System Revenue Bonds in an Amount Not to Exceed \$128,000,000 (Ordinance 2021-03)

..Body

Agenda of: June 23, 2021

Item No.: **2021-243**

Amount: Not to Exceed \$128,000,000

TO: The Honorable

Board of Directors

Great Lakes Water Authority

FROM: Sue F. McCormick

Chief Executive Officer

Great Lakes Water Authority

DATE: June 23, 2021

RE: Resolution Regarding Approval of Series Ordinance Authorizing

Issuance and Sale of Water Supply System Revenue Bonds in an

Amount Not to Exceed \$128,000,000 (Ordinance 2021-03)

<u>MOTION</u>

Upon recommendation of Sue McCormick, Chief Executive Officer, the Board of Directors (Board) of the Great Lakes Water Authority (GLWA), approve the resolution Approval of Series Ordinance Authorizing Issuance and Sale of Water Supply System Revenue Bonds in an Amount Not to Exceed \$128,000,000 as presented, and authorizes the CEO to take such other action as may be necessary to accomplish the intent of this vote.

BACKGROUND

On February 26, 2020, the Great Lakes Water Authority ("GLWA") Board of Directors approved Resolution 2020-068, "Resolution of the Great Lakes Water Authority Authorizing Publication of Notice of Intent to Issue Water Supply System Revenue Bonds in a principal amount not to exceed \$200,000,000" (the "Notice of Intent"). This is the second series of water bonds from that Notice of Intent in the amount not to exceed \$128,000,000.

The approval of the Series Ordinance presented today is the next formal step required by the GLWA Board of Directors in the bond issuance process. The Series Ordinance authorizes the issuance of the Bonds by GLWA, sets forth the guidelines for the Drinking Water Revolving Fund (DWRF) Bonds, designates the Bonds as 2021 SRF-2/3 Junior Lien Bonds, and authorizes the Chief Executive Officer or the Chief Financial Officer to execute the final terms of the Bonds, paying issuance costs and signing of the Purchase Contract and Sale Order, within the parameters set forth in the Series Ordinance.

JUSTIFICATION

This series of bonds authorized by this ordinance will be sold through the state of Michigan's DWRF program and will be used to finance improvements associated with two projects. The first project, 14 Mile Road Transmission Main Loop-Phase II (7461-02), is a Regional Water System project involving the construction of approximately eight miles of new 54-inch transmission main to connect the 8 Mile Road transmission system with the 14 Mile Road transmission system. This project also includes yard piping and reservoir fill line improvements at the Haggerty Pumping Station, and the construction of a control valve to regulate flows to and from the 14 Mile Road Transmission system.

The second project, Water Main Replacement (7484-01), is a Local Water System project comprising the replacement of aging water mains in the Jefferson Chalmers area within the city of Detroit. Construction will include excavation of existing water mains, installation of new pipes, rehabilitation of pipes, replacement of lead service lines between the water main and the water meter, pressure testing, backfill, and right-of-way.

Per the Ordinance, this series of bonds will be designated 2021 SRF-2/3 Junior Lien Bonds, with a loan amount not to exceed \$128,000,000. The 2021 SRF-2/3 Junior Lien Bonds will be sold to the Michigan Finance Authority. The current program interest rate for the DWRF is 1.875% for a 20-year term and 2.125% for a 30-year term. Based on the not to exceed amount for this series of \$128.0 million, GLWA could save an estimated

\$48.3 million over the life of these bond issues in interest costs and avoided issuance costs in comparison to similar open market revenue bonds with a 30-year term and 3.50% interest rate.

BUDGET IMPACT

The debt service payments on the GLWA Regional project are anticipated to start on April 1, 2022 with minimal amounts of interest due, because of the projected draw down schedules. Interest expense on the loan is included in the FY 2022 Water Budget.

COMMITTEE REVIEW

This matter was reviewed by the GLWA Audit Committee at its meeting on June 21, 2021. The Audit Committee [insert action] approval of the resolution Approval of Series Ordinance Authorizing Issuance and Sale of Water Supply System Revenue Bonds in an Amount Not to Exceed \$128,000,000 as presented.

GREAT LAKES WATER AUTHORITY ORDINANCE NO. 2021-03

SERIES ORDINANCE AUTHORIZING ISSUANCE AND SALE OF WATER SUPPLY SYSTEM REVENUE BONDS IN AN AGGREGATE AMOUNT NOT TO EXCEED \$128,000,000

WHEREAS, pursuant to Resolution No. 2015-10-02 adopted by the Board of Directors of the Great Lakes Water Authority (the "Authority") on October 7, 2015, the Authority Board approved and adopted Master Bond Ordinance No. 2015-01 (as subsequently amended through the date hereof, the "Ordinance"), which authorizes the issuance by the Authority of Water Supply System Revenue Bonds; and

WHEREAS, the Ordinance authorizes the issuance of such Water Supply System Revenue Bonds in one or more Series pursuant to a Series Ordinance authorizing the issuance and sale of such Series; and

WHEREAS, the Authority Board has determined that it is necessary to authorize at this time two or more Series of SRF Junior Lien Bonds (the "2021 SRF-2/3 Junior Lien Bonds") to provide moneys to pay the costs of the hereinafter described repairs, extensions, enlargements and improvements to the Regional Water System identified in the Capital Improvement Program (the "2021 SRF-2 Project") and to the Local Water System identified in the Detroit Capital Improvement Program (the "2021 SRF-3 Project", and collectively with the 2021 SRF-2 Project, the "2021 SRF 2/3 Projects").

NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF DIRECTORS OF THE GREAT LAKES WATER AUTHORITY AS FOLLOWS:

- Section 1. <u>Authority for this Series Ordinance</u>. This Series Ordinance (the "2021 SRF-2/3 Series Ordinance") is adopted pursuant to Section 1102(1) of the Ordinance.
- Section 2. <u>Definitions</u>. Except as otherwise provided in this 2021 SRF-2/3 Series Ordinance, all terms which are defined in Section 101 of the Ordinance shall have the same meanings, respectively, in this 2021 SRF-2/3 Series Ordinance as such terms are given in the Ordinance. In addition, the following terms shall have the following meanings unless the context shall clearly indicate some other meaning:
- (a) "2021 SRF-2 Junior Lien Bonds" means the Bonds authorized by Section 5 of this 2021 SRF-2/3 Series Ordinance for the purpose of paying and/or reimbursing costs of the 2021 SRF-2 Project.
- (b) "2021 SRF-3 Junior Lien Bonds" means the Bonds authorized by Section 5 of this 2021 SRF 2/3 Series Ordinance for the purpose of paying and/or reimbursing costs of the 2021 SRF-3 Project.
- (c) "2021 SRF-2/3 Junior Lien Bonds" means, collectively, the 2021 SRF-2 Junior Lien Bonds and the 2021 SRF-3 Junior Lien Bonds.

- (d) "2021 SRF-2 Project" means improvements to the Regional Water System, including but not limited to the construction of approximately eight miles of new 54-inch transmission main to connect the Eight Mile Road transmission system with the 14 Mile Road transmission system, yard piping and reservoir fill line improvements at the Haggerty Pumping Station, and the construction of a control valve to regulate flows to and from the 14 Mile Road transmission system.
- (e) "2021 SRF-3 Project" means improvements to the Local Water System, including but not limited to the replacement of aging water mains in the Jefferson Chalmers area within the City of Detroit, consisting of the excavation of existing water mains, installation of new pipes, rehabilitation of pipes, and the replacement of lead service lines between the water main and water meters.
- (f) "2021 SRF-2/3 Projects" means, collectively, the 2021 SRF-2 Project and the 2021 SRF-3 Project.
- (g) "Authorized Denomination" means any denomination as determined by an Authorized Officer in the Sale Order.
- (h) "Authorized Officer" means either the Chief Executive Officer or the Chief Financial Officer.
- (i) "City Authorized Officer" means any officer of DWSD-R designated in a resolution adopted by the Board of Water Commissioners of DWSD-R as authorized to take actions on behalf of the City as described in this 2021 SRF-2/3 Series Ordinance.
- (j) "Interest Payment Date" means except as otherwise set forth in the Sale Order each April 1 and October 1.
- (k) "Local Construction Fund, Series 2021 SRF-3" means a subaccount of the Construction Fund established in accordance with Section 11 of this 2021 SRF-2/3 Series Ordinance relating to the construction of the 2021 SRF-3 Project to be paid with the proceeds of the 2021 SRF-3 Junior Lien Bonds.
- (l) "Local Water System Project Costs" means the costs of acquiring, constructing, equipping, installing and financing the 2021 SRF-3 Project, including Issuance Costs relating to the 2021 SRF-3 Junior Lien Bonds
- (m) "Maturity Date" means such dates of maturity of the 2021 SRF-2/3 Junior Lien Bonds as determined in the Sale Order.
 - (n) "MFA" means the Michigan Finance Authority.
- (o) "Person" means any natural person, association, corporation, trust, partnership, joint venture, joint-stock company, municipal corporation, public body or other entity, however organized.

- (p) "Project Costs" means, collectively, the Local Water System Project Costs and the Regional Water System Project Costs.
- (q) "Purchase Contract" means the Purchase Contract between the MFA and the Authority with respect to the purchase by the MFA and the sale by the Authority of a Series of the 2021 SRF-2/3 Junior Lien Bonds.
- (r) "Regional Construction Fund, Series 2021 SRF-2" means a subaccount of the Construction Fund established in accordance with Section 11 of this 2021 SRF-2/3 Series Ordinance relating to the construction of the 2021 SRF-2 Project to be paid with the proceeds of the 2021 SRF-2 Junior Lien Bonds.
- (s) "Regional Water System Project Costs" means the costs of acquiring, constructing, equipping, installing and financing the 2021 SRF-2 Project, including Issuance Costs relating to the 2021 SRF-2 Junior Lien Bonds.
- (t) "Regular Record Date" means except as otherwise set forth in the Sale Order the fifteenth day of the calendar month immediately preceding an Interest Payment Date.
- (u) "Sale Order" means any one or more Sale Orders of an Authorized Officer authorizing acts consistent with the Ordinance and this 2021 SRF-2/3 Series Ordinance necessary and appropriate to complete the sale, execution and delivery of the 2021 SRF-2/3 Junior Lien Bonds and to complete the other transactions contemplated herein.
- (v) "Supplemental Agreement" means, collectively, (1) the Supplemental Agreement among the Authority, the MFA and the State of Michigan acting through the Department of Environment, Great Lakes, and Energy, with respect to a Series of the 2021 SRF-2 Junior Lien Bonds; and (2) the Supplemental Agreement among the City, the MFA and the State of Michigan acting through the Department of Environment, Great Lakes, and Energy, and approved and agreed to by the Authority, with respect to a Series of the 2021 SRF-3 Junior Lien Bonds.
- (w) "Taxable 2021 SRF-2/3 Junior Lien Bonds" means any 2021 SRF-2/3 Junior Lien Bonds other than Tax-Exempt 2021 SRF-2/3 Junior Lien Bonds.
- (x) "Tax-Exempt 2021 SRF-2/3 Junior Lien Bonds" means any 2021 SRF-2/3 Junior Lien Bonds that are Tax-Exempt Bonds.

Section 3. <u>Approval of 2021 SRF-2/3 Projects.</u>

- (a) <u>Approval of 2021 SRF-2 Project</u>. It is hereby determined to be necessary for the public health, benefit and welfare of the area served by the Regional Water System to acquire, construct and undertake the 2021 SRF-2 Project, and the 2021 SRF-2 Project is hereby approved and accepted.
- (b) <u>Approval of 2021 SRF-3 Project</u>. It is hereby determined to be necessary for the public health, benefit and welfare of the area served by the Local Water System to acquire, construct and undertake the 2021 SRF-3 Project, and the 2021 SRF-3 Project is hereby approved and accepted.

- Section 4. <u>Estimated Cost and Period of Usefulness of 2021 SRF-2/3 Projects</u>. The aggregate Project Costs are estimated by the Authority Board to not exceed \$128,000,000, and consist of the following:
- (a) The Regional Water System Project Costs are estimated by the Authority Board to not exceed \$110,000,000 and the Regional Water System Project Costs are hereby approved and confirmed. The period of usefulness of the 2021 SRF-2 Project is estimated to be not less than 40 years.
- (b) The Local Water System Project Costs are estimated by the Authority Board to not exceed \$18,000,000 and the Local Water System Project Costs are hereby approved and confirmed. The period of usefulness of the 2021 SRF-3 Project is estimated to be not less than 40 years.

Section 5. <u>Authorization of 2021 SRF-2/3 Junior Lien Bonds.</u>

(a) <u>Authorization of Borrowing</u>.

- (i) The Authority may borrow an amount not in excess of \$110,000,000, as is finally determined in the Sale Order, and issue the 2021 SRF-2 Junior Lien Bonds in one or more Series, all to evidence such borrowing pursuant to Act 233, Act 94 and the Ordinance, as 2021 SRF-2 Junior Lien Bonds, all as finally determined in the Sale Order. The amount of the 2021 SRF-2 Junior Lien Bonds authorized in this Section 5(a) shall include the amount of the net original issue premium, if any.
- (ii) The Authority may borrow an amount not in excess of \$18,000,000, as is finally determined in the Sale Order, and issue the 2021 SRF-3 Junior Lien Bonds in one or more Series, all to evidence such borrowing pursuant to Act 233, Act 94 and the Ordinance, as 2021 SRF-3 Junior Lien Bonds, all as finally determined in the Sale Order. The amount of the 2021 SRF-3 Junior Lien Bonds authorized in this Section 5(b) shall include the amount of the net original issue premium, if any.

(b) Purpose of 2021 SRF-2/3 Junior Lien Bonds.

- (i) The 2021 SRF-2 Junior Lien Bonds shall be issued as Additional Bonds for the purpose of paying and/or reimbursing Regional Water System Project Costs.
- (ii) The 2021 SRF-3 Junior Lien Bonds shall be issued as Additional Bonds for the purpose of paying and/or reimbursing Local Water System Project Costs.
- (c) <u>Priority of Lien</u>. Each Series of the 2021 SRF-2/3 Junior Lien Bonds shall be issued as SRF-2/3 Junior Lien Bonds.

(d) <u>Insufficient Proceeds</u>.

(i) To the extent that proceeds of SRF-2 Junior Lien Bonds are insufficient to pay Regional Water System Project Costs, the insufficiency shall be paid from the proceeds

of future Additional Bonds, if any, and/or moneys of the Regional Water System on hand and legally available therefor, as determined by the Authority Board.

