



FY 2021 & FY 2022
Biennial Budget
and
FY 2021 Schedule of Charges

January 24, 2020

January 24, 2020

Annually, in January, the Great Lakes Water Authority (GLWA) presents a proposed biennial budget and related schedule of charges for the upcoming fiscal year which begins on July 1, 2020. In addition, public hearings on the proposed budget and charges is scheduled for February each year. This year, the Public Hearings for the proposed FY 2021 and FY 2022 Biennial Budget and FY 2021 Water and Sewerage Service Charges are scheduled for the Board of Directors meeting at **2:00 p.m. on Wednesday, February 26, 2020 at 735 Randolph, 5th Floor Board Room, Detroit, Michigan 48226.**

This hearing will provide GLWA an opportunity to present the Authority's budget which encompasses the Capital Improvement Program (CIP), estimated sales volume and other factors that serve as the basis for the proposed revenue requirements and schedule of charges for FY 2021. This hearing also provides an opportunity for the public and our member partners to comment or submit questions in writing related to the proposed charges. All comments or questions raised during the hearing will receive a written response. Please note that the proposed budget and charges are subject to change after the public hearing and subsequent deliberation by the GLWA Board.

Our primary objective continues to be one of providing our member partners with wholesale water and wastewater services of unquestionable quality at fair and equitable charges. GLWA is committed to exceeding our member partners' expectations in the region. GLWA would like to remind our valued member partners of added services that we provide at no additional cost.

- ✓ Extensive training and development opportunities for your team members through the One Water Institute (OWI)
- ✓ Expanded local system water testing to meet new Michigan Department of Environment Great Lakes and Energy (EGLE) for all member partners
- ✓ Public Communication materials related to the state of Michigan's new Lead and Copper Rule, educating the public about the perils of "flushable" wipes, and providing easy-to digest graphics regarding a range of emerging contaminants. These materials can be found at <https://www.glwater.org/members/member-partner-resources/>
- ✓ Community access videos designed to inform local elected officials, staff and residents on GLWA's budget and service charges

Introduction to GLWA Charges and Community Rates - <http://bit.ly/2Eg4I6I>

The ABC's of Water Charges - <http://bit.ly/2DFWnlh>

From Budgets to Customer Sewer and Water Charges - <http://bit.ly/2DCDkyy>

If you are unable to attend the Public Hearing, comments or questions may be submitted in writing to Sue F. McCormick, Chief Executive Officer, Great Lakes Water Authority, 735 Randolph Detroit, Michigan, 48226.

Table of Contents

FY 2021 & FY 2022 Biennial Budget

Public Hearing Notice – FY 2021 & FY 2022 Proposed Biennial Budget.....	1
FY 2021 & FY 2022 Proposed Biennial Budget Summary	2
One Pager Series – FY 2021 & FY 2022 Proposed Biennial Budget.....	9

FY 2021 Schedule of Charges

Public Hearing Notice – FY 2021 Proposed Schedule of Charges	10
FY 2021 Proposed Schedule of Charges.....	11
One Pager Series – FY 2021 Proposed Schedule of Charges.....	16



**GREAT LAKES WATER AUTHORITY
NOTICE OF PUBLIC HEARING
PROPOSED BIENNIAL BUDGET
For the Two-Year Period ended June 30, 2022
(FY 2021 and FY 2022)**

Notice is hereby given that the Great Lakes Water Authority Board of Directors will hold a Public Hearing on the FY 2021 and FY 2022 Biennial budget.

DATE: Wednesday, February 26, 2020

TIME: 2:00 p.m.

**PLACE: 5th Floor Board Room
735 Randolph
Detroit, Michigan 48226**

The proposed budget is scheduled to take effect on July 1, 2020. The budget is available for public inspection at the office of the Authority, Water Board Building, 735 Randolph, Detroit, Michigan 48226. A copy of the budget may also be found online at <https://www.glwater.org/financials/>.

Individuals or groups wishing to make oral presentations or submit prepared statements pertaining to the proposed budget may do so at the Public Hearing. Individuals or groups giving oral presentations are encouraged to have their presentations in writing, with a copy to be submitted for the record to the Great Lakes Water Authority Board of Directors. Oral presentations should be brief to allow all parties the opportunity to participate. A time limit may be imposed based upon registration at the hearing.