- (ii) To the extent that proceeds of the SRF-3 Junior Lien Bonds are insufficient to pay Local Water System Project Costs, the insufficiency shall be paid from the proceeds of future Additional Bonds, if any, and/or moneys of the Local Water System on hand and legally available therefor, as determined by the Board of Water Commissioners of DWSD-R and, in the case of any Additional Bonds, with the concurrence of the Authority Board.
- (e) <u>Separate Series</u>. The 2021 SRF-2 Junior Lien Bonds are issuable at one or more times and as one or more separate Series of Bonds in such amounts as determined in the Sale Order. The 2021 SRF-3 Junior Lien Bonds are issuable at one or more times and as one or more separate Series of Bonds in such amounts as determined in the Sale Order. The 2021 SRF-2 Junior Lien Bonds and the 2021 SRF-3 Junior Lien Bonds shall be issued as separate Series.
- (f) <u>Taxable and Tax-Exempt 2021 SRF-2/3 Junior Lien Bonds</u>. Each Series of the 2021 SRF-2/3 Junior Lien Bonds may be issued as Taxable 2021 SRF-2/3 Junior Lien Bonds or Tax-Exempt 2021 SRF-2/3 Junior Lien Bonds, or as separate subseries of both, as set forth in the Sale Order.
- (g) <u>Source of Payment and Security</u>. The 2021 SRF-2/3 Junior Lien Bonds shall be payable and secured as provided in Section 8.
- (h) <u>Applicability of Ordinance</u>. Except as otherwise provided in this 2021 SRF-2/3 Series Ordinance or in the Sale Order, all of the provisions of the Ordinance shall apply to the 2021 SRF-2/3 Junior Lien Bonds as if set forth in full in this 2021 SRF-2/3 Series Ordinance, the purpose of this 2021 SRF-2/3 Series Ordinance being to supplement the Ordinance to authorize the issuance of 2021 SRF-2/3 Junior Lien Bonds for the purposes set forth herein.

Section 6. 2021 SRF-2/3 Junior Lien Bond Details.

(a) Designation.

- (1) The 2021 SRF-2 Junior Lien Bonds shall bear the designations Water Supply System Revenue Bonds, Series 2021-SRF-2 and shall include such other designations, including, without limitation, designations for multiple Series or subseries, as determined by an Authorized Officer as shall be set forth in the Sale Order and not inconsistent with the Ordinance or this 2021 SRF-2/3 Series Ordinance. The 2021 SRF-3 Junior Lien Bonds shall bear the designations Water Supply System Revenue Bonds, Series 2021-SRF-3 and shall include such other designations, including, without limitation, designations for multiple Series or subseries, as determined by an Authorized Officer as shall be set forth in the Sale Order and not inconsistent with the Ordinance or this 2021 SRF-2/3 Series Ordinance.
- (2) If any Series of the 2021 SRF-2/3 Junior Lien Bonds are not issued in 2021, an Authorized Officer is authorized in her discretion to re-designate the year and Series designation of such Series of 2021 SRF-2/3 Junior Lien Bonds

and the various funds and accounts established hereunder to correspond with the year of issuance of such Series of 2021 SRF-2/3 Junior Lien Bonds. Furthermore, an Authorized Officer is authorized to establish designations within the various funds and accounts established hereunder if necessary in order to differentiate such funds and accounts from other similarly named funds and accounts related to other Bonds.

- (b) <u>Numbering</u>. Each Series of the 2021 SRF-2/3 Junior Lien Bonds shall be numbered in such manner as shall be determined in the Sale Order.
- (c) <u>Principal</u>. Each Series of the 2021 SRF-2/3 Junior Lien Bonds shall be issued in the form of Serial Bonds or Term Bonds, or any combination of Serial Bonds and Term Bonds, in any Authorized Denomination, and the principal thereof shall mature on October 1, or such other date as set forth in the Sale Order, in such years and amounts, and shall be or not be subject to redemption prior to maturity, all as shall be determined in the Sale Order subject to the following limitations:
 - (1) No 2021 SRF-2/3 Junior Lien Bonds shall mature later than 40 years after the date of issuance thereof.
 - (2) The 2021 SRF-2/3 Junior Lien Bonds shall only be issued with annual principal and interest installments permitted by the Ordinance, including Section 207 thereof.
- (d) <u>Interest</u>. 2021 SRF-2/3 Junior Lien Bonds or portions thereof shall bear interest at a rate or rates as set forth in the Sale Order not in excess of 2.50% per annum. Interest on 2021 SRF-2/3 Junior Lien Bonds shall be payable on each Interest Payment Date.
- (e) Payment of Principal and Interest. The principal of, premium, if any, and interest on the 2021 SRF-2/3 Junior Lien Bonds shall be payable in lawful money of the United States. Except as otherwise provided in the Sale Order, so long as the 2021 SRF-2/3 Junior Lien Bonds are owned by the MFA, the 2021 SRF-2/3 Junior Lien Bonds are payable as to principal, redemption premium, if any, and interest at The Bank of New York Mellon Trust Company, N.A., or at such other place as shall be designated in writing to the Authority by the MFA (the MFA's Depository"), and the Authority agrees that it will deposit with the MFA's Depository payments of the principal of, premium, if any, and interest on the 2021 SRF-2/3 Junior Lien Bonds in immediately available funds by 12:00 noon at least five Business Days prior to the date on which any such payment is due, whether by maturity, redemption or otherwise. If the 2021 SRF-2/3 Junior Lien Bonds are not registered in the name of the MFA, the principal of and premium, if any, on the 2021 SRF-2/3 Junior Lien Bonds are payable upon the surrender thereof at the corporate trust office of the Trustee and the interest is payable by check or draft drawn on the Trustee and mailed to the registered owners as of the immediately preceding Regular Record Date at their address shown on the registration books of the Authority maintained by the Trustee.
- (f) <u>Dating</u>. Each Series of the 2021 SRF-2/3 Junior Lien Bonds shall be dated such date as determined in the Sale Order.

- (g) <u>Reserve Requirement</u>. There shall be no Reserve Requirement with respect to the 2021 SRF-2/3 Junior Lien Bonds.
- (h) <u>Exchange</u>. The registered owner of any 2021 SRF-2/3 Junior Lien Bond may exchange such 2021 SRF-2/3 Junior Lien Bond for a new 2021 SRF-2/3 Junior Lien Bond or Bonds of the same interest rate, maturity and Priority of Lien in an equal aggregate principal amount in one or more of the Authorized Denominations by surrendering such 2021 SRF-2/3 Junior Lien Bond to be exchanged at the designated office of the Trustee together with an assignment duly executed by the registered owner thereof or his attorney or legal representative in such form as shall be satisfactory to the Trustee. As provided in Section 206 of the Ordinance, the Trustee shall be responsible for the registration, transfer and exchange of 2021 SRF-2/3 Junior Lien Bonds and shall indicate its acceptance of such duties by a document filed with an Authorized Officer concurrently with the delivery of the 2021 SRF-2/3 Junior Lien Bonds.
- (i) Execution and Delivery of 2021 SRF-2/3 Junior Lien Bonds. Each Series of the 2021 SRF-2/3 Junior Lien Bonds shall be executed in the name of the Authority by manual or facsimile signature of the Chief Executive Officer of the Authority and countersigned by the manual or facsimile signature of the Secretary of the Authority Board, and shall have the Authority's seal or facsimile thereof affixed or printed thereon. The Chief Financial Officer is authorized to deliver the 2021 SRF-2/3 Junior Lien Bonds to the MFA upon receiving the purchase price therefor in lawful money of the United States.
- (j) <u>Form of 2021 SRF-2/3 Junior Lien Bonds</u>. Each Series of the 2021 SRF-2/3 Junior Lien Bonds shall be in substantially the following form, subject to such changes, additions or deletions as determined by the Chief Executive Officer within the parameters of this 2021 SRF-2/3 Series Ordinance:

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UNITED STATES OF AMERICA STATE OF MICHIGAN COUNTIES OF MACOMB, OAKLAND AND WAYNE GREAT LAKES WATER AUTHORITY WATER SUPPLY SYSTEM REVENUE BOND, SERIES 2021-SRF-

REGISTERED OWNER:	Michigan Finance Authority
PRINCIPAL AMOUNT:	\$
INTEREST RATE:	%
ORIGINAL ISSUE DATE:	

The Great Lakes Water Authority, Counties of Macomb, Oakland and Wayne, State of Michigan (the "Issuer"), upon authorization from the Board of Directors of the Issuer (the "Board"), has issued this Bond. The Issuer, for value received, promises to pay, in lawful money of the United States of America, but only from the Pledged Assets (as defined below), to the Registered Owner named above, or registered assigns, the Principal Amount stated above, or so much thereof as shall have been advanced to the Issuer and not prepaid or reduced pursuant to a Purchase Contract between the Issuer and the Michigan Finance Authority (the "MFA"), a Supplemental Agreement by and among the [Issuer][City of Detroit], the MFA and State of Michigan acting through the Department of Environment, Great Lakes, and Energy [and approved and agreed to by the Issuer], and the Order of Approval issued by the Department of Environment, Great Lakes, and Energy. The Principal Amount shall be payable on the dates and in the principal installments set forth in Schedule A attached hereto.

In the event less than the Principal Amount of this Bond is disbursed by the MFA, any portion of the Principal Amount is prepaid as provided herein, or any serial principal payment becomes due before the Issuer has received proceeds from corresponding purchased principal installments of at least a like amount, then the MFA may prepare a new serial principal installment repayment schedule which shall be presented to the Issuer and be effective upon receipt as provided in the Purchase Contract.

Interest on this Bond shall accrue from the Original Issue Date set forth above at the Interest Rate set forth above, only on that portion of installments of the Principal Amount which have been disbursed by the MFA, shall be payable on ______, 201_ and semiannually on each April 1 and October 1 thereafter (each an "Interest Payment Date").

If the MFA is not the registered owner of this Bond, principal of this Bond is payable upon presentation and surrender at the designated office of U.S. Bank National Association, as Trustee under the Ordinance (as defined below) or such other trustee as the Issuer may hereafter designate by notice mailed to the registered owner not less than 60 days prior to any Interest Payment Date (the "<u>Trustee</u>").

Interest on this Bond is payable to the registered owner of record as of the close of business on the 15th day of the month immediately preceding any Interest Payment Date as shown on the registration books kept by the Trustee by check or draft mailed by the Trustee to the registered owner at the registered address. Interest on this Bond shall be computed on the basis of a 360-day year comprised of twelve 30-day months. During the time funds are being drawn down by the Issuer under this Bond, the MFA will periodically provide the Issuer with a statement showing the amount of principal that has been advanced and the date of each advance, which statement shall constitute prima facie evidence of the reported information; provided, that no failure on the part of the MFA to provide such a statement or to reflect a disbursement or the correct amount of a disbursement shall relieve the Issuer of its obligation to repay the outstanding principal amount actually advanced [(subject to any principal forgiveness as provided for herein)], all accrued interest thereon, and any other amount payable with respect thereto in accordance with the terms of this Bond.

In the event of a default in the payment of principal or interest hereon when due, whether at maturity, by redemption or otherwise, the amount of such default shall bear interest (the "additional interest") at a rate equal to the rate of interest that is two percent above the MFA's cost of providing funds (as determined by the MFA) to make payment on the bonds of the MFA issued to provide funds to purchase this Bond but in no event in excess of the maximum rate of interest permitted by law. The additional interest shall continue to accrue until the MFA has been fully reimbursed for all costs incurred by the MFA (as determined by the MFA) as a consequence of the Issuer's default. Such additional interest shall be payable on the interest payment date following demand of the MFA. In the event that (for reasons other than the default in the payment of any municipal obligation purchased by the MFA) the investment of amounts in the reserve account established by the MFA for the bonds of the MFA issued to provide funds to purchase this bond fails to provide sufficient available funds (together with any other funds that may be made available for such purpose) to pay the interest on outstanding bonds of the MFA issued to fund such account, the Issuer shall and hereby agrees to pay on demand only the Issuer's pro rata share (as determined by the MFA) of such deficiency as additional interest on this bond.

Notwithstanding any other provision of this Bond, so long as the MFA is the owner of this Bond, (a) this Bond is payable as to principal, premium, if any, and interest at The Bank of New York Mellon Trust Company, N.A., or at such other place as shall be designated in writing to the Issuer by the MFA (the "MFA's Depository"); (b) the Issuer agrees that it will deposit with the MFA's Depository payments of the principal of, premium, if any, and interest on this Bond in immediately available funds by 12:00 noon at least five business days prior to the date on which any such payment is due whether by maturity, redemption or otherwise; in the event that the MFA's Depository has not received the Issuer's deposit by 12:00 noon on the scheduled day, the Issuer shall immediately pay to the MFA as invoiced by the MFA an amount to recover the MFA's administrative costs and lost investment earnings attributable to that late payment; and (c) written notice of any redemption of this Bond shall be given by the Issuer and received by the MFA's Depository at least 40 days prior to the date on which redemption is to be made.

This Bond is one of a series of bonds designated "Water Supply System Revenue Bonds, Series 2021-SRF-_" and is issued pursuant to the provisions of (i) Act 233, Public Acts of Michigan, 1955, as amended ("Act 233"), and Act 94, Public Acts of Michigan, 1933, as amended ("Act 94"), (ii) Master Bond Ordinance No. 2015-01 adopted by the Board on October 7, 2015, as

amended (the "Bond Ordinance"), (iii) the Series Ordinance Authorizing Issuance and Sale of Water Supply System Revenue Bonds in an Aggregate Amount not to Exceed \$128,000,000, adopted by the Board on _______, 2021 (the "Series Ordinance"), and (iv) a Sale Order of the Chief Executive Officer of the Issuer dated _______, 2021 (the "Sale Order," and, collectively with the Bond Ordinance and the Series Ordinance, the "Ordinance"). This Bond is issued for the purposes set forth in the Series Ordinance and the Sale Order.

For the prompt payment of the principal of and interest on this Bond, and other bonds issued by the Issuer pursuant to the Bond Ordinance, the Issuer has irrevocably pledged the Pledged Assets (as defined in the Bond Ordinance), which includes the revenues of the Water System (as defined in the Bond Ordinance), after provision is made for reasonable and necessary expenses of operation, maintenance and administration of the Water System (the "Net Revenues"), and a statutory lien on the Net Revenues and Pledged Assets is hereby recognized and acknowledged. Such lien is a third lien, subject to obligations heretofore and hereafter issued or incurred under the Bond Ordinance secured by a first or second lien on the Pledged Assets. This Bond is of equal standing on a parity with all other obligations heretofore and hereafter issued or incurred under the Bond Ordinance and secured by a third lien on the Pledged Assets.

For a complete statement of the revenues from which and the conditions under which this Bond is payable, a statement of the conditions under which Additional Bonds (as defined in the Bond Ordinance) of senior or equal standing and Additional Bonds of junior standing may hereafter be issued and the general covenants and provisions pursuant to which this Bond is issued, reference is made to the Bond Ordinance.

This Bond is subject to redemption prior to maturity at the option of the Issuer and with the prior written consent of and upon such terms as may be required by the MFA. That portion of this Bond called for redemption shall not bear interest after the date fixed for redemption, provided funds are on hand with the Trustee to redeem the same.

THIS BOND IS ISSUED UNDER ACT 233 AND ACT 94. IT IS A SELF-LIQUIDATING BOND AND IS NOT A GENERAL OBLIGATION OF THE ISSUER AND DOES NOT CONSTITUTE AN INDEBTEDNESS OF THE ISSUER WITHIN ANY CONSTITUTIONAL OR STATUTORY LIMITATION, BUT IS PAYABLE, BOTH AS TO PRINCIPAL AND INTEREST SOLELY FROM THE PLEDGED ASSETS OF THE WATER SYSTEM. THE PAYMENT OF THE PRINCIPAL OF AND INTEREST ON THIS BOND ARE SECURED BY A STATUTORY LIEN ON THE PLEDGED ASSETS AS DESCRIBED HEREIN.

The Issuer has covenanted and agreed, and hereby covenants and agrees, to fix and maintain, or cause to be fixed and maintained, at all times while any bonds payable from the Pledged Assets of the Water System shall be outstanding, such rates for service furnished by the Water System as shall be sufficient to provide for payment of the interest upon and the principal of this Bond and all other Bonds (as defined in the Bond Ordinance) assumed or issued and to be issued under the Bond Ordinance as and when the same shall become due and payable, to create and maintain a bond redemption fund therefor, including a bond reserve for Bonds other than this Bond, to provide for the payment of expenses of administration and operation and such expenses for maintenance of the Water System as are necessary to preserve the same in good repair and

working order, and to provide for such other expenditures and funds for the Water System, all as are required by the Bond Ordinance.

This Bond is transferable only upon the books of the Issuer kept for that purpose at the office of the Trustee by the registered owner hereof in person, or by his attorney duly authorized in writing, upon the surrender of this Bond together with a written instrument of transfer satisfactory to the Trustee duly executed by the registered owner or his attorney duly authorized in writing, and thereupon a new registered bond or bonds of the same type, in the same aggregate principal amount and of the same maturity shall be issued to the transferee in exchange therefor as provided in the Ordinance and upon the payment of the charges, if any, therein prescribed.

It is hereby certified and recited that all acts, conditions and things required by law precedent to and in the issuance of this Bond have been done and performed by regular and due time and form as required by law.

This Bond is not valid or obligatory for any purpose until the Trustee's Certificate of Authentication hereon has been executed by the Trustee.

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[Seal]

IN WITNESS WHEREOF, the Great Lakes Water Authority, Counties of Macomb, Oakland and Wayne, State of Michigan, has caused this Bond to be signed in its name by the facsimile signatures of its Chief Executive Officer and its Secretary of the Board, and a facsimile of its corporate seal to be printed, impressed or otherwise reproduced hereon, all as of the Original Issue Date.

By: Chief Executive Officer Countersigned: By: Secretary, Board of Directors

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CERTIFICATE OF AUTHENTICATION

This Bond is authenticated as the bornevenue Bond, Series 2021-SRF".	nd designated by the Issuer as "Water Supply System
	U.S. Bank National Association, Trustee
	By:
Date of Authentication:, 2021	

ASSIGNMENT

	For	value	received,	the	undersigned	sells,	assigns	and	transfers	unto
			thi	is Bon	d and all rights	hereund	er and her	eby irre	evocably ap	points
			at	torney	to transfer this	s Bond	on the boo	oks kej	ot for regist	tration
thereo	f with	full pow	er of substit	ution i	in the premises.					
Dated:										
					Signature					

NOTICE: The signature to this assignment must correspond with the name as it appears on the face of this Bond in every particular.

Schedule A

The principal amounts and maturity dates applicable to the Bond to which this Schedule A is attached are as follows:

Date Amount

Based on the schedule provided above unless revised as provided in this paragraph, repayment of the Principal Amount shall be made according to such schedule until the full Principal Amount disbursed to the Issuer is repaid; provided, however, that the Issuer shall have no obligation to repay any serial principal installment for which the Issuer did not receive a disbursement of Principal Amount by the date such serial principal installment is due. In the event the Order of Approval issued by the Department of Environment, Great Lakes, and Energy (the "Order") approves a principal amount of assistance less than the amount of this Bond, the MFA shall only disburse principal up to the amount stated in the Order. In the event (1) that the payment schedule described above provides for payment of a total principal amount greater than the amount of assistance approved by the Order, (2) that less than the principal amount of assistance approved by the Order is disbursed to the Issuer by the MFA or (3) of prepayment [or principal forgiveness] of the Bond, the MFA shall prepare a new payment schedule that shall be effective upon receipt by the Issuer.

END OF BOND FORM

Section 7. <u>Concerning the Securities Depository.</u>

(a) As used herein:

"Beneficial Owner" means any Person who indirectly owns 2021 SRF-2/3 Junior Lien Bonds pursuant to the indirect ownership system maintained by a securities depository (the "Securities Depository") and its Participants, commonly known as the "Book-Entry Only System."

"Participant" means any Person whose ownership of 2021 SRF-2/3 Junior Lien Bonds is shown on books of the Securities Depository.

- (b) The 2021 SRF-2/3 Junior Lien Bonds will initially be registered in the name of the MFA, or such other purchasers as designated in the Sale Order. In the event 2021 SRF-2/3 Junior Lien Bonds are later to be registered in the name of a Securities Depository or its nominee, neither the Authority nor the Trustee shall have any responsibility or obligation to any Participant or to any Beneficial Owner with respect to any matter, including the following:
 - (1) the accuracy of the records of the Securities Depository, its nominee or any Participant with respect to any ownership interest in 2021 SRF-2/3 Junior Lien Bonds,
 - (2) the delivery to any Participant, Beneficial Owner or any other Person other than the Securities Depository of any notice with respect to: any 2021 SRF-2/3 Junior Lien Bonds, including any notice of redemption, or
 - (3) the payment to any Participant, Beneficial Owner or any other Person, other than the Securities Depository of any amount with respect to the principal (and premium, if any) of or interest on any 2021 SRF-2/3 Junior Lien Bonds.
- (c) The Trustee shall pay all principal (and premium, if any) of and interest on the 2021 SRF-2/3 Junior Lien Bonds only to or upon the order of the MFA, or the Securities Depository, as applicable, and all such payments shall be valid and effective fully to satisfy and discharge the Authority's obligations with respect to the principal (and premium, if any) of, and interest on such 2021 SRF-2/3 Junior Lien Bonds to the extent of the sum or sums so paid.
- (d) If 2021 SRF-2/3 Junior Lien Bonds become registered in the name of the Securities Depository and (1) the Authority receives a written notice from the Securities Depository to the effect the Securities Depository is unable or unwilling to discharge its responsibilities or (2) the Authority determines that it is in the best interests of the Beneficial Owners of 2021 SRF-2/3 Junior Lien Bonds that they be able to obtain 2021 SRF-2/3 Junior Lien Bonds in certificated form, then, in either event, the Authority shall notify the Trustee and, in the case of clause, (2), the Securities Depository.
- (e) Upon discontinuance of the use of the Book-Entry Only System maintained by the Securities Depository, if any, pursuant to subsection (d), above and upon receipt of notice from the Securities Depository containing sufficient information, the Authority shall execute and the Trustee shall authenticate and deliver 2021 SRF-2/3 Junior Lien Bonds in certificated form to

Beneficial Owners in exchange for the beneficial interests of such Beneficial Owners in corresponding principal amounts and in any Authorized Denominations.

- (f) Notwithstanding any other provision of this 2021 SRF-2/3 Series Ordinance to the contrary, so long as any 2021 SRF-2/3 Junior Lien Bond is registered in the name of the Securities Depository or its nominee:
 - (1) all payments with respect to the principal, premium, if any, and interest on such 2021 SRF-2/3 Junior Lien Bond and all notices of redemption, tender and otherwise with respect to such 2021 SRF-2/3 Junior Lien Bond shall be made and given, respectively, to the Securities Depository as provided in the letter of representations from the Authority to the Securities Depository with respect to such 2021 SRF-2/3 Junior Lien Bonds or any master letter of representations from the Authority to the Securities Depository;
 - (2) if less than all of the 2021 SRF-2/3 Junior Lien Bonds of the same type of any maturity are to be redeemed, then the particular 2021 SRF-2/3 Junior Lien Bonds or portions of 2021 SRF-2/3 Junior Lien Bonds of such type and maturity to be redeemed shall be selected by the Securities Depository in any such manner as the Securities Depository may determine;
 - (3) all payments with respect to principal of the 2021 SRF-2/3 Junior Lien Bonds and premium, if any and interest on the 2021 SRF-2/3 Junior Lien Bonds shall be made in such manner as shall be prescribed by the Securities Depository; and
 - (4) if a 2021 SRF-2/3 Junior Lien Bond is redeemed or tendered in part, then all amounts payable in respect of such redemption or tender shall be paid without presentation and surrender of such 2021 SRF-2/3 Junior Lien Bond pursuant to the procedures of the Securities Depository.

Section 8. <u>Payment of 2021 SRF-2/3 Junior Lien Bonds; Confirmation of Statutory</u> Lien.

- (a) The 2021 SRF-2/3 Junior Lien Bonds and the interest thereon shall be payable solely from the Pledged Assets.
- (b) To secure payment of the 2021 SRF-2/3 Junior Lien Bonds, the statutory lien upon the whole of the Pledged Assets established by Act 94 and the pledge created in Section 501 of the Ordinance is hereby confirmed in favor of the 2021 SRF-2/3 Junior Lien Bonds as follows: Such lien in favor of the 2021 SRF-2/3 Junior Lien Bonds shall be a statutory third lien on the Pledged Assets of equal standing and Priority of Lien with all issued, to be issued and outstanding SRF-2/3 Junior Lien Bonds.
- Section 9. <u>Funds and Accounts; Flow of Funds</u>. Except as otherwise provided in this 2021 SRF-2/3 Series Ordinance, all of the provisions relative to funds and accounts, their maintenance, the flow of funds and other details relative thereto, shall remain as specifically set forth in the Ordinance.

Section 10. Disposition of Proceeds.

- (a) <u>Disposition of Accrued Interest and Capitalized Interest</u>. (1)From the proceeds of the sale of the 2021 SRF-2 Junior Lien Bonds there shall be immediately deposited in the SRF Junior Lien Debt Service Account, an amount equal to any accrued interest received on the delivery of the 2021 SRF-2 Junior Lien Bonds and any capitalized interest on the 2021 SRF-2 Junior Lien Bonds, and the Authority may take credit for the amount so deposited against the amount required to be deposited in the SRF Junior Lien Debt Service Account for payment of the next maturing interest payment on the 2021 SRF-2 Junior Lien Bonds.
- (2) From the proceeds of the sale of the 2021 SRF-3 Junior Lien Bonds there shall be immediately deposited in the SRF Junior Lien Debt Service Account, an amount equal to any accrued interest received on the delivery of the 2021 SRF-3 Junior Lien Bonds and any capitalized interest on the 2021 SRF-3 Junior Lien Bonds, and the Authority may take credit for the amount so deposited against the amount required to be deposited in the SRF Junior Lien Debt Service Account for payment of the next maturing interest payment on the 2021 SRF-3 Junior Lien Bonds.
- (b) <u>Construction Fund</u>. The balance of the proceeds of each Series of the 2021 SRF-2/3 Junior Lien Bonds shall be deposited in the Construction Fund and used to pay Project Costs as provided in Section 11.

Section 11. Construction Fund.

(a) <u>Construction Fund – Regional Water System Improvements.</u>

- (1) A subaccount of the Authority Regional Construction Account of the Construction Fund established by the Ordinance shall be established for the 2021 SRF-2 Junior Lien Bonds and designated the "Regional Construction Fund, Series 2021 SRF-2," and shall be established and maintained as a separate depository account with a Custodian as designated by the Chief Financial Officer.
- (2) Moneys in the Regional Construction Fund, Series 2021 SRF-2 shall be applied solely to payment of Regional Water System Project Costs (or to the reimbursement of Regional Water System Project Costs paid by the Authority from other funds prior to the issuance of the 2021 SRF-2 Junior Lien Bonds).
 - (A) Payments or reimbursements for Regional Water System Project Costs for construction, either on account or otherwise, shall not be made unless the registered engineer in charge of such work shall file with an Authorized Officer a signed statement to the effect that the work has been completed in accordance with the plans and specifications therefor, that it was done in accordance with the contract therefor, that such work is satisfactory and that such work has not been previously paid for.
 - (B) Payment or reimbursement for Regional Water System Project Costs consisting of Issuance Costs and engineering, legal and financial costs shall be made upon submission of appropriate documentation to an Authorized Officer.

(b) <u>Construction Fund – Local Water System Improvements.</u>

- (1) A subaccount of the Detroit Local Construction Account of the Construction Fund established by the Ordinance shall be established for the 2021 SRF-3 Junior Lien Bonds and designated the "Local Construction Fund, Series 2021 SRF-3," and shall be established and maintained as a separate depository account with a Custodian as designated by a City Authorized Officer.
- (2) Moneys in the Local Construction Fund, Series 2021 SRF-3 shall be applied solely to payment of Local Water System Project Costs (or to the reimbursement of Local Water System Project Costs paid by the Authority or the City from other funds prior to the issuance of the 2021 SRF-3 Junior Lien Bonds).
 - (A) Payments or reimbursements for Local Water System Project Costs for construction, either on account or otherwise, shall not be made unless the registered engineer in charge of such work shall file with a City Authorized Officer a signed statement to the effect that the work has been completed in accordance with the plans and specifications therefor, that it was done pursuant to and in accordance with the contract therefor, that such work is satisfactory and that such work has not been previously paid for.
 - (B) Payment or reimbursement for Local Water System Project Costs consisting of Issuance Costs and engineering, legal and financial costs shall be made upon submission of appropriate documentation to a City Authorized Officer.

Section 12. Tax Covenant.

- (a) The Authority hereby covenants and represents with the registered owners of the Tax-Exempt 2021 SRF-2/3 Junior Lien Bonds, that so long as any of the Tax-Exempt 2021 SRF-2/3 Junior Lien Bonds remain outstanding and unpaid as to either principal or interest, the Authority shall, to the extent permitted by law, take all actions within its control to maintain, and will refrain from taking any action which would impair, the exclusion of the interest on the Tax-Exempt 2021 SRF-2/3 Junior Lien Bonds from gross income for federal income tax purposes under the Code.
- (b) The actions referred to in subsection (a), above include, but are not limited to actions relating to any required rebate of arbitrage earnings and the expenditure and investment of proceeds of Tax-Exempt 2021 SRF-2/3 Junior Lien Bonds and moneys deemed to be proceeds of Tax-Exempt 2021 SRF-2/3 Junior Lien Bonds, and to prevent Tax-Exempt 2021 SRF-2/3 Junior Lien Bonds from being or becoming "private activity bonds" as that term is used in the Code.

Section 13. Sale of 2021 SRF-2/3 Junior Lien Bonds; Purchase Contract; Expiration of Referendum Period.

(a) The 2021 SRF-2/3 Junior Lien Bonds shall be sold by negotiated sale to the MFA pursuant to a Purchase Contract in customary form with such changes thereto as an Authorized Officer shall determine are in the best interests of the Authority, within the parameters established by this 2021 SRF-2/3 Series Ordinance. Such determination shall be conclusively established by the Authorized Officer's execution of the Purchase Contract to the MFA.