Interested parties who are unable to attend the Public Hearing may submit their comments in writing to:

Sue F. McCormick, Chief Executive Officer
Great Lakes Water Authority
735 Randolph
Detroit, Michigan, 48226

Great Lakes Water Authority
FY 2021 & FY 2022 Proposed Biennial Budget Summary
As of January 24, 2020

Schedule 1A - Water System Revenue Requirements Budget

Water System Revenue Requirements	Current Year		Biennial Budget					
	FY 2020 Adopted	FY 2020 Estimated	FY 2021 Requested	FY 2021 \$ Change	FY 2021 % Change	FY 2022 Requested	FY 2022 \$ Change	FY 2022 % Change
Revenues								
11 Revenues from Charges	\$ 330,580,000	\$ 326,215,000	\$ 338,575,500	\$ 7,995,500	2.4%	\$ 349,850,200	\$ 11,274,700	3.3%
10.1 Non-Operating Revenue	9,084,200	5,732,100	4,834,400	(4,249,800)	-46.8%	3,862,100	(972,300)	-20.1%
Total Revenues	339,664,200	331,947,100	343,409,900	3,745,700	1.1%	353,712,300	10,302,400	3.0%
Revenue Requirements								
1 Operations & Maintenance (O&M) Expense	\$131,490,500	\$131,490,500	\$137,127,300	\$5,636,800	4.3%	\$139,642,500	\$2,515,200	1.8%
2 General Retirement System Legacy Pension	6,048,000	6,048,000	6,048,000	-	0.0%	6,048,000	-	0.0%
3 Debt Service Allocation	137,557,600	137,581,000	143,189,900	5,632,300	4.1%	141,151,000	(2,038,900)	-1.4%
4 General Retirement System Accelerated Pension	6,268,300	6,268,300	6,268,300	-	0.0%	6,268,300	-	0.0%
5 Water Residential Assistance Program Contribution	1,698,300	1,698,300	1,678,000	(20,300)	-1.2%	1,768,600	90,600	5.4%
6 Lease Payment to Local System I&E Account	22,500,000	22,500,000	22,500,000	-	0.0%	22,500,000	-	0.0%
7 Improvement & Extension Fund Allocation	30,125,500	22,385,000	25,721,800	(4,403,700)	-14.6%	35,495,500	9,773,700	38.0%
8 Operating Reserve Deposit	3,976,000	3,976,000	876,600	(3,099,400)	-78.0%	838,400	(38,200)	-4.4%
9 Extraordinary Repair & Replacement Deposit	-	-	-	-	NA	-	-	NA
Annual Budgeted Revenue Requirements	\$ 339,664,200	\$ 331,947,100	\$ 343,409,900	\$ 3,745,700	1.1%	\$ 353,712,300	\$ 10,302,400	3.0%

Note: Revenues from Charges for FY 2021 above is comprised of the following

Regional System Wholesale Revenues – Suburban Wholesale Customers	\$315,810,200
Regional System Wholesale Revenues – Detroit Customers	<u>22,765,300</u>
Total Revenues from Charges	<u>\$338,575,500</u>

Great Lakes Water Authority
FY 2021 & FY 2022 Proposed Biennial Budget Summary
As of January 24, 2020

Schedule 1B - Sewer System Revenue Requirements Budget

Sewer System Revenue Requirements	Current Year		Biennial Budget					
	FY 2020 Adopted	FY 2020 Estimated	FY 2021 Requested	FY 2021 \$ Change	FY 2021 % Change	FY 2022 Requested	FY 2022 \$ Change	FY 2022 % Change
Revenues								
11 Revenues from Charges	\$ 471,874,500	\$ 471,874,500	\$ 487,012,900	\$ 15,138,400	3.2%	\$ 501,966,100	\$ 14,953,200	3.1%
10.1 Non-Operating Revenue	8,730,800	5,051,500	5,589,200	(3,141,600)	-36.0%	5,414,000	(175,200)	-3.1%
Total Revenues	480,605,300	476,926,000	492,602,100	11,996,800	2.5%	507,380,100	14,778,000	3.0%
Revenue Requirements								
1 Operations & Maintenance (O&M) Expense	\$187,057,200	\$187,057,200	\$184,946,100	\$ (2,111,100)	-1.1%	\$188,934,600	\$3,988,500	2.2%
2 General Retirement System Legacy Pension	10,824,000	10,824,000	10,824,000	-	0.0%	10,824,000	-	0.0%
3 Debt Service	215,738,800	213,802,800	209,739,900	(5,998,900)	-2.8%	215,438,500	5,698,600	2.7%
4 General Retirement System Accelerated Pension	11,620,700	11,620,700	11,620,700	-	0.0%	11,620,700	-	0.0%
5 Water Residential Assistance Program Contribution	2,403,000	2,403,000	2,444,200	41,200	1.7%	2,536,900	92,700	3.8%
6 Lease Payment to Local System	27,500,000	27,500,000	27,500,000	-	0.0%	27,500,000	-	0.0%
7 Improvement & Extension Fund Allocation	25,461,600	23,718,300	45,527,200	20,065,600	78.8%	49,195,900	3,668,700	8.1%
8 Operating Reserve Deposit	-	-	-	-	NA	1,329,500	1,329,500	NA
9 Extraordinary Repair & Replacement Deposit	-	-	-	-	NA	-	-	NA
Annual Budgeted Revenue Requirements	\$ 480,605,300	\$ 476,926,000	\$ 492,602,100	\$ 11,996,800	2.5%	\$ 507,380,100	\$ 14,778,000	3.0%