- (b) The Authority Board hereby determines that the sale of the 2021 SRF-2/3 Junior Lien Bonds by negotiated sale as described in subsection (a) is in the best interests of the Authority and will allow the 2021 SRF-2/3 Junior Lien Bonds to receive a subsidized interest rate through participation in the MFA's Drinking Water Revolving Fund Program.
- (c) An Authorized Officer is authorized to accept, on behalf of the Authority, an offer from the MFA to purchase the 2021 SRF-2/3 Junior Lien Bonds subject to the following limitations:
 - (1) The interest rate with respect to any Series of the 2021 SRF-2/3 Junior Lien Bonds shall not exceed 2.50%.
 - (2) The aggregate purchaser's discount at which any Series of the 2021 SRF-2/3 Junior Lien Bonds shall be sold to the MFA shall not exceed 2.00%.
- (d) An Authorized Officer shall confirm in the Sale Order that there was no petition meeting the requirements of Section 33 of Act 94 that was filed with the Secretary of the Authority Board within 45 days of the date of publication of the notice of intent to issue bonds with respect to the 2021 SRF-2/3 Junior Lien Bonds as required by Section 33 of Act 94.
- Section 14. <u>Delegation of Authority to and Authorization of Actions of Authorized</u> Officers.
- (a) An Authorized Officer shall make all determinations herein provided to be made in the Sale Order and shall make all such determinations in accordance with the best interests of the Authority within the parameters of this 2021 SRF-2/3 Series Ordinance.
- (b) In addition to determinations authorized elsewhere in this 2021 SRF-2/3 Series Ordinance, an Authorized Officer shall determine the aggregate principal amount of 2021 SRF-2/3 Junior Lien Bonds to be issued, but not in excess of the aggregate principal amount authorized by this 2021 SRF-2/3 Series Ordinance, on the basis of her evaluation of the maximum amount of 2021 SRF-2/3 Junior Lien Bonds which can be sold, given anticipated interest rates and the revenue coverage requirements with respect to the 2021 SRF-2/3 Junior Lien Bonds and for any other reasons the Authorized Officer deems appropriate.
 - (1) Such determination shall also include the redemption provisions for the 2021 SRF-2/3 Junior Lien Bonds.
 - (2) An Authorized Officer shall also determine and establish, in accordance with this 2021 SRF-2/3 Series Ordinance, the maturities of each Series of the 2021 SRF-2/3 Junior Lien Bonds, whether such maturities shall be serial or term maturities and the Mandatory Redemption Requirements for any term maturities.
- (c) An Authorized Officer is authorized, if necessary, to file applications and to pay the related fees, if any, to the Michigan Department of Treasury at her discretion under Act 34 for one or more orders of approval to issue all or a portion of the 2021 SRF-2/3 Junior Lien Bonds, and such waivers or other Treasury approvals as necessary to implement the sale, delivery and

security for the 2021 SRF-2/3 Junior Lien Bonds as authorized herein, and as required by the Michigan Department of Treasury or Act 34.

- (d) An Authorized Officer shall determine in the Sale Order that the requirements set forth in Section 207 of the Ordinance with respect to the issuance of the 2021 SRF-2/3 Junior Lien Bonds as Additional Bonds have been satisfied.
- (e) An Authorized Officer is hereby authorized and directed to do and perform any and all other acts and things with respect to the 2021 SRF-2/3 Junior Lien Bonds which are necessary or appropriate to carry into effect, consistent with the Ordinance and this 2021 SRF-2/3 Series Ordinance, the authorizations therein and herein contained including without limitation the securing of ratings by bond rating agencies, and the incurring of reasonable fees costs and expenses incidental to the foregoing, for and on behalf of the Authority.
- Section 15. <u>Advancement of Project Costs</u>. At the direction of an Authorized Officer, the Authority may advance certain Project Costs from the Authority's funds prior to the issuance of the 2021 SRF-2/3 Junior Lien Bonds to the extent that such costs are expenditures appropriate for reimbursement under applicable law, including the Code in the case of Tax-Exempt 2021 SRF-2/3 Junior Lien Bonds.
- Section 16. <u>Ratification</u>. All determinations and decisions of an Authorized Officer heretofore taken with respect to the issuance and sale of the 2021 SRF-2/3 Junior Lien Bonds as permitted or required by the Ordinance or law are hereby ratified, confirmed and approved.
- Section 17. <u>Additional Authorization</u>. The Chief Executive Officer, the Chief Financial Officer, the Chief Administrative and Compliance Officer and the General Counsel of the Authority, any such officials acting in an interim or acting capacity to such officers, their deputies and staff, or any of them, are hereby authorized to execute and deliver such certificates, Supplemental Agreements, other agreements, documents, instruments, opinions and other papers as may be deemed necessary or appropriate to complete the sale, execution and delivery of the 2021 SRF-2/3 Junior Lien Bonds and otherwise give effect to the transactions contemplated by this 2021 SRF-2/3 Series Ordinance, as determined by such officials executing and delivering the foregoing items.
- Section 18. <u>2021 SRF-2/3 Series Ordinance a Contract</u>. The provisions of this 2021 SRF-2/3 Series Ordinance shall constitute a contract between the Authority and each registered owner of an outstanding 2021 SRF-2/3 Junior Lien Bond.

Section 19. Professional Services.

- (a) Dickinson Wright PLLC is hereby appointed as Bond Counsel for the 2021 SRF-2/3 Junior Lien Bonds, notwithstanding the periodic representation by Dickinson Wright PLLC in unrelated matters of other parties and potential parties to the issuance of the 2021 SRF-2/3 Junior Lien Bonds.
- (b) PFM Financial Advisors LLC is hereby appointed as Financial Advisor for the 2021 SRF-2/3 Junior Lien Bonds, notwithstanding the periodic representation by PFM Financial

Advisors LLC in unrelated matters of other parties and potential parties to the issuance of the 2021 SRF-2/3 Junior Lien Bonds.

- (c) The fees and expenses of Dickinson Wright PLLC and PFM Financial Advisors LLC shall be payable as an Issuance Cost from the proceeds of the 2021 SRF-2/3 Junior Lien Bonds or other available funds.
- (d) An Authorized Officer is authorized to engage financial and other consultants as she deems necessary or appropriate in connection with the sale, issuance and delivery of the 2021 SRF-2/3 Junior Lien Bonds and to pay the fees and expenses thereof from the proceeds of the 2021 SRF-2/3 Junior Lien Bonds or other available funds.
- Section 20. <u>Severability; Headings; and Conflict</u>. If any section, paragraph, clause or provision of this 2021 SRF-2/3 Series Ordinance shall be held invalid, the invalidity of such section, paragraph, clause or provision shall not affect any of the other provisions of this 2021 SRF-2/3 Series Ordinance. The section and paragraph headings in this 2021 SRF-2/3 Series Ordinance are furnished for convenience of reference only and shall not be considered to be part of this 2021 SRF-2/3 Series Ordinance.
- Section 21. <u>Publication and Recordation</u>. This 2021 SRF-2/3 Series Ordinance shall be published in full in the Detroit Legal News, a newspaper of general circulation within the geographic boundaries of the Authority qualified under State law to publish legal notices, promptly after its adoption, and shall be maintained in the official records of the Authority and such recording authenticated by the signatures of the Chairperson and Secretary of the Authority Board.
- Section 22. <u>Repeal</u>. All ordinances, resolutions, indentures or orders, or parts thereof, in conflict with the provisions of this 2021 SRF-2/3 Series Ordinance are, to the extent of such conflict, repealed.

Section 23. <u>Effective Date</u>. This 2021 SRF-2/3 Series Ordinance shall be effective upon adoption.

Adopted and signed on the 23rd day of June, 2021.

GREAT LAKES WATER AUTHORITY

Signed _	
_	Chairperson
Signed _	
<u> </u>	Secretary

4831-2196-2674 v4 [63818-21]

Great Lakes Water Authority

Resolution 2021-243

RE: Approval of Series Ordinance Authorizing Issuance and Sale of Water Supply System Revenue Bonds in an Aggregate Amount not to Exceed \$128,000,000 Ordinance 2021-03

By Board Member:			

Whereas

There has been presented to the Board of Directors of the Great Lakes Water Authority (the "Authority") an ordinance entitled "Series Ordinance Authorizing the Issuance and Sale of Water Supply System Revenue Bonds in an Aggregate Amount not to Exceed \$128,000,000" (the "2021 SRF-2/3 Series Ordinance"), which ordinance is a Series Ordinance as defined and described in Master Bond Ordinance No. 2015-01 adopted by the Board of Directors on October 7, 2015, as amended on December 9, 2015, January 27, 2016 and August 10, 2016.

Whereas

The Articles of Incorporation of the Authority provide that at least 5 of the 6 members of the Authority Board must vote to approve the 2021 SRF-2/3 Series Ordinance.

Now, Therefore Be It:

Resolved

That the 2021 SRF-2/3 Series Ordinance, in the form presented to this meeting, is approved and adopted, and the Chairperson and the Secretary are authorized to authenticate the 2021 SRF-2/3 Series Ordinance in the form approved; **And Be it Further**

Resolved

That an affirmative vote of at least 5 members of the Authority Board is necessary for the passage of this Resolution.

Adopted by the Great Lakes Water Authority Board on: June 23, 2021

BLOOMFIELD 63818-21 2359313v3

Page 119 AGENDA ITEM #7F



Financial Services Audit Committee Communication

Date: June 21, 2021

To: Great Lakes Water Authority Audit Committee

From: Kim Garland, CPA, Reporting & Compliance Manager

Re: Resolution Regarding Approval of Series Ordinance Authorizing Issuance and Sale of

Sewage Disposal System Revenue Bonds in an Amount Not to Exceed \$30,000,000

(Ordinance 2021-04)

Background: Attached is the draft Great Lakes Water Authority ("GLWA") Board letter for the June 23, 2021 Board meeting regarding the Series Ordinance for the proposed Sewage Disposal System State Revolving Fund (SRF) bond issue. The series of bonds authorized by this ordinance will be sold through the state of Michigan's Clean Water Revolving Fund program (Project #5706-01) and will be used to finance the improvements to the Local Sewage Disposal System, comprised of the rehabilitation with some limited replacement of aging sewers in Riverdale and South Rosedale Park within the City of Detroit. Construction will include in-place rehabilitation of sewers and manhole structures, and in limited instances, excavation of existing sewers for replacement.

Key Provisions:

- Not to Exceed Par Amount: \$30,000,000
- Maximum Coupon Rate: 2.50% (Current program rate is 1.875%)
- Bonds will be designated 2021 SRF-2 Junior Lien Bonds
- Bonds will be sold to the Michigan Finance Authority (MFA)

Proposed Action: Audit Committee recommends that the Great Lakes Water Authority Board approve the resolution Approval of Series Ordinance Authorizing Issuance and Sale of Sewage Disposal System Revenue Bonds in an Amount Not to Exceed \$30,000,000 as presented, at its regular meeting on June 23, 2021.

..Title

Resolution Regarding Approval of Series Ordinance Authorizing Issuance and Sale of Sewage Disposal System Revenue Bonds in an Amount Not to Exceed \$30,000,000 (Ordinance 2021-04)

..Body

Agenda of: June 23, 2021 Item No.: **2021-244**

Amount: Not to Exceed \$30,000,000

TO: The Honorable

Board of Directors

Great Lakes Water Authority

FROM: Sue F. McCormick

Chief Executive Officer

Great Lakes Water Authority

DATE: June 23, 2021

RE: Resolution Regarding Approval of Series Ordinance Authorizing

Issuance and Sale of Sewage System Revenue Bonds in an Amount

Not to Exceed \$30,000,000 (Ordinance 2021-04)

<u>MOTION</u>

Upon recommendation of Sue McCormick, Chief Executive Officer, the Board of Directors (Board) of the Great Lakes Water Authority (GLWA), approve the resolution Approval of Series Ordinance Authorizing Issuance and Sale of Sewage Disposal System Revenue Bonds in an Amount Not to Exceed \$30,000,000 as presented, and authorizes the CEO to take such other action as may be necessary to accomplish the intent of this vote.

BACKGROUND

On March 8, 2017, the Great Lakes Water Authority ("GLWA") Board of Directors approved Resolution 2017-185, "Resolution of the Great Lakes Water Authority Authorizing Publication of Notice of Intent to Issue Sewage Disposal System Revenue Bonds in a principal amount not to exceed \$275,000,000" (the "Notice of Intent"). This is the seventh series of sewer bonds from that Notice of Intent in the amount not to exceed \$30,000,000.

The approval of the Series Ordinance presented today is the next formal step required by the GLWA Board of Directors in the bond issuance process. The Series Ordinance authorizes the issuance of the Bonds by GLWA, sets forth the guidelines for the Clean Water Revolving Fund (CWRF) Bonds, designates the Bonds as 2021 SRF-2 Junior Lien Bonds, and authorizes the Chief Executive Officer or the Chief Financial Officer to execute the final terms of the Bonds, paying issuance costs and signing of the Purchase Contract and Sale Order, within the parameters set forth in the Series Ordinance.

JUSTIFICATION

The series of bonds authorized by this ordinance will be sold through the state of Michigan's Clean Water Revolving Fund program (Project #5706-01) and will be used to finance the improvements to the Local Sewage Disposal System, comprised of the rehabilitation with some limited replacement of aging sewers in Riverdale and South Rosedale Park within the City of Detroit. Construction will include in-place rehabilitation of sewers and manhole structures, and in limited instances, excavation of existing sewers for replacement. Per the Ordinance, this series of bonds will be designated 2021 SRF-2 Junior Lien Bonds, with a loan amount not to exceed \$30,000,000.

The 2021 SRF-2 Junior Lien Bonds will be sold to the Michigan Finance Authority. The current program interest rate for the DWRF is 1.875% for a 20-year term and 2.125% for a 30-year term. Based on the not to exceed amount for this series of \$30.0 million, GLWA could save an estimated \$8.0 million over the life of this bond issue in interest costs and avoided issuance costs in comparison to a similar open market revenue bond with a 30-year term and 3.50% interest rate.

BUDGET IMPACT

The debt service payments on the GLWA Regional project are anticipated to start on April 1, 2022 with minimal amounts of interest due, because of the projected draw down schedules. Interest expense on the loan is included in the FY 2022 Water Budget.

COMMITTEE REVIEW

This matter was reviewed by the GLWA Audit Committee at its meeting on June 21, 2021. The Audit Committee [insert action] approval of the resolution Approval of Series Ordinance Authorizing Issuance and Sale of Sewage Disposal System Revenue Bonds in an Amount Not to Exceed \$30,000,000 as presented.

GREAT LAKES WATER AUTHORITY ORDINANCE NO. 2021-04

SERIES ORDINANCE AUTHORIZING ISSUANCE AND SALE OF SEWAGE DISPOSAL SYSTEM REVENUE BONDS IN AN AGGREGATE AMOUNT NOT TO EXCEED \$30,000,0000

WHEREAS, pursuant to Resolution No. 2015-10-03 adopted by the Board of Directors of the Great Lakes Water Authority (the "Authority") on October 7, 2015, the Authority Board approved and adopted Master Bond Ordinance No. 2015-02 (as subsequently amended through the date hereof, the "Ordinance"), which authorizes the issuance by the Authority of Sewage Disposal System Revenue Bonds; and

WHEREAS, the Ordinance authorizes the issuance of such Sewage Disposal System Revenue Bonds in one or more Series pursuant to a Series Ordinance authorizing the issuance and sale of such Series; and

WHEREAS, the Authority Board has determined that it is necessary to authorize at this time one or more Series of SRF Junior Lien Bonds (the "2021 SRF-2 Junior Lien Bonds") to provide moneys to pay the costs of the hereinafter described repairs, extensions, enlargements and improvements to the Local Sewer System identified in the Detroit Capital Improvement Program (the "2021 SRF-2 Project").

NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF DIRECTORS OF THE GREAT LAKES WATER AUTHORITY AS FOLLOWS:

- Section 1. <u>Authority for this Series Ordinance</u>. This Series Ordinance (the "2021 SRF-2 Series Ordinance") is adopted pursuant to Section 1102(1) of the Ordinance.
- Section 2. <u>Definitions</u>. Except as otherwise provided in this 2021 SRF-2 Series Ordinance, all terms which are defined in Section 101 of the Ordinance shall have the same meanings, respectively, in this 2021 SRF-2 Series Ordinance as such terms are given in the Ordinance. In addition, the following terms shall have the following meanings unless the context shall clearly indicate some other meaning:
- (a) "2021 SRF-2 Junior Lien Bonds" means the Bonds authorized by Section 5 of this 2021 SRF-2 Series Ordinance for the purpose of paying and/or reimbursing costs of the 2021 SRF-2 Project.
- (b) "2021 SRF-2 Project" means improvements to the Local Sewer System, including but not limited to the rehabilitation and replacement of aging sewers and manhole structures in the Riverdale and South Rosedale Park neighborhoods within the City.
- (c) "Authorized Denomination" means any denomination as determined by an Authorized Officer in the Sale Order.

- (d) "Authorized Officer" means either the Chief Executive Officer or the Chief Financial Officer.
- (e) "City Authorized Officer" means any officer of DWSD-R designated in a resolution adopted by the Board of Water Commissioners of DWSD-R as authorized to take actions on behalf of the City as described in this 2021 SRF-2 Series Ordinance.
- (f) "Interest Payment Date" means except as otherwise set forth in the Sale Order each April 1 and October 1.
- (g) "Local Construction Fund, Series 2021 SRF-2" means a subaccount of the Construction Fund established in accordance with Section 11 of this 2021 SRF-2 Series Ordinance relating to the construction of the 2021 SRF-2 Project to be paid with the proceeds of the 2021 SRF-2 Junior Lien Bonds.
- (h) "Maturity Date" means such dates of maturity of the 2021 SRF-2 Junior Lien Bonds as determined in the Sale Order.
 - (i) "MFA" means the Michigan Finance Authority.
- (j) "Person" means any natural person, association, corporation, trust, partnership, joint venture, joint-stock company, municipal corporation, public body or other entity, however organized.
- (k) "Project Costs" means the costs of acquiring, constructing, equipping, installing and financing the 2021 SRF-2 Project, including Issuance Costs relating to the 2021 SRF-2 Junior Lien Bonds.
- (l) "Purchase Contract" means the Purchase Contract between the MFA and the Authority with respect to the purchase by the MFA and the sale by the Authority of a Series of the 2021 SRF-2 Junior Lien Bonds.
- (m) "Regular Record Date" means except as otherwise set forth in the Sale Order the fifteenth day of the calendar month immediately preceding an Interest Payment Date.
- (n) "Sale Order" means any one or more Sale Orders of an Authorized Officer authorizing acts consistent with the Ordinance and this 2021 SRF-2 Series Ordinance necessary and appropriate to complete the sale, execution and delivery of the 2021 SRF-2 Junior Lien Bonds and to complete the other transactions contemplated herein.
- (o) "Supplemental Agreement" means the Supplemental Agreement among the City, the MFA and the State of Michigan acting through the Department of Environment, Great Lakes, and Energy, and approved and agreed to by the Authority, with respect to the 2021 SRF-2 Junior Lien Bonds.
- (p) "Taxable 2021 SRF-2 Junior Lien Bonds" means any 2021 SRF-2 Junior Lien Bonds other than Tax-Exempt 2021 SRF-2 Junior Lien Bonds.

- (q) "Tax-Exempt 2021 SRF-2 Junior Lien Bonds" means any 2021 SRF-2 Junior Lien Bonds that are Tax-Exempt Bonds.
- Section 3. <u>Approval of 2021 SRF-2 Project</u>. It is hereby determined to be necessary for the public health, benefit and welfare of the area served by the Local Sewer System to acquire, construct and undertake the 2021 SRF-2 Project, and the 2021 SRF-2 Project is hereby approved and accepted.
- Section 4. <u>Estimated Cost and Period of Usefulness of 2021 SRF-2 Project</u>. The Project Costs are estimated by the Authority Board to not exceed \$30,000,000 and the Project Costs are hereby approved and confirmed. The period of usefulness of the 2021 SRF-2 Project is estimated to be not less than 40 years.

Section 5. Authorization of 2021 SRF-2 Junior Lien Bonds.

- (a) <u>Authorization of Borrowing</u>. The Authority may borrow an amount not in excess of \$30,000,000, as is finally determined in the Sale Order, and issue the 2021 SRF-2 Junior Lien Bonds in one Series, all to evidence such borrowing pursuant to Act 233, Act 94 and the Ordinance, as 2021 SRF-2 Junior Lien Bonds, all as finally determined in the Sale Order. The amount of the 2021 SRF-2 Junior Lien Bonds authorized in this Section 5(a) shall include the amount of the net original issue premium, if any.
- (b) <u>Purpose of 2021 SRF-2 Junior Lien Bonds</u>. The 2021 SRF-2 Junior Lien Bonds shall be issued as Additional Bonds for the purpose of paying and/or reimbursing Project Costs.
- (c) <u>Priority of Lien</u>. The 2021 SRF-2 Junior Lien Bonds shall be issued as SRF Junior Lien Bonds.
- (d) <u>Insufficient Proceeds</u>. To the extent that proceeds of SRF-2 Junior Lien Bonds are insufficient to pay Project Costs, the insufficiency shall be paid from the proceeds of future Additional Bonds, if any, and/or moneys of the Local Sewer System on hand and legally available therefor, as determined by the Board of Water Commissioners of DWSD-R and, in the case of the issuance of any Additional Bonds, with the concurrence of the Authority Board.
- (e) <u>Taxable and Tax-Exempt 2021 SRF-2 Junior Lien Bonds</u>. The 2021 SRF-2 Junior Lien Bonds may be issued as Taxable 2021 SRF-2 Junior Lien Bonds or Tax-Exempt 2021 SRF-2 Junior Lien Bonds, or as separate subseries of both, as set forth in the Sale Order.
- (f) <u>Source of Payment and Security</u>. The 2021 SRF-2 Junior Lien Bonds shall be payable and secured as provided in Section 8.
- (g) <u>Applicability of Ordinance</u>. Except as otherwise provided in this 2021 SRF-2 Series Ordinance or in the Sale Order, all of the provisions of the Ordinance shall apply to the 2021 SRF-2 Junior Lien Bonds as if set forth in full in this 2021 SRF-2 Series Ordinance, the purpose of this 2021 SRF-2 Series Ordinance being to supplement the Ordinance to authorize the issuance of 2021 SRF-2 Junior Lien Bonds for the purposes set forth herein.

Section 6. 2021 SRF-2 Junior Lien Bond Details.

(a) <u>Designation</u>.

- (1) The 2021 SRF-2 Junior Lien Bonds shall bear the designations Sewage Disposal System Revenue Bonds, Series 2021-SRF-2 and shall include such other designations, including, without limitation, designations for multiple subseries, as determined by an Authorized Officer as shall be set forth in the Sale Order and not inconsistent with the Ordinance or this 2021 SRF-2 Series Ordinance.
- (2) If the 2021 SRF-2 Junior Lien Bonds are not issued in 2021, an Authorized Officer is authorized in her discretion to re-designate the year and Series designation of such Series of 2021 SRF-2 Junior Lien Bonds and the various funds and accounts established hereunder to correspond with the year of issuance of such Series of 2021 SRF-2 Junior Lien Bonds. Furthermore, an Authorized Officer is authorized to establish designations within the various funds and accounts established hereunder if necessary in order to differentiate such funds and accounts from other similarly named funds and accounts related to other Bonds.
- (b) <u>Numbering</u>. The 2021 SRF-2 Junior Lien Bonds shall be numbered in such manner as shall be determined in the Sale Order.
- (c) <u>Principal</u>. The 2021 SRF-2 Junior Lien Bonds shall be issued in the form of Serial Bonds or Term Bonds, or any combination of Serial Bonds and Term Bonds, in any Authorized Denomination, and the principal thereof shall mature on October 1, or such other date as set forth in the Sale Order, in such years and amounts, and shall be or not be subject to redemption prior to maturity, all as shall be determined in the Sale Order subject to the following limitations:
 - (1) No 2021 SRF-2 Junior Lien Bonds shall mature later than 40 years after the date of issuance thereof.
 - (2) The 2021 SRF-2 Junior Lien Bonds shall only be issued with annual principal and interest installments permitted by the Ordinance, including Section 207 thereof.
- (d) <u>Interest</u>. 2021 SRF-2 Junior Lien Bonds or portions thereof shall bear interest at a rate or rates as set forth in the Sale Order not in excess of 2.50% per annum. Interest on 2021 SRF-2 Junior Lien Bonds shall be payable on each Interest Payment Date.
- (e) Payment of Principal and Interest. The principal of, premium, if any, and interest on the 2021 SRF-2 Junior Lien Bonds shall be payable in lawful money of the United States. Except as otherwise provided in the Sale Order, so long as the 2021 SRF-2 Junior Lien Bonds are owned by the MFA, the 2021 SRF-2 Junior Lien Bonds are payable as to principal, redemption premium, if any, and interest at The Bank of New York Mellon Trust Company, N.A., or at such other place as shall be designated in writing to the Authority by the MFA (the MFA's Depository"), and the Authority agrees that it will deposit with the MFA's Depository payments of the principal of, premium, if any, and interest on the 2021 SRF-2 Junior Lien Bonds in immediately available funds by 12:00 noon at least five Business Days prior to the date on which any such payment is

due, whether by maturity, redemption or otherwise. If the 2021 SRF-2 Junior Lien Bonds are not registered in the name of the MFA, the principal of and premium, if any, on the 2021 SRF-2 Junior Lien Bonds are payable upon the surrender thereof at the corporate trust office of the Trustee and the interest is payable by check or draft drawn on the Trustee and mailed to the registered owners as of the immediately preceding Regular Record Date at their address shown on the registration books of the Authority maintained by the Trustee.

- (f) <u>Dating</u>. The 2021 SRF-2 Junior Lien Bonds shall be dated such date as determined in the Sale Order.
- (g) <u>Reserve Requirement</u>. There shall be no Reserve Requirement with respect to the 2021 SRF-2 Junior Lien Bonds.
- (h) <u>Exchange</u>. The registered owner of any 2021 SRF-2 Junior Lien Bond may exchange such 2021 SRF-2 Junior Lien Bond for a new 2021 SRF-2 Junior Lien Bond or Bonds of the same interest rate, maturity and Priority of Lien in an equal aggregate principal amount in one or more of the Authorized Denominations by surrendering such 2021 SRF-2 Junior Lien Bond to be exchanged at the designated office of the Trustee together with an assignment duly executed by the registered owner thereof or his attorney or legal representative in such form as shall be satisfactory to the Trustee. As provided in Section 206 of the Ordinance, the Trustee shall be responsible for the registration, transfer and exchange of 2021 SRF-2 Junior Lien Bonds and shall indicate its acceptance of such duties by a document filed with an Authorized Officer concurrently with the delivery of the 2021 SRF-2 Junior Lien Bonds.
- (i) Execution and Delivery of 2021 SRF-2 Junior Lien Bonds. The 2021 SRF-2 Junior Lien Bonds shall be executed in the name of the Authority by manual or facsimile signature of the Chief Executive Officer of the Authority and countersigned by the manual or facsimile signature of the Secretary of the Authority Board, and shall have the Authority's seal or facsimile thereof affixed or printed thereon. The Chief Financial Officer is authorized to deliver the 2021 SRF-2 Junior Lien Bonds to the MFA upon receiving the purchase price therefor in lawful money of the United States.
- (j) <u>Form of 2021 SRF-2 Junior Lien Bonds</u>. The 2021 SRF-2 Junior Lien Bonds shall be in substantially the following form, subject to such changes, additions or deletions as determined by the Chief Executive Officer within the parameters of this 2021 SRF-2 Series Ordinance:

R-__

UNITED STATES OF AMERICA STATE OF MICHIGAN COUNTIES OF MACOMB, OAKLAND AND WAYNE GREAT LAKES WATER AUTHORITY SEWAGE DISPOSAL SYSTEM REVENUE BOND, SERIES 2021-SRF-2

REGISTERED OWNER:	Michigan Finance Authority
PRINCIPAL AMOUNT:	\$
INTEREST RATE:	%
ORIGINAL ISSUE DATE:	

The Great Lakes Water Authority, Counties of Macomb, Oakland and Wayne, State of Michigan (the "Issuer"), upon authorization from the Board of Directors of the Issuer (the "Board"), has issued this Bond. The Issuer, for value received, promises to pay, in lawful money of the United States of America, but only from the Pledged Assets (as defined below), to the Registered Owner named above, or registered assigns, the Principal Amount stated above, or so much thereof as shall have been advanced to the Issuer and not prepaid or reduced pursuant to a Purchase Contract between the Issuer and the Michigan Finance Authority (the "MFA"), a Supplemental Agreement by and among the City of Detroit, the MFA and State of Michigan acting through the Department of Environment, Great Lakes, and Energy and approved and agreed to by the Issuer, and the Order of Approval issued by the Department of Environment, Great Lakes, and Energy. The Principal Amount shall be payable on the dates and in the principal installments set forth in Schedule A attached hereto.

In the event less than the Principal Amount of this Bond is disbursed by the MFA, any portion of the Principal Amount is prepaid as provided herein, or any serial principal payment becomes due before the Issuer has received proceeds from corresponding purchased principal installments of at least a like amount, then the MFA may prepare a new serial principal installment repayment schedule which shall be presented to the Issuer and be effective upon receipt as provided in the Purchase Contract.

Interest on this Bond shall accrue from the Original Issue Date set forth above at the Interest Rate set forth above, only on that portion of installments of the Principal Amount which have been disbursed by the MFA, shall be payable on ______, 20__ and semiannually on each April 1 and October 1 thereafter (each an "Interest Payment Date").

If the MFA is not the registered owner of this Bond, principal of this Bond is payable upon presentation and surrender at the designated office of U.S. Bank National Association, as Trustee under the Ordinance (as defined below) or such other trustee as the Issuer may hereafter designate by notice mailed to the registered owner not less than 60 days prior to any Interest Payment Date (the "<u>Trustee</u>").

Interest on this Bond is payable to the registered owner of record as of the close of business on the 15th day of the month immediately preceding any Interest Payment Date as shown on the registration books kept by the Trustee by check or draft mailed by the Trustee to the registered owner at the registered address. Interest on this Bond shall be computed on the basis of a 360-day year comprised of twelve 30-day months. During the time funds are being drawn down by the Issuer under this Bond, the MFA will periodically provide the Issuer with a statement showing the amount of principal that has been advanced and the date of each advance, which statement shall constitute prima facie evidence of the reported information; provided, that no failure on the part of the MFA to provide such a statement or to reflect a disbursement or the correct amount of a disbursement shall relieve the Issuer of its obligation to repay the outstanding principal amount actually advanced [(subject to any principal forgiveness as provided for herein)], all accrued interest thereon, and any other amount payable with respect thereto in accordance with the terms of this Bond.