Note: Revenues from Charges for FY 2021 above is comprised of the following

Regional System Wholesale Revenues – Suburban Wholesale Customers	\$294,509,300
Regional System Wholesale Revenues – Detroit Customers	<u>192,503,600</u>
Total Revenues from Charges	<u>\$487,012,900</u>

Great Lakes Water Authority
FY 2021 & FY 2022 Proposed Biennial Budget Summary
As of January 24, 2020

Schedule 1C - Combined Water and Sewer System Revenue Requirements Budget

	Current Year		Biennial Budget					
Combined System Revenue Requirements	FY 2020 Adopted	FY 2020 Estimated	FY 2021 Requested	FY 2021 \$ Change	FY 2021 % Change	FY 2022 Requested	FY 2022 \$ Change	FY 2022 % Change
Revenues								
11 Revenues from Charges	\$ 802,454,500	\$ 798,089,500	\$ 825,588,400	\$ 23,133,900	2.9%	\$ 851,816,300	\$ 26,227,900	3.2%
10.1 Non-Operating Revenue	17,815,000	10,783,600	10,423,600	(7,391,400)	-41.5%	9,276,100	(1,147,500)	-11.0%
Total Revenues	820,269,500	808,873,100	836,012,000	15,742,500	1.9%	861,092,400	25,080,400	3.0%
Revenue Requirements								
1 Operations & Maintenance (O&M) Expense	\$318,547,700	\$318,547,700	\$322,073,400	\$3,525,700	1.1%	\$328,577,100	\$6,503,700	2.0%
2 General Retirement System Legacy Pension	16,872,000	16,872,000	16,872,000	-	0.0%	16,872,000	-	0.0%
3 Debt Service	353,296,400	351,383,800	352,929,800	(366,600)	-0.1%	356,589,500	3,659,700	1.0%
4 General Retirement System Accelerated Pension	17,889,000	17,889,000	17,889,000	-	0.0%	17,889,000	-	0.0%
5 Water Residential Assistance Program Contribution	4,101,300	4,101,300	4,122,200	20,900	0.5%	4,305,500	183,300	4.4%
6 Lease Payment to Local System	50,000,000	50,000,000	50,000,000	-	0.0%	50,000,000	-	0.0%
7 Improvement & Extension Fund Allocation	55,587,100	46,103,300	71,249,000	15,661,900	28.2%	84,691,400	13,442,400	18.9%
8 Operating Reserve Deposit	3,976,000	3,976,000	876,600	(3,099,400)	-78.0%	2,167,900	1,291,300	147.3%
9 Extraordinary Repair & Replacement Deposit	-	-	-	-	NA	-	-	NA
Annual Budgeted Revenue Requirements	\$ 820,269,500	\$ 808,873,100	\$ 836,012,000	\$ 15,742,500	1.9%	\$ 861,092,400	\$ 25,080,400	3.0%

Great Lakes Water Authority
FY 2021 & FY 2022 Proposed Biennial Budget Summary
As of January 24, 2020

There is no Schedule 3 for purposes of this presentation

Great Lakes Water Authority
FY 2021 & FY 2022 Proposed Biennial Budget Summary
As of January 24, 2020

Schedule 4 - Debt Service Coverage Calculations Consistent with the Master Bond Ordinance