In the event of a default in the payment of principal or interest hereon when due, whether at maturity, by redemption or otherwise, the amount of such default shall bear interest (the "additional interest") at a rate equal to the rate of interest that is two percent above the MFA's cost of providing funds (as determined by the MFA) to make payment on the bonds of the MFA issued to provide funds to purchase this Bond but in no event in excess of the maximum rate of interest permitted by law. The additional interest shall continue to accrue until the MFA has been fully reimbursed for all costs incurred by the MFA (as determined by the MFA) as a consequence of the Issuer's default. Such additional interest shall be payable on the interest payment date following demand of the MFA. In the event that (for reasons other than the default in the payment of any municipal obligation purchased by the MFA) the investment of amounts in the reserve account established by the MFA for the bonds of the MFA issued to provide funds to purchase this bond fails to provide sufficient available funds (together with any other funds that may be made available for such purpose) to pay the interest on outstanding bonds of the MFA issued to fund such account, the Issuer shall and hereby agrees to pay on demand only the Issuer's pro rata share (as determined by the MFA) of such deficiency as additional interest on this Bond.

Notwithstanding any other provision of this Bond, so long as the MFA is the owner of this Bond, (a) this Bond is payable as to principal, premium, if any, and interest at The Bank of New York Mellon Trust Company, N.A., or at such other place as shall be designated in writing to the Issuer by the MFA (the "MFA's Depository"); (b) the Issuer agrees that it will deposit with the MFA's Depository payments of the principal of, premium, if any, and interest on this Bond in immediately available funds by 12:00 noon at least five business days prior to the date on which any such payment is due whether by maturity, redemption or otherwise; in the event that the MFA's Depository has not received the Issuer's deposit by 12:00 noon on the scheduled day, the Issuer shall immediately pay to the MFA as invoiced by the MFA an amount to recover the MFA's administrative costs and lost investment earnings attributable to that late payment; and (c) written notice of any redemption of this Bond shall be given by the Issuer and received by the MFA's Depository at least 40 days prior to the date on which redemption is to be made.

This Bond is one of a series of bonds designated "Sewage Disposal System Revenue Bonds, Series 2021-SRF-2" and is issued pursuant to the provisions of (i) Act 233, Public Acts of Michigan, 1955, as amended ("Act 233"), and Act 94, Public Acts of Michigan, 1933, as amended ("Act 94"), (ii) Master Bond Ordinance No. 2015-02 adopted by the Board on October 7, 2015, as

amended (the "Bond Ordinance"), (iii) the Series Ordinance Authorizing Issuance and Sale of Sewage Disposal System Revenue Bonds in an Aggregate Amount not to Exceed \$30,000,000, adopted by the Board on _______, 2021 (the "Series Ordinance"), and (iv) a Sale Order of the Chief Executive Officer of the Issuer dated _______, 2021 (the "Sale Order," and, collectively with the Bond Ordinance and the Series Ordinance, the "Ordinance"). This Bond is issued for the purposes set forth in the Series Ordinance and the Sale Order.

For the prompt payment of the principal of and interest on this Bond, and other bonds issued by the Issuer pursuant to the Bond Ordinance, the Issuer has irrevocably pledged the Pledged Assets (as defined in the Bond Ordinance), which includes the revenues of the Sewer System (as defined in the Bond Ordinance), after provision is made for reasonable and necessary expenses of operation, maintenance and administration of the Sewer System (the "Net Revenues"), and a statutory lien on the Net Revenues and Pledged Assets is hereby recognized and acknowledged. Such lien is a third lien, subject to obligations heretofore and hereafter issued or incurred under the Bond Ordinance secured by a first or second lien on the Pledged Assets. This Bond is of equal standing on a parity with all other obligations heretofore and hereafter issued or incurred under the Bond Ordinance and secured by a third lien on the Pledged Assets.

For a complete statement of the revenues from which and the conditions under which this Bond is payable, a statement of the conditions under which Additional Bonds (as defined in the Bond Ordinance) of senior or equal standing and Additional Bonds of junior standing may hereafter be issued and the general covenants and provisions pursuant to which this Bond is issued, reference is made to the Bond Ordinance.

This Bond is subject to redemption prior to maturity at the option of the Issuer and with the prior written consent of and upon such terms as may be required by the MFA. That portion of this Bond called for redemption shall not bear interest after the date fixed for redemption, provided funds are on hand with the Trustee to redeem the same.

THIS BOND IS ISSUED UNDER ACT 233 AND ACT 94. IT IS A SELF-LIQUIDATING BOND AND IS NOT A GENERAL OBLIGATION OF THE ISSUER AND DOES NOT CONSTITUTE AN INDEBTEDNESS OF THE ISSUER WITHIN ANY CONSTITUTIONAL OR STATUTORY LIMITATION, BUT IS PAYABLE, BOTH AS TO PRINCIPAL AND INTEREST SOLELY FROM THE PLEDGED ASSETS OF THE SEWER SYSTEM. THE PAYMENT OF THE PRINCIPAL OF AND INTEREST ON THIS BOND ARE SECURED BY A STATUTORY LIEN ON THE PLEDGED ASSETS AS DESCRIBED HEREIN.

The Issuer has covenanted and agreed, and hereby covenants and agrees, to fix and maintain, or cause to be fixed and maintained, at all times while any bonds payable from the Pledged Assets of the Sewer System shall be outstanding, such rates for service furnished by the Sewer System as shall be sufficient to provide for payment of the interest upon and the principal of this Bond and all other Bonds (as defined in the Bond Ordinance) assumed or issued and to be issued under the Bond Ordinance as and when the same shall become due and payable, to create and maintain a bond redemption fund therefor, including a bond reserve for Bonds other than this Bond, to provide for the payment of expenses of administration and operation and such expenses for maintenance of the Sewer System as are necessary to preserve the same in good repair and

working order, and to provide for such other expenditures and funds for the Sewer System, all as are required by the Bond Ordinance.

This Bond is transferable only upon the books of the Issuer kept for that purpose at the office of the Trustee by the registered owner hereof in person, or by his attorney duly authorized in writing, upon the surrender of this Bond together with a written instrument of transfer satisfactory to the Trustee duly executed by the registered owner or his attorney duly authorized in writing, and thereupon a new registered bond or bonds of the same type, in the same aggregate principal amount and of the same maturity shall be issued to the transferee in exchange therefor as provided in the Ordinance and upon the payment of the charges, if any, therein prescribed.

It is hereby certified and recited that all acts, conditions and things required by law precedent to and in the issuance of this Bond have been done and performed by regular and due time and form as required by law.

This Bond is not valid or obligatory for any purpose until the Trustee's Certificate of Authentication hereon has been executed by the Trustee.

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[Seal]

IN WITNESS WHEREOF, the Great Lakes Water Authority, Counties of Macomb, Oakland and Wayne, State of Michigan, has caused this Bond to be signed in its name by the facsimile signatures of its Chief Executive Officer and its Secretary of the Board and its corporate seal or a facsimile thereof to be printed, impressed or otherwise reproduced hereon, all as of the Original Issue Date.

By: Chief Executive Officer Countersigned: By: Secretary, Board of Directors

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CERTIFICATE OF AUTHENTICATION

This Bond is authenticated as the bond designated by the Issuer as "Sewage Disposal System Revenue Bond, Series 2021-SRF-2".

	U.S. Bank National Association, Trustee
	By:
Date of Authentication:, 2021	

ASSIGNMENT

For	value	received,	the	undersigned	sells,	assigns	and	transfers	unto
		thi	is Bon	d and all rights	hereund	er and her	eby irre	evocably ap	points
		at	torney	to transfer thi	s Bond	on the boo	oks kej	pt for regist	tration
thereof with	full pow	ver of substit	ution	in the premises.					
	_			_					
Dated:									
				Signature	;				

NOTICE: The signature to this assignment must correspond with the name as it appears on the face of this Bond in every particular.

Schedule A

The principal amounts and maturity dates applicable to the Bond to which this Schedule A is attached are as follows:

Date Amount

Based on the schedule provided above unless revised as provided in this paragraph, repayment of the Principal Amount shall be made according to such schedule until the full Principal Amount disbursed to the Issuer is repaid; provided, however, that the Issuer shall have no obligation to repay any serial principal installment for which the Issuer did not receive a disbursement of Principal Amount by the date such serial principal installment is due. In the event the Order of Approval issued by the Department of Environment, Great Lakes, and Energy (the "Order") approves a principal amount of assistance less than the amount of the Bond, the MFA shall only disburse principal up to the amount stated in the Order. In the event (1) that the payment schedule described above provides for payment of a total principal amount greater than the amount of assistance approved by the Order, (2) that less than the principal amount of assistance approved by the Order is disbursed to the Issuer by the MFA or (3) of prepayment [or principal forgiveness] of the Bond, the MFA shall prepare a new payment schedule that shall be effective upon receipt by the Issuer.

END OF BOND FORM

Section 7. <u>Concerning the Securities Depository.</u>

(a) As used herein:

"Beneficial Owner" means any Person who indirectly owns 2021 SRF-2 Junior Lien Bonds pursuant to the indirect ownership system maintained by a securities depository (the "Securities Depository") and its Participants, commonly known as the "Book-Entry Only System."

"Participant" means any Person whose ownership of 2021 SRF-2 Junior Lien Bonds is shown on books of the Securities Depository.

- (b) The 2021 SRF-2 Junior Lien Bonds will initially be registered in the name of the MFA, or such other purchasers as designated in the Sale Order. In the event 2021 SRF-2 Junior Lien Bonds are later to be registered in the name of a Securities Depository or its nominee, neither the Authority nor the Trustee shall have any responsibility or obligation to any Participant or to any Beneficial Owner with respect to any matter, including the following:
 - (1) the accuracy of the records of the Securities Depository, its nominee or any Participant with respect to any ownership interest in 2021 SRF-2 Junior Lien Bonds,
 - (2) the delivery to any Participant, Beneficial Owner or any other Person other than the Securities Depository of any notice with respect to: any 2021 SRF-2 Junior Lien Bonds, including any notice of redemption, or
 - (3) the payment to any Participant, Beneficial Owner or any other Person, other than the Securities Depository of any amount with respect to the principal (and premium, if any) of or interest on any 2021 SRF-2 Junior Lien Bonds.
- (c) The Trustee shall pay all principal (and premium, if any) of and interest on the 2021 SRF-2 Junior Lien Bonds only to or upon the order of the MFA, or the Securities Depository, as applicable, and all such payments shall be valid and effective fully to satisfy and discharge the Authority's obligations with respect to the principal (and premium, if any) of, and interest on such 2021 SRF-2 Junior Lien Bonds to the extent of the sum or sums so paid.
- (d) If 2021 SRF-2 Junior Lien Bonds become registered in the name of the Securities Depository and (1) the Authority receives a written notice from the Securities Depository to the effect the Securities Depository is unable or unwilling to discharge its responsibilities or (2) the Authority determines that it is in the best interests of the Beneficial Owners of 2021 SRF-2 Junior Lien Bonds that they be able to obtain 2021 SRF-2 Junior Lien Bonds in certificated form, then, in either event, the Authority shall notify the Trustee and, in the case of clause, (2), the Securities Depository.
- (e) Upon discontinuance of the use of the Book-Entry Only System maintained by the Securities Depository, if any, pursuant to subsection (d), above and upon receipt of notice from the Securities Depository containing sufficient information, the Authority shall execute and the Trustee shall authenticate and deliver 2021 SRF-2 Junior Lien Bonds in certificated form to

Beneficial Owners in exchange for the beneficial interests of such Beneficial Owners in corresponding principal amounts and in any Authorized Denominations.

- (f) Notwithstanding any other provision of this 2021 SRF-2 Series Ordinance to the contrary, so long as any 2021 SRF-2 Junior Lien Bond is registered in the name of the Securities Depository or its nominee:
 - (1) all payments with respect to the principal, premium, if any, and interest on such 2021 SRF-2 Junior Lien Bond and all notices of redemption, tender and otherwise with respect to such 2021 SRF-2 Junior Lien Bond shall be made and given, respectively, to the Securities Depository as provided in the letter of representations from the Authority to the Securities Depository with respect to such 2021 SRF-2 Junior Lien Bonds or any master letter of representations from the Authority to the Securities Depository;
 - (2) if less than all of the 2021 SRF-2 Junior Lien Bonds of the same type of any maturity are to be redeemed, then the particular 2021 SRF-2 Junior Lien Bonds or portions of 2021 SRF-2 Junior Lien Bonds of such type and maturity to be redeemed shall be selected by the Securities Depository in any such manner as the Securities Depository may determine;
 - (3) all payments with respect to principal of the 2021 SRF-2 Junior Lien Bonds and premium, if any and interest on the 2021 SRF-2 Junior Lien Bonds shall be made in such manner as shall be prescribed by the Securities Depository; and
 - (4) if a 2021 SRF-2 Junior Lien Bond is redeemed or tendered in part, then all amounts payable in respect of such redemption or tender shall be paid without presentation and surrender of such 2021 SRF-2 Junior Lien Bond pursuant to the procedures of the Securities Depository.

Section 8. Payment of 2021 SRF-2 Junior Lien Bonds; Confirmation of Statutory Lien.

- (a) The 2021 SRF-2 Junior Lien Bonds and the interest thereon shall be payable solely from the Pledged Assets.
- (b) To secure payment of the 2021 SRF-2 Junior Lien Bonds, the statutory lien upon the whole of the Pledged Assets established by Act 94 and the pledge created in Section 501 of the Ordinance is hereby confirmed in favor of the 2021 SRF-2 Junior Lien Bonds as follows: Such lien in favor of the 2021 SRF-2 Junior Lien Bonds shall be a statutory third lien on the Pledged Assets of equal standing and Priority of Lien with all issued, to be issued and outstanding SRF Junior Lien Bonds.
- Section 9. <u>Funds and Accounts; Flow of Funds</u>. Except as otherwise provided in this 2021 SRF-2 Series Ordinance, all of the provisions relative to funds and accounts, their maintenance, the flow of funds and other details relative thereto, shall remain as specifically set forth in the Ordinance.

Section 10. <u>Disposition of Proceeds</u>.

- (a) <u>Disposition of Accrued Interest and Capitalized Interest</u>. From the proceeds of the sale of the 2021 SRF-2 Junior Lien Bonds there shall be immediately deposited in the SRF Junior Lien Debt Service Account, an amount equal to any accrued interest received on the delivery of the 2021 SRF-2 Junior Lien Bonds and any capitalized interest on the 2021 SRF-2 Junior Lien Bonds, and the Authority may take credit for the amount so deposited against the amount required to be deposited in the SRF Junior Lien Debt Service Account for payment of the next maturing interest payment on the 2021 SRF-2 Junior Lien Bonds.
- (b) <u>Construction Fund</u>. The balance of the proceeds of the 2021 SRF-2 Junior Lien Bonds shall be deposited in the Construction Fund and used to pay Project Costs as provided in Section 11.

Section 11. Construction Fund.

- (a) A subaccount of the Detroit Local Construction Account of the Construction Fund established by the Ordinance shall be established for the 2021 SRF-2 Junior Lien Bonds and designated the "Local Construction Fund, Series 2021 SRF-2," and shall be established and maintained as a separate depository account with a Custodian as designated by a City Authorized Officer...
- (b) Moneys in the Local Construction Fund, Series 2021 SRF-2 shall be applied solely to payment of Project Costs (or to the reimbursement of Project Costs paid by the Authority or the City from other funds prior to the issuance of the 2021 SRF-2 Junior Lien Bonds).
 - (1) Payments or reimbursements for Project Costs for construction, either on account or otherwise, shall not be made unless the registered engineer in charge of such work shall file with a City Authorized Officer a signed statement to the effect that the work has been completed in accordance with the plans and specifications therefor, that it was done in accordance with the contract therefor, that such work is satisfactory and that such work has not been previously paid for.
 - (2) Payment or reimbursement for Project Costs consisting of Issuance Costs and engineering, legal and financial costs shall be made upon submission of appropriate documentation to a City Authorized Officer.

Section 12. Tax Covenant.

(a) The Authority hereby covenants and represents with the registered owners of the Tax-Exempt 2021 SRF-2 Junior Lien Bonds, that so long as any of the Tax-Exempt 2021 SRF-2 Junior Lien Bonds remain outstanding and unpaid as to either principal or interest, the Authority shall, to the extent permitted by law, take all actions within its control to maintain, and will refrain from taking any action which would impair, the exclusion of the interest on the Tax-Exempt 2021 SRF-2 Junior Lien Bonds from gross income for federal income tax purposes under the Code.

(b) The actions referred to in subsection (a), above include, but are not limited to actions relating to any required rebate of arbitrage earnings and the expenditure and investment of proceeds of Tax-Exempt 2021 SRF-2 Junior Lien Bonds and moneys deemed to be proceeds of Tax-Exempt 2021 SRF-2 Junior Lien Bonds, and to prevent Tax-Exempt 2021 SRF-2 Junior Lien Bonds from being or becoming "private activity bonds" as that term is used in the Code.

Section 13. <u>Sale of 2021 SRF-2 Junior Lien Bonds; Purchase Contract; Expiration of Referendum Period.</u>

- (a) The 2021 SRF-2 Junior Lien Bonds shall be sold by negotiated sale to the MFA pursuant to a Purchase Contract in customary form with such changes thereto as an Authorized Officer shall determine are in the best interests of the Authority, within the parameters established by this 2021 SRF-2 Series Ordinance. Such determination shall be conclusively established by the Authorized Officer's execution of the Purchase Contract to the MFA.
- (b) The Authority Board hereby determines that the sale of the 2021 SRF-2 Junior Lien Bonds by negotiated sale as described in subsection (a) is in the best interests of the Authority and will allow the 2021 SRF-2 Junior Lien Bonds to receive a subsidized interest rate through participation in the MFA's State Revolving Fund Program.
- (c) An Authorized Officer is authorized to accept, on behalf of the Authority, an offer from the MFA to purchase the 2021 SRF-2 Junior Lien Bonds subject to the following limitations:
 - (1) The interest rate with respect to any Series of the 2021 SRF-2 Junior Lien Bonds shall not exceed 2.50%.
 - (2) The aggregate purchaser's discount at which any Series of the 2021 SRF-2 Junior Lien Bonds shall be sold to the MFA shall not exceed 2.00%.
- (d) An Authorized Officer shall confirm in the Sale Order that there was no petition meeting the requirements of Section 33 of Act 94 that was filed with the Secretary of the Authority Board within 45 days of the date of publication of the notice of intent to issue bonds with respect to the 2021 SRF-2 Junior Lien Bonds as required by Section 33 of Act 94.

Section 14. <u>Delegation of Authority to and Authorization of Actions of Authorized</u> Officers.

- (a) An Authorized Officer shall make all determinations herein provided to be made in the Sale Order and shall make all such determinations in accordance with the best interests of the Authority within the parameters of this 2021 SRF-2 Series Ordinance.
- (b) In addition to determinations authorized elsewhere in this 2021 SRF-2 Series Ordinance, an Authorized Officer shall determine the aggregate principal amount of 2021 SRF-2 Junior Lien Bonds to be issued, but not in excess of the aggregate principal amount authorized by this 2021 SRF-2 Series Ordinance, on the basis of her evaluation of the maximum amount of 2021 SRF-2 Junior Lien Bonds which can be sold, given anticipated interest rates and the revenue coverage requirements with respect to the 2021 SRF-2 Junior Lien Bonds and for any other reasons the Authorized Officer deems appropriate.

- (1) Such determination shall also include the redemption provisions for the 2021 SRF-2 Junior Lien Bonds.
- (2) An Authorized Officer shall also determine and establish, in accordance with this 2021 SRF-2 Series Ordinance, the maturities of each Series of the 2021 SRF-2 Junior Lien Bonds, whether such maturities shall be serial or term maturities and the Mandatory Redemption Requirements for any term maturities.
- (c) An Authorized Officer is authorized, if necessary, to file applications and to pay the related fees, if any, to the Michigan Department of Treasury at her discretion under Act 34 for one or more orders of approval to issue all or a portion of the 2021 SRF-2 Junior Lien Bonds, and such waivers or other Treasury approvals as necessary to implement the sale, delivery and security for the 2021 SRF-2 Junior Lien Bonds as authorized herein, and as required by the Michigan Department of Treasury or Act 34.
- (d) An Authorized Officer shall determine in the Sale Order that the requirements set forth in Section 207 of the Ordinance with respect to the issuance of the 2021 SRF-2 Junior Lien Bonds as Additional Bonds have been satisfied.
- (e) An Authorized Officer is hereby authorized and directed to do and perform any and all other acts and things with respect to the 2021 SRF-2 Junior Lien Bonds which are necessary or appropriate to carry into effect, consistent with the Ordinance and this 2021 SRF-2 Series Ordinance, the authorizations therein and herein contained including without limitation the securing of ratings by bond rating agencies, and the incurring of reasonable fees costs and expenses incidental to the foregoing, for and on behalf of the Authority.
- Section 15. <u>Advancement of Project Costs</u>. At the direction of an Authorized Officer, the Authority may advance certain Project Costs from the Authority's funds prior to the issuance of the 2021 SRF-2 Junior Lien Bonds to the extent that such costs are expenditures appropriate for reimbursement under applicable law, including the Code in the case of Tax-Exempt 2021 SRF-2 Junior Lien Bonds.
- Section 16. <u>Ratification</u>. All determinations and decisions of an Authorized Officer heretofore taken with respect to the issuance and sale of the 2021 SRF-2 Junior Lien Bonds as permitted or required by the Ordinance or law are hereby ratified, confirmed and approved.
- Section 17. <u>Additional Authorization</u>. The Chief Executive Officer, the Chief Financial Officer, the Chief Administrative and Compliance Officer and the General Counsel of the Authority, any such officials acting in an interim or acting capacity to such officers, their deputies and staff, or any of them, are hereby authorized to execute and deliver such certificates, Supplemental Agreements, other agreements, documents, instruments, opinions and other papers as may be deemed necessary or appropriate to complete the sale, execution and delivery of the 2021 SRF-2 Junior Lien Bonds and otherwise give effect to the transactions contemplated by this 2021 SRF-2 Series Ordinance, as determined by such officials executing and delivering the foregoing items.

Section 18. <u>2021 SRF-2 Series Ordinance a Contract</u>. The provisions of this 2021 SRF-2 Series Ordinance shall constitute a contract between the Authority and each registered owner of an outstanding 2021 SRF-2 Junior Lien Bond.

Section 19. Professional Services.

- (a) Dickinson Wright PLLC is hereby appointed as Bond Counsel for the 2021 SRF-2 Junior Lien Bonds, notwithstanding the periodic representation by Dickinson Wright PLLC in unrelated matters of other parties and potential parties to the issuance of the 2021 SRF-2 Junior Lien Bonds.
- (b) PFM Financial Advisors LLC is hereby appointed as Financial Advisor for the 2021 SRF-2 Junior Lien Bonds, notwithstanding the periodic representation by PFM Financial Advisors LLC in unrelated matters of other parties and potential parties to the issuance of the 2021 SRF-2 Junior Lien Bonds.
- (c) The fees and expenses of Dickinson Wright PLLC and PFM Financial Advisors LLC shall be payable as an Issuance Cost from the proceeds of the 2021 SRF-2 Junior Lien Bonds or other available funds.
- (d) An Authorized Officer is authorized to engage financial and other consultants as she deems necessary or appropriate in connection with the sale, issuance and delivery of the 2021 SRF-2 Junior Lien Bonds and to pay the fees and expenses thereof from the proceeds of the 2021 SRF-2 Junior Lien Bonds or other available funds.
- Section 20. <u>Severability; Headings; and Conflict</u>. If any section, paragraph, clause or provision of this 2021 SRF-2 Series Ordinance shall be held invalid, the invalidity of such section, paragraph, clause or provision shall not affect any of the other provisions of this 2021 SRF-2 Series Ordinance. The section and paragraph headings in this 2021 SRF-2 Series Ordinance are furnished for convenience of reference only and shall not be considered to be part of this 2021 SRF-2 Series Ordinance.
- Section 21. <u>Publication and Recordation</u>. This 2021 SRF-2 Series Ordinance shall be published in full in the Detroit Legal News, a newspaper of general circulation within the geographic boundaries of the Authority qualified under State law to publish legal notices, promptly after its adoption, and shall be maintained in the official records of the Authority and such recording authenticated by the signatures of the Chairperson and Secretary of the Authority Board.
- Section 22. <u>Repeal</u>. All ordinances, resolutions, indentures or orders, or parts thereof, in conflict with the provisions of this 2021 SRF-2 Series Ordinance are, to the extent of such conflict, repealed.
- Section 23. <u>Effective Date</u>. This 2021 SRF-2 Series Ordinance shall be effective upon adoption.

Adopted and signed on the 23rd day of June, 2021.

GREAT LAKES WATER AUTHORITY

Signed _	
Ç <u>–</u>	Chairperson
Signed _	
	Secretary

4845-7692-0769 v2 [63818-29]

Great Lakes Water Authority

Resolution 2021-244

RE: Approval of Series Ordinance Authorizing Issuance and Sale of Sewage Disposal System Revenue Bonds in an Amount not to Exceed \$30,000,000 Ordinance 2021-04

By Board Member:	

Whereas

There has been presented to the Board of Directors of the Great Lakes Water Authority (the "Authority") an ordinance entitled "Series Ordinance Authorizing the Issuance and Sale of Sewage Disposal System Revenue Bonds in an Amount not to Exceed \$30,000,000" (the "2021 SRF-2 Series Ordinance"), which ordinance is a Series Ordinance as defined and described in Master Bond Ordinance No. 2015-02 adopted by the Board of Directors on October 7, 2015, as amended on December 9, 2015, January 27, 2016 and August 10, 2016.

Whereas

The Articles of Incorporation of the Authority provide that at least 5 of the 6 members of the Authority Board must vote to approve the 2021 SRF-2 Series Ordinance.

Now, Therefore Be It:

Resolved

That the 2021 SRF-2 Series Ordinance, in the form presented to this meeting, is approved and adopted, and the Chairperson and the Secretary are authorized to authenticate the 2021 SRF-2 Series Ordinance in the form approved; **And Be it Further**

Resolved

That an affirmative vote of at least 5 members of the Authority Board is necessary for the passage of this Resolution.

Adopted by the Great Lakes Water Authority Board on: June 23, 2021

4812-4094-1761 v1 [63818-29]

Page 144 AGENDA ITEM #7G



Financial Services Audit Committee Communication

Date: June 21, 2021

To: Great Lakes Water Authority Audit Committee

From: Deirdre Henry, Treasury Manager

Re: Proposed Contract Amendment with Wayne Metro for WRAP Program

Administration

Background: The Water Residential Assistance Program ("WRAP") provides sustainable funding for qualifying low-income residents served by the Great Lakes Water Authority's ("GLWA") customers. The program is funded by GLWA at an amount equal to 0.5 percent of budgeted revenues for the Regional System and not less than 0.5 percent, but not greater than 1.0 percent of budgeted revenues for the DWSD Local System. The budgeted WRAP funding for FY 2022 \$6.2 million combined for direct assistance and conservation services.

The WRAP began assisting residents in the GLWA service area on March 1, 2016. With Wayne Metro as the program administrator, the WRAP has committed over \$20.9 million in assistance and conservation funds to qualified participants through March 31, 2021. WRAP has the potential to serve over 100 communities within the GLWA service area.

The current contract with Wayne Metro (GLWA CS-010) expires on June 30, 2021 and has been in place since February 2016. In March 2020, GLWA engaged Public Sector Consultants (PSC) to evaluate the WRAP program through a series of one on one meetings and focus groups with various GLWA stakeholders. PSC's evaluation has resulted in a number of recommendations to change the delivery model for WRAP. The timeline for review and implementation of these recommendations extends beyond the current contract expiration date of June 30, 2021.

In order to accommodate the transition time needed to execute the proposed recommendations, GLWA is recommending the extension of the current contract (GLWA CS-010) through February 28, 2022 through a contract amendment (Change Order 5). The current status of GLWA CS-010 is summarized below:

Program Management Status:

Original Start Work Date:
Original Contract End Date:
Change Order 1 Contract End Date:
Change Order 2 Contract End Date:
Change Order 3 Contract End Date:
Change Order 4 Contract End Date:
December 31, 2020
Change Order 4 Contract End Date:
December 30, 2021
Froposed Change Order 5 Contract End Date:
February 22, 2016
February 21, 2018
June 30, 2018
June 30, 2020
June 30, 2021
February 28, 2022

Analysis: The contract with Wayne Metro specifies the not-to-exceed administrative fee amount based on the anticipated allocation of assistance dollars to each county. Change order #5 extends the GLWA CS-010 contract 8 months to February 28, 2022 and increases the contract amount based on the total budgeted WRAP funding amounts shown below.

Wayne Metro will continue to administer WRAP services for Genesee, Monroe, Wayne, and Washtenaw counties as well as assist GLWA in the review, implementation, and transition of any program changes. Macomb Community Action Agency and Oakland Livingston Human Service Agency will be recognized as sub-recipients under Change order #5 and will be responsible for the program administration and implementation in their local communities. Wayne Metro and each sub-recipient will be paid their administration fee directly from GLWA.

At a summary level, as of July 1, 2021, there will be an increase in effort for OLHSA and MCAA as subrecipients of Wayne Metro (thereby removing these tasks from WM's direct responsibility in restructure of the existing contract).

- 1. Resident intake and eligibility verification
- 2. Marketing to residents
- 3. Member Partner outreach and engagement
- 4. Conservation services from intake, audit, and home plumbing repairs
- 5. Bill assistance processing from intake through payment to local utility
- 6. Coordination of other wrap around services that complement WRAP
- 7. Direct accountability and reporting to GLWA for funds expended, services provided, and marketing efforts
- 8. Submit marketing plan for approval to GLWA program manager
- 9. Participation in WRAP partnership meetings with GLWA, WM, and other county agencies
- 10. Compensation for direct assistance services
 - a. Assistance program monthly base fee: \$1,000 per month
 - b. Assistance Program New Enrollee Fee: Flat fee of \$70 each
 - c. Conservation Program New Enrollee Fee: Flat fee of \$100 each

- d. The above program fees will be paid by GLWA directly to subrecipients monthly based upon activity report submitted to GLWA and contract holder (Wayne Metro)
- e. Conservation and Plumbing repairs:
 - i. Home Water Audit: Fee schedule to be submitted to Assistance Program Manager in advance of services being provided for approval
 - ii. Contracted Services: Licensed plumber or contractor cost
 - iii. Self-performed services: Fee schedule to be submitted to Assistance Program Manager in advance of services being provided for approval
- 11. Annual marketing budget: Up to \$10,000 with \$5,000 being disbursed by GLWA July 1, 2021 and second disbursement on January 1, 2022 after review of marketing efforts and related costs with approval from Assistance Program Manager.
- 12. GLWA will not provide additional administrative funds after the 12% cap has been met, however, CAA's will continue to provide assistance services until allocated program funding is fully utilized. Additional administrative funding may be provided through a reallocation process.