Flow of Funds Basis		FY 2021 Water Fund	FY 2021 Sewer Fund	(Informational Only)	FY 2022 Water Fund	FY 2022 Sewer Fund	(Informational Only)
Revenues							
1	Regional System Wholesale Revenues	\$ 338,575,500	\$ 487,012,900	\$ 825,588,400	\$ 349,850,200	\$ 501,966,100	\$ 851,816,300
2	Local System Revenues	72,850,000	99,303,900	172,153,900	74,795,700	110,569,600	185,365,300
3	Miscellaneous Revenue (Local System)	6,149,100	5,634,700	11,783,800	6,149,100	5,634,700	11,783,800
4	Non-Operating Revenue (Regional System)	4,834,400	5,589,200	10,423,600	3,862,100	5,414,000	9,276,100
5	Total Revenues	\$ 422,409,000	\$ 597,540,700	\$ 1,019,949,700	\$ 434,657,100	\$ 623,584,400	\$ 1,058,241,500
Revenue Requirements							
Operations & Maintenance Expense							
6	Regional System Wholesale Expenses	\$ 137,127,300	\$ 184,946,100	\$ 322,073,400	\$ 139,642,500	\$ 188,934,600	\$ 328,577,100
7	Local System Expenses	36,471,300	71,101,900	107,573,200	37,556,300	73,200,700	110,757,000
8	GRS Pension allocable to Regional System	6,048,000	10,824,000	16,872,000	6,048,000	10,824,000	16,872,000
9	GRS Pension allocable to Local System	4,272,000	2,856,000	7,128,000	4,272,000	2,856,000	7,128,000
10	Total Operations & Maintenance Expense	183,918,600	269,728,000	453,646,600	187,518,800	275,815,300	463,334,100
11	Net Revenues after Operations & Maintenance Expense	\$ 238,490,400	\$ 327,812,700	\$ 566,303,100	\$ 247,138,300	\$ 347,769,100	\$ 594,907,400
Debt Service by Lien							
12	Senior Lien Bonds	131,142,700	132,686,600	263,829,300	133,759,600	144,396,600	278,156,200
13	Second Lien Bonds	49,280,800	54,642,000	103,922,800	44,683,600	48,104,300	92,787,900
14	SRF Junior Lien Bonds	5,040,900	54,240,700	59,281,600	7,791,600	55,117,400	62,909,000
15	Total Debt Service	\$ 185,464,400	\$ 241,569,300	\$ 427,033,700	\$ 186,234,800	\$ 247,618,300	\$ 433,853,100
Debt Service Coverage							
16	Senior Lien Bonds (11)/(12)	1.82	2.47		1.85	2.41	
17	Second Lien Bonds (11)/[(12)+(13)]	1.32	1.75		1.38	1.81	
18	SRF Junior Lien Bonds (11)/(15)	1.29	1.36		1.33	1.40	

Great Lakes Water Authority
FY 2021 & FY 2022 Proposed Biennial Budget Summary
As of January 24, 2020

Schedule 5A - Water Improvement & Extension Fund

	Current Year	Biennial Budget	
Inflows & Outflows	FY 2020 Estimated	FY 2021 Requested	FY 2022 Forecast
Water Improvement & Extension Fund			
Water System Revenue Transfers	\$22,385,000	\$25,721,800	\$35,495,500
Receipt of DWSD Shortfall Loan	-	-	-
Grant Revenues	-	-	-
Earnings on Investments, Net	-	-	-
Capital Outlay	(10,125,300)	(17,892,000)	(13,760,200)
Revenue Financed Capital - Strategic	(50,000,000)	(75,000,000)	(85,000,000)
Increase (Decrease) in I&E Reserves	(\$37,740,300)	(\$67,170,200)	(\$63,264,700)
Beginning Year Balance	264,584,900	226,844,600	159,674,400
Projected Ending Balance	\$226,844,600	\$159,674,400	\$96,409,700

Schedule 5B - Sewer Improvement & Extension Fund

	Current Year	Biennial Budget	
Inflows & Outflows	FY 2020 Estimated	FY 2021 Requested	FY 2022 Forecast
Sewer Improvement & Extension Fund			
Sewer System Revenue Transfers	\$23,718,300	\$45,527,200	\$49,195,900
Receipt of DWSD Shortfall Loan	19,288,300	19,288,300	8,705,000
Grant Revenues	-	-	-
Earnings on Investments, Net	-	-	-
Capital Outlay	(20,122,200)	(20,481,100)	(15,794,700)
Revenue Financed Capital - Strategic	(25,000,000)	(50,000,000)	(35,000,000)
Increase (Decrease) in I&E Reserves	(\$2,115,600)	(\$5,665,600)	\$7,106,200
Beginning Year Balance	96,648,700	94,533,100	88,867,500
Projected Ending Balance	\$94,533,100	\$88,867,500	\$95,973,700

Great Lakes Water Authority
FY 2021 & FY 2022 Proposed Biennial Budget Summary
As of January 24, 2020

Schedule 5C - Water Construction Bond Fund

	Current Year	Biennial Budget	
Inflows & Outflows	FY 2020 Estimated	FY 2021 Requested	FY 2022 Forecast
Water Construction Bond Fund			
Bond Proceeds, Net	\$0	\$0	\$0
Earnings on Investments, Net	1,131,300	820,400	376,100
Transfer from Improvement & Extension Fund	50,000,000	75,000,000	85,000,000
Contributions In Aid of Construction	-	-	-
Grant Revenues (DWRP Loans)	12,898,300	12,365,800	16,590,200
Project Expenditures	(70,930,700)	(110,673,000)	(134,939,000)
Increase (Decrease) in Construction Funds	(\$6,901,100)	(\$22,486,800)	(\$32,972,700)
Beginning Year Balance	92,331,900	85,430,800	62,944,000
Projected Ending Balance	\$85,430,800	\$62,944,000	\$29,971,300