Similarly, as of July 1, 2021, the compensation for Wayne Metro is being restructured to achieve a blend of residents served and ensuring that program resources are fully utilized. Note that the structure for Wayne Metro is different as the scale of the program is materially larger.

- 1. Compensation for direct assistance services
 - a. Assistance Program New Enrollee Fee: Flat fee of \$80 each
 - b. Conservation Program New Enrollee Fee: Flat fee of \$100 each
- 2. Conservation and Plumbing repairs:
 - a. Home Water Audit: Fee schedule to be submitted to Assistance Program Manager in advance of services being provided for approval
 - b. Contracted Services: Licensed plumber or contractor cost
 - c. Self-performed services: Fee schedule to be submitted to Assistance Program Manager in advance of services being provided for approval

WRAP Program Funding Allocation

WRAP has historically provided 80% of available funds for direct bill assistance and 20% of funds for conservation services. Recognizing the continue influx of other assistance dollars, GLWA is considering a process to reallocate program funding between direct assistance and conservation. This process will be defined by the Assistance Program Manager and managed during the fiscal year.

BUDGETED WRAP REVENUE ALLOCATION FY 2022 - BUDGET

Community	Budgeted Direct Assistance	Budgeted Conservation Assistance	Budgeted Administration Cost Cap	Total Budgeted Revenue	Revenue Allocation
WAYNE METRO					
CITY OF DETROIT					
Wholesale Funding	\$756,264	\$189,066	\$116,839	\$1,062,169	26.14%
Local Funding	1,553,228	388,307	239,965	2,181,500	
TOTAL DETROIT	\$2,309,492	\$577,373	\$356,804	\$3,243,669	26.14%
WAYNE COUNTY	731,249	182,812	112,974	1,027,034	25.27%
GENESSE COUNTY	16,660	4,165	2,574	23,399	0.58%
WASHTENAW COUNTY	39,392	9,848	6,086	55,326	1.36%
MONROE COUNTY	6,350	1,587	981	8,918	0.22%
TOTAL WAYNE METRO	3,103,142	775,786	479,418	4,358,346	53.57%
OAKLAND LIVINSTON HUMAN SERVICE AGENCY					
OAKLAND COUNTY	806,739	201,685	124,637	1,133,060	27.88%
MACOMB COMMUNITY ACTION AGENCY					
MACOMB COUNTY	519,461	129,865	80,254	729,580	17.95%
LAPEER COUNTY	12,487	3,122	1,929	17,538	0.43%
ST. CLAIR COUNTY	4,825	1,206	745	6,777	0.17%
TOTAL MACOMB COMMUNITY ACTION AGENCY	536,773	134,193	82,928	753,895	18.55%
GRAND TOTAL	\$4,446,654	\$1,111,663	\$686,983	\$6,245,300	100.00%

- (1) Based on allocation of assistance funds of 80% Direct Bill Asst. and 20% Conservation Asst.
- (2) Based on FY 2022 Budgeted WRAP Funding of:

Wholesale Funding \$4,063,800

Detroit Local Funding 2,181,500

Total WRAP Funding \$6,245,300

CONTRACT EXTENSION CALCULATION

NUMBER OF MONTHS 8
CONTRACT EXTENSION AMOUNT \$457,989
CONTRACT EXTENSION AMOUNT ROUNDED \$460,000

Based on the FY2022 budget the maximum administrative fee for the total fiscal year is \$686,983. Since the recommended contract extension is eight months, the increase in the contract amount would be \$460,000.

Project Estimate:

Original Contract Price	\$825,000.00
Change Order No. 1	480,900.00
Change Order No. 2	950,000.00
Change Order No. 3	276,550.00
Change Order No. 4	276,550.00
Proposed Change Order No.5	<u>460,000.00</u>
New Contract Total:	<u>\$3,269,000.00</u>

Budget Impact: This contract extension request for funding of the proposed administration fees for WRAP are included in the budgeted WRAP funding each year and does not impact the FY2022 budget.

Proposed Action: The Audit Committee recommends the GLWA Board approve a resolution to enter into Change Order No. 5 of Contract No. GLWA-CS-010, Water Residential Assistance Program (WRAP) with Wayne Metropolitan Community Action Agency, a cost increase of \$460,000.00, for a total cost not to exceed \$3,269,000.00 and a time extension of 8 months for a total contract duration of 72 months through February 28, 2022.

Water Residential Assistance Program: Fiscal Year 2022 Updates

Maggie Pallone and Eric Pardini
Public Sector Consultants
Great Lakes Water Authority Audit Committee
Monday, June 21, 2021





Timeline

- Phase One: WRAP Evaluation (June 2020 November 2020)
 - Results presented to GLWA Audit Committee on October 23, 2020
 - PSC identified program successes and opportunities for improvement
 - 17 recommendations for improving WRAP
- Phase Two: Implementation Support (November 2020 June 2021)
 - PSC worked with GLWA and Community Action Agencies to implement recommended changes to WRAP
- Phase Three: WRAP 2.0 (July 2021 June 2022)
 - New program structure to launch for Fiscal Year 2022 on July 1, 2021



Phase Two – Implementation Status

Decentralizing Program Delivery

- Work with Wayne Metro, Macomb Community Action (MCA), and Oakland Livingston Human Services Agency (OLHSA) to decentralize WRAP delivery
- Under decentralized delivery model, individual Community Action Agencies (CAAs) will be responsible for providing WRAP services throughout the counties they serve
 - Manage program communications and marketing
 - Conduct outreach to member partner communities
 - Lead program intake and enrollment
 - Provide conservation and water repair services

Improving Program Reporting and Oversight

- Enhance GLWA program oversight
 - GLWA will hire an Assistance manager to provide dedicated support and oversight for the program
- Updated outcomes and reporting measures
 - Updated measures align better with original program design, and simplified report format makes it easier to convey progress of WRAP commitments
 - Approved by GLWA Board of Directors on April 28, 2021



Approved Program Design Changes (April 2021)

• Enable categorical eligibility for WRAP applicants

- Next step toward easing access for eligible households
- Leverages applicants' eligibility and/or enrollment in other income-qualified programs as an automatic qualification for WRAP
- Approved by GLWA Board of Directors on April 28, 2021 and will take effect on July 1, 2021

Increase arrearage payment cap from \$700/year to \$1,200/year

- Would enable WRAP to pay off over 75 percent of arrearage balances in the first year and up to 92 percent after two years in the program
- Approved by GLWA Board of Directors on April 28, 2021 and will take effect on July 1, 2021



Phase Three – WRAP 2.0



Phase Three – WRAP 2.0 Objectives

- Codify decentralized program delivery model
- Provide flexibility for CAAs to administer the program
- Simplify monthly bill payment process
- Recruit nonparticipating member partner communities
- Enhance conservation and water repair services
- Make WRAP more accessible for residents
- Improve performance reporting, financial monitoring, and cost of service
- Leverage other forms of assistance



WRAP 2.0 Contract Overview

- Extend current WRAP contract with Wayne Metro through February 2021 to pilot decentralized program delivery model.
 - Gives GLWA time to test out program changes and formalize direct relationships with CAAs
 - During this transition phase, GLWA will play a direct role in sub-recipient relationships with MCA and OLHSA.
 - MCA and OLHSA will be responsible for all WRAP functions in their communities
 - Wayne Metro will provide support to CAA partners on an as needed basis during this transition phase.
- GLWA has updated contract scope of work to reflect approved program changes, reporting requirements, and relationship between CAAs

WRAP 2.0 Contract Overview – Admin Fees

- Revise compensation structure for CAAs
 - Cap administrative funding at 12 percent of annual WRAP budget.
 - Reflects prior WRAP allocation
 - Cost caps for similar programs (LIHEAP and MEAP)
 - Provide greater certainty for CAAs to support internal capacity building
 - Designate funding to support marketing, communications, and outreach efforts.
 - Compensate CAAs based on the number of households served
 - Direct assistance households and conservation households
 - Incentivize increased program participation



WRAP 2.0 Contract Changes

Contract Changes

Topic	Today	July 1, 2021	February 1, 2021 (or before)			
Contractual Relationship	Contract with Wayne Metro holds subrecipient agreements with Macomb and OLHSA	Contract with Wayne Metro who holds subrecipient agreements with Macomb and OLHSA and supports transitional matters; GLWA will provide day to day program management and monitory; Subrecipients become lead interaction with Member Partner Communities	Individual partnership agreements with Wayne Metro, OLHSA, and Macomb			
Administrative and Marketing Fees	Paid a percent of dollars committed after households are enrolled	Provide a flat fee for service based on households enrolled for all CAAs; \$1,000 base monthly allocation for OLHSA and Macomb to support smaller program; \$10,000 annual marketing budget for OLHSA and Macomb to support program growth	Refine, as needed, based on experience from July through December (or before)			
Funding Flow	All funds flow through Wayne Metro	Funding disbursed by GLWA directly to CAAs to support more efficient processes; Transparent reporting among all partners	Direct funding from GLWA to CAAs			



WRAP 2.0 Organizational Structure



WRAP FY2022 - Proposed Administrative Fee Structure												
	Budgeted Assistance	Budgeted Administrative Costs (12% CAP)		Flat Fee Per Household Enrolled			lat Fee	Ma	nrketing			
Wayne Metro	\$3,103,142	\$	383,534	\$	80	\$	-	\$	-			
OLHSA	\$ 806,739	\$	99,709	\$	70	\$	12,000	\$	10,000			
Macomb	\$ 536,773	\$	66,343	\$	70	\$	12,000	\$	10,000			
Direct Assistance Total	\$4,446,654	\$	549,586			\$	24,000	\$	20,000			
Wayne Metro	\$ 775,786	\$	95,884	\$	100	\$	-	\$	-			
OLHSA	\$ 201,685	\$	24,927	\$	100	\$	-	\$	-			
Macomb	\$ 134,193	\$	16,586	\$	100	\$	-	\$	-			
Conservation Total	\$1,111,664	\$	137,397			\$	-	\$	-			
Grand Total	\$5,558,318	\$	686,983			\$	24,000	\$	20,000			



	FY2022 - Administrative Fee Structure - Based on Historical Average Annual Enrollments																																				
			# of	Flat Fee Per	Ca	alculated						<u>Total</u>																									
			Households	<u>Household</u>	Н	Household		Household		Household		Household		Household		Household		Household		Household		Household		Household		Household		Household					<u>Ca</u>	<u>iclulated</u>			
			<u>Enrolled</u>	<u>Enrolled</u>		<u>Fee</u>	<u>F</u>	lat Fee	Ma	arketing		<u>Fee</u>		<u>1</u>	2% CAP																						
	Total Wayne Metro 4,301 80		80	\$	344,048					\$	344,048		\$	383,534																							
	OLHSA		257	70		17,990		12,000		10,000		39,990			99,709																						
	Macomb		297	70		20,804		12,000		10,000		42,804			66,343																						
Direct Ass	istance Tot	:al	4,855		\$	382,842	\$	24,000	\$	20,000	\$	426,842		\$	549,586																						
	Total Wayı	ne Metro	691	100	\$	69,060					\$	69,060		\$	95,884																						
	OLHSA		59	100	\$	5,920					\$	5,920		\$	24,927																						
	Macomb		24	100	\$	2,440					\$	2,440		\$	16,586																						
Conservation Total		774		\$	77,420					\$	77,420		\$	137,397																							
Grand Total		5,629		\$	460,262	\$	24,000	\$	20,000	\$	504,262		\$	686,983																							



			FY2022	- New Fee Stru	ıctur	e - Enrollm	ent	Increased	by	50%											
			# of	Flat Fee Per	Ca	alculated						Total									
			Households	<u>Household</u>	Household		Household		Household		Household							<u>Caclulated</u>			
			<u>Enrolled</u>	<u>Enrolled</u>		<u>Fee</u>	<u>F</u>	lat Fee	Ma	arketing		<u>Fee</u>		<u>1</u>	2% CAP						
	Total Wayne	e Metro	6,451	80	\$	516,072					\$	516,072		\$	383,534						
	OLHSA		386	70		26,985		12,000		10,000		48,985			99,709						
	Macomb		446	70		31,206		12,000		10,000		53,206			66,343						
Direct As	sistance Tota	I	7,282		\$	574,263	\$	24,000	\$	20,000	\$	618,263		\$	549,586						
	Total Wayne	e Metro	1,036	100	\$	103,590					\$	103,590		\$	95,884						
	OLHSA		89	100	\$	8,880					\$	8,880		\$	24,927						
	Macomb		37	100	\$	3,660					\$	3,660		\$	16,586						
Conserva	ntion Total		1,161		\$	116,130					\$	116,130		\$	137,397						
Grand To	tal		8,444		\$	690,393	\$	24,000	\$	20,000	\$	734,393		\$	686,983						





FY2022 - New Fee Structure - Maximum Use of Admin Fee														
			# of	Flat Fee Per	Ca	alculated						<u>Total</u>		
			Households	<u>Household</u>	Н	ousehold					<u>Ca</u>	<u>iclulated</u>		
			<u>Enrolled</u>	<u>Enrolled</u>		<u>Fee</u>	<u>F</u>	lat Fee	Ma	rketing		<u>Fee</u>	<u>1</u>	2% CAP
	Total Wayne Metro		4,794	80	\$	383,536					\$	383,536	\$	383,534
	OLHSA		1,110	70		77,707		12,000		10,000		99,707		99,709
	Macomb		634	70		44,345		12,000		10,000		66,345		66,343
Direct Ass	sistance Tot	al	6,538		\$	505,588	\$	24,000	\$	20,000	\$	549,588	\$	549,586
	Total Wayr	ne Metro	959	100	\$	95,880		_			\$	95,880	\$	95,884
	OLHSA		249	100	\$	24,930					\$	24,930	\$	24,927
	Macomb		166	100	\$	16,590					\$	16,590	\$	16,586
Conservat	Conservation Total		1,374		\$	137,400					\$	137,400	\$	137,397
Grand Tot	tal		7,912		\$	642,988	\$	24,000	\$	20,000	\$	686,988	\$	686,983



Next Steps

- Finalize contract for FY 2022
- Develop partnership agreements for February 2021 or sooner
- Compile end of year reporting for FY 2021
 - Provide fourth quarter reporting update to Audit Committee in July
 - Review FY 2021 financials and assess reallocation
- Provide GLWA Board of Directors with recommended program changes for conservation (July 2021)
- Continue work on other WRAP 2.0 objectives in partnership with CAA partners



Questions?







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