Schedule 5D - Sewer Construction Bond Fund

	Current Year	Biennial Budget	
Inflows & Outflows	FY 2020 Estimated	FY 2021 Requested	FY 2022 Forecast
Sewer Construction Bond Fund			
Bond Proceeds, Net	\$0	\$0	\$0
Earnings on Investments, Net	706,800	553,900	441,100
Transfer from Improvement & Extension Fund	25,000,000	50,000,000	35,000,000
Contributions In Aid of Construction	-	-	-
Grant Revenues (CWRP Loans)	40,505,000	33,200,000	15,112,000
Project Expenditures	(94,826,000)	(82,979,000)	(84,568,000)
Increase (Decrease) in Construction Funds	(\$28,614,200)	\$774,900	(\$34,014,900)
Beginning Year Balance	82,031,700	53,417,500	54,192,400
Projected Ending Balance	\$53,417,500	\$54,192,400	\$20,177,500

The combined GLWA revenue requirement budget is the basis for establishing the annual charges for services. Much of the FY 2021 budget of \$836 million is fixed commitments such as debt service (42%), lease payment (6%), legacy liabilities (4%) as well as capital funding (9%), and other (1%). Operations & Maintenance (O&M) expense represents \$322 million, or 38%, of the total requirement for FY 2021 and is the focus of this One Pager. FY 2021 presents an increase of \$3.5 million, or 1.1%, over FY 2020. The second year of the biennial budget, FY 2022, increases 2%. Highlights for the upcoming year include:

Water Operations – increase of \$5.9 million

The majority of this net increase (\$5.2 million) is to the removal, hauling, and disposal of alum sludge at the water treatment plants. This mobile dredging & video piping program is a long-term maintenance effort that aligns with regulatory requirements.

Wastewater Operations – decrease \$309

thousand Ongoing efforts to achieve operational efficiencies have resulted in budgeted reductions of \$548,000 in utilities and \$758,000 in chemicals. Additionally, increased production through the environmentally stable Bio-dryer Facility, which significantly reduces the high cost of material sent to landfills, contributed an additional \$1,469,000 in projected savings. These savings are being reinvested into a multi-year instrumentation and control systems upgrade program budgeted at \$742,000 for FY 2021.

Centralized Services¹ – decrease \$4.2 million

Factors that decreased the budget include a reduction of contractual services in the planning area (\$2.2 million) due to material completion of large consulting projects for asset management and the wastewater master plan in FY 2020. In

addition, the pace of spending for the new, annual Water Transmission System Pipe Integrity Program has been slowed to align with other operational demands and projects.

Also, the field services team expects a reduction of \$2.5 million of contracted sewer cleaning and investigation services. The facilities team expects a decrease of \$2 million dollars from improved pricing on snow removal (\$400,000), in-sourcing trade services (\$500,000), and lower facility costs based on historical review (\$1.1 million).

Factors increasing the budget are related to information technology (\$2.7 million). This includes a loss of \$1.2 million in information shared service reimbursements as well as implementation expenses for a new enterprise asset management system (\$1.6 million).

Administrative Services² – increase \$2.1 million

The administrative services budget is largely driven by personnel costs and contractual services for eight areas. Programs that are supported by these increases include One Water Institute, procurement strategic initiatives, internal audit, and government relations service.

Staffing - If all positions were filled for the entire year, the full-time-equivalent (FTE) count would be 1,219, up by 12 positions from the prior year plan. Based on assumptions related to recruitment and turnover, the budget provides funding for 1,200 positions. Two positions are in water operations, four in wastewater operations, one in safety, two in organizational development, two in financial services and a partial allocation among other areas.

Questions? Contact the Office of the Chief Financial Officer at cfo@glwater.org

¹ Includes the Planning Services, Systems Operations Control; Facility and Fleet Operations; Field Service Operations; Energy, Research & Innovation; Information Technology; and Security & Integrity/HazMat.

² Includes the Board of Directors, Chief Executive Officer, Chief Administrative & Compliance Officer, Risk Management & Safety, General Counsel, Public Affairs, Organizational Development, and Financial Services



**GREAT LAKES WATER AUTHORITY
NOTICE OF PUBLIC HEARING
PROPOSED FY 2021 WATER AND SEWERAGE SERVICE CHARGES**

Notice is hereby given that the Great Lakes Water Authority Board of Directors will hold a Public Hearing on Water and Sewerage service charges proposed by the Great Lakes Water Authority for Fiscal Year 2021.

DATE: Wednesday, February 26, 2020

TIME: 2:00 p.m.

**PLACE: 5th Floor Board Room
735 Randolph
Detroit, Michigan 48226**

The proposed service charges are scheduled to take effect on July 1, 2020.

The proposed schedule of charges is available for public inspection at the office of the Authority, Water Board Building, 735 Randolph, Detroit, Michigan 48226. The proposed schedule of charges may also be found online at <https://www.glwater.org/financials/>.

Individuals or groups wishing to make oral presentations or submit prepared statements pertaining to the proposed service charges may do so at the Public Hearing. Individuals or groups giving oral presentations are encouraged to have their presentations in writing, with a copy to be submitted for the record to the Great Lakes Water Authority Board of Directors. Oral presentations should be brief to allow all parties the opportunity to participate. A time limit may be imposed based upon registration at the hearing.

Interested parties who are unable to attend the Public Hearing may submit their comments in writing to:

Sue F. McCormick, Chief Executive Officer
Great Lakes Water Authority
735 Randolph
Detroit, Michigan, 48226

Great Lakes Water Authority
Proposed FY 2021 Water Supply System Allocated Revenue Requirements and Service Charges

Line No.	Customer	Fixed Monthly Charge (a) \$/mo	Commodity Charge (a) \$/Mcf	Annual Revenue Req'ts \$
1	Allen Park	123,000	7.84	2,460,200
2	Almont Village	12,300	10.52	245,400
3	Ash Township	42,600	8.32	852,400
4	Belleville	16,100	9.80	321,600
5	Berlin Township	37,600	11.45	752,400
6	Brownstown Township	188,300	10.88	3,766,900
7	Bruce Twp	16,700	71.93	334,900
8	Burtchville Twp	16,900	18.72	337,600
9	Canton Township	530,200	12.23	10,603,400
10	Center Line	24,100	6.23	481,000
11	Chesterfield Township	218,700	10.37	4,373,300
12	Clinton Township	392,000	7.83	7,839,300
13	Commerce Township	184,300	14.57	3,686,300
14	Dearborn	542,500	7.27	10,850,200
15	Dearborn Heights	190,100	7.74	3,801,700
16	Eastpointe	81,000	6.18	1,619,600
17	Ecorse	79,200	4.33	1,583,300
18	Farmington	52,600	9.27	1,051,100
19	Farmington Hills	463,200	10.24	9,263,700
20	Ferndale	52,500	6.23	1,050,100
21	Flat Rock	70,900	9.21	1,417,200
22	Flint (b)	575,100	8.80	11,501,400
23	Fraser	63,500	8.55	1,269,100
24	Garden City	88,300	8.34	1,766,000
25	Gibraltar	17,400	8.35	347,400
26	Grosse Ile Township	57,600	11.70	1,152,300
27	Grosse Pt. Park	77,000	11.11	1,540,600
28	Grosse Pt. Shores	34,000	13.70	680,700
29	Grosse Pt. Woods	74,100	9.17	1,481,600
30	Hamtramck	41,100	5.41	821,200
31	Harper Woods	42,700	6.80	854,900
32	Harrison Township	79,500	6.85	1,590,100
33	Hazel Park	38,400	6.01	767,900
34	Highland Park	60,600	4.64	1,212,200
35	Huron Township	76,400	10.13	1,527,600
36	Imlay City	75,000	13.57	1,500,000
37	Imlay Twp	800	40.00	16,800
38	Inkster	64,100	5.48	1,282,600
39	Keego Harbor	15,600	12.38	311,000
40	Lapeer	80,700	11.90	1,613,200
41	Lenox Township	15,400	8.23	307,500
42	Lincoln Park	116,500	6.15	2,329,200
43	Livonia	597,700	9.97	11,954,000
44	Macomb Township	656,100	16.11	13,122,700
45	Madison Heights	99,900	6.85	1,997,100
46	Mayfield Twp	2,500	23.45	49,700
47	Melvindale	33,700	6.28	674,300
48	New Haven, Village of	20,600	6.77	411,800
49	N O C W A	1,149,100	10.27	22,982,800
50	Northville	46,300	11.78	926,700
51	Northville Township	291,500	17.04	5,830,400
52	Novi	471,100	12.75	9,421,300
53	Oak Park	72,000	6.06	1,440,500
54	Oakland Co. Drain Comm.	4,400	3.22	87,300
55	Plymouth	55,800	10.28	1,115,700
56	Plymouth Township	231,000	11.37	4,620,100
57	Redford Township	166,100	8.08	3,321,200
58	River Rouge	35,000	7.57	700,100
59	Riverview	45,200	7.87	903,500
60	Rockwood	14,400	11.70	288,600

Great Lakes Water Authority
Proposed FY 2021 Water Supply System Allocated Revenue Requirements and Service Charges

Line No.	Customer	Fixed Monthly Charge (a) \$/mo	Commodity Charge (a) \$/Mcf	Annual Revenue Req'ts \$
61	Romeo	13,000	18.39	260,800
62	Romulus	217,500	8.26	4,349,700
63	Roseville	139,400	5.93	2,788,300
64	Royal Oak Township	10,600	7.14	211,500
65	S O C W A	1,198,600	7.62	23,972,900
66	Shelby Township	728,100	15.22	14,561,400
67	South Rockwood	6,000	10.04	120,200
68	Southgate	115,100	7.94	2,302,700
69	St. Clair County-Greenwood Township	24,100	12.90	482,700
70	St. Clair Shores	159,000	6.72	3,180,800
71	Sterling Heights	788,800	11.04	15,776,600
72	Sumpter Township	34,600	9.71	692,900
73	Sylvan Lake	12,200	15.11	243,100
74	Taylor	242,600	7.28	4,851,400
75	Trenton	87,100	8.15	1,742,500
76	Troy	704,200	12.20	14,083,000
77	Utica	30,000	9.36	599,700
78	Van Buren Township	178,000	11.20	3,560,500
79	Walled Lake	41,900	10.69	837,500
80	Warren	532,600	6.92	10,651,400
81	Washington Township	117,400	12.56	2,348,500
82	Wayne	160,300	13.44	3,206,200
83	West Bloomfield Township	540,600	16.37	10,812,900
84	Westland	323,200	7.84	6,464,300
85	Wixom	128,200	13.80	2,563,900
86	Woodhaven	87,100	11.97	1,741,900
87	Ypsilanti Comm Util Auth	543,500	8.80	10,869,800
88	Total Wholesale Contract Customers			323,689,800
89	Adjustment to Flint Revenue Requirement for KWA Debt Service			(6,667,400)
90	Adjustment for Highland Park Bad Debt			(1,212,200)
91	Net Requirement from Wholesale Charges (agrees with GLWA Budget "Schedule 3A")			315,810,200
Detroit Customer Class - \$				
92	Wholesale Revenue Requirement (c)			43,465,300
93	less: Ownership Benefit per Lease			(20,700,000)
94	Net Wholesale Revenue Requirement			22,765,300
95	Indirect Retail Revenue Requirements (d)			47,031,500
96	less: Use of Lease Payment for Debt Service			(8,775,700)
97	Net Indirect Retail Revenue Requirements (d)			38,255,800
98	Subtotal Subject to GLWA Board Approval (94) + (97)			61,021,100
99	Direct Retail Revenue Requirements (e)			40,743,300
100	Total Local System Revenue Requirement (97) + (99)			78,999,100
101	Net Requirement from Detroit Customer Class (agrees with GLWA Budget "Schedule 3A")			101,764,400

(a) Reflects proposed charges presented on January 23, 2020.

(b) Net fixed monthly charge will include \$555,600 monthly credits for KWA debt service.

(c) Wholesale revenue requirements for the Detroit Customer Class.

(d) Local System revenue requirements related to Master Bond Ordinance (local debt service, etc.)

(e) Local System operating expenses (net of shared services reimbursement) and I&E deposit. Not Subject to GLWA Board approval.

Great Lakes Water Authority
Proposed FY 2021 Sewage Disposal System Allocated Revenue Requirements and Service Charges

	<u>Fixed Monthly Charge</u> \$/mo	<u>Annual Revenue Requirement</u> \$
<u>Suburban Wholesale</u>		
1 OMID	6,470,000	77,639,500
2 Rouge Valley	4,631,800	55,582,000
3 Oakland GWK	3,867,700	46,412,300
4 Evergreen Farmington	2,980,100	35,760,900
5 SE Macomb San Dist	2,122,700	25,472,200
6 Dearborn	1,666,400	19,996,200
7 Grosse Pointe Farms	235,200	2,821,800
8 Grosse Pointe Park	154,800	1,858,000
9 Melvindale	131,100	1,573,600
10 Farmington	98,400	1,181,100
11 Center Line	88,400	1,060,700
12 Allen Park	73,100	876,900
13 Highland Park	484,800	5,817,500
14 Hamtramck	341,100	4,093,600
15 Grosse Pointe	76,300	915,400
16 Harper Woods	18,700	224,800
17 Redford Township	22,600	270,800
18 Wayne County #3	4,400	52,200
19 Subtotal "Regional Wholesale Revenues from Charges"		281,609,500
20 Industrial Specific Revenues		14,209,800
21 Subtotal "Regional Wholesale Revenues from Charges"		295,819,300
22 less: Highland Park Bad Debt		(1,310,000)
23 Total "Regional Wholesale Revenues" (a)		294,509,300
<i>* Wholesale charges will be effective July 1, 2020</i>		
Detroit Customer Class - \$		
24 Wholesale Revenue Requirement (c)		198,019,600
25 less: Ownership Benefit per Lease		(5,516,000)
26 Net Wholesale Revenue Requirement		192,503,600
27 Indirect Retail Revenue Requirements (d)		35,566,600
28 less: Use of Lease Payment for Debt Service		(4,585,900)
29 Net Indirect Retail Revenue Requirements (d)		30,980,700
30 Subtotal Subject to GLWA Board Approval (26) + (29)		223,484,300
31 Direct Retail Revenue Requirements (e)		73,957,900
32 Total Local System Revenue Requirement (29) + (31)		104,938,600
33 Net Requirement from Detroit Customer Class (a)		297,442,200

(a) Agrees with GLWA Budget "Schedule 3A"

(b) Reserved

(c) Wholesale revenue requirements for the Detroit Customer Class.

(d) Local System revenue requirements related to Master Bond Ordinance (local debt service, etc.)

(e) Local System operating expenses (net of shared services reimbursement) and I&E deposit. Not Subject to GLWA Board approval.

Great Lakes Water Authority
Proposed FY 2021 Industrial Specific Retail Sewer Charges

Industrial Waste Control Charges	
<u>Meter Size - inches</u>	<u>Charge</u> \$/mo
5/8	3.49
3/4	5.24
1	8.73
1-1/2	19.20
2	27.92
3	50.61
4	69.80
6	104.70
8	174.50
10	244.30
12	279.20
14	349.00
16	418.80
18	488.60
20	558.40
24	628.20
30	698.00
36	767.80
48	837.60

Pollutant Surcharges	
<u>Pollutant</u>	<u>Charge</u> \$/lb
BIOCHEMICAL OXYGEN DEMAND (BOD) for concentrations > 275 mg/l	0.508
TOTAL SUSPENDED SOLIDS (TSS) for concentrations > 350 mg/l	0.516
PHOSPHORUS (P) for concentrations > 12 mg/l	7.611
FATS, OIL AND GREASE (FOG) for concentrations > 100 mg/l	0.490
SEPTAGE DISPOSAL FEE Per 500 gallons of disposal	49.00

Great Lakes Water Authority
Proposed FY 2021 Industrial Specific Retail Sewer Charges

Industrial Waste Control Charges- Administration Only	
<u>Meter Size - inches</u>	<u>Charge</u> \$/mo
5/8	0.87
3/4	1.31
1	2.18
1-1/2	4.80
2	6.98
3	12.65
4	17.45
6	26.18
8	43.63
10	61.08
12	69.80
14	87.25
16	104.70
18	122.15
20	139.60
24	157.05
30	174.50
36	191.95
48	209.40



FY 2021 Service Charges Highlights

On February 26, 2020, the GLWA Board of Directors will hold a Public Hearing for the proposed schedule of charges for the fiscal year beginning July 1, 2020. Board deliberation and action will occur after receiving public input.

Charges are Based on Four Key Elements.

1) Budget: The costs for the daily operations and maintenance activities (such as the people, services, utilities, chemicals, and parts to operate plants and maintain the pipelines), the lease payment for the regional system, Water Residential Assistance Program (WRAP) funding, debt service, legacy pension, and capital project funding. The budget is also known as the “revenue requirement”.

2) Capital Improvement Plan (CIP): Annually the GLWA’s engineers evaluate the physical improvement needs of the regional systems. Those needs are funded by a combination of cash on hand and debt.

3) Units of Service (UOS): Quantifies each community’s service needs based on engineering studies, metering data, and other criteria. For the water system, this includes the amount of water purchased each year. For the sewer system, each member partner is assigned a percentage “share.”

4) Cost of Service Study (COS): The inputs from the three sources above are applied to an agreed upon charges methodology to allocate the revenue requirement (i.e. budget) by functional categories (such as purification for the water system or sludge disposal for the sewer system) and then allocated to each customer. The outcome is the charge calculation for each community. Unique to FY 2021, the proposed charges are indexed from the previous year’s charges given a

concentrated effort to evaluate the charges methodology with our member partners.

FY 2021 Water System Charges

The average wholesale water charge increase is proposed to be 3.5 percent with the entire system adjustment at 3.8 percent. This outcome is the result of 1) a proposed FY 2021 Water budget increase of 1.1 percent, 2) reduced investment earnings, and 3) reduced estimated sales volumes which has the impact of increasing the unit cost. As a result of the 2019 Contract Alignment Process (CAP), the FY 2021 Units of Service were virtually unchanged from FY 2020. This has significantly improved charge stability among member partner communities. The increase is proposed to be applied uniformly to all member partners that did not have changes in contractual demand

Proposed FY 2021 Sewer System Charges

The average wholesale sewer charge increase is proposed to be 3.5 percent with the entire system adjustment at 3.2 percent. This outcome is the result of 1) a proposed FY 2021 Sewer budget increase of 2.5 percent and 2) reduced investment earnings. Since there were no changes made to the sewer shares for FY 2021, the proposed increase will be applied uniformly to all member partners.

Average System Charge Adjustments

Year	Water	Sewer
2017	4.5%	8.3%
2018	1.9%	-0.7%
2019	1.6%	0.1%
2020	0.6%	0.8%
2021*	3.8%	3.2%
Five Year Average	2.5%	2.3%

* Proposed

For Additional Information: See [How GLWA Sets Charges Infographic](#) and visit us at www.glwater.org