



## THE FOSTER GROUP

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### MEMORANDUM

Final FY 2018 Wholesale Service Charge Proposals

June 6, 2017

To: Sue McCormick

From: Bart Foster

The intent of this memorandum is to provide an executive summary of the final FY 2018 proposed wholesale water and sewer service charges, and the corresponding annual water and sewer revenue requirements allocable to the Detroit customer class. The discussion and supporting exhibits herein present final proposals that reflect our understanding of three specific developments since the original proposals were submitted in January:

- Discussions regarding continued potential full service to Flint and temporarily extended full service to Genesee County for part of FY 2018; and
- Our understanding of agreements between GLWA and DWSD regarding development of a supplemental Memorandum of Understanding (“MOU”), or a related document, to clarify the intent of certain aspects of the Lease(s); and
- Ongoing review at the Board level of proposed modifications to Sewer SHARES for FY 2018.

Specifics regarding all of these elements are (or are in the process of being) documented in full detail elsewhere, and we’ll not attempt to articulate in detail herein. Rather, we will limit this presentation to a high level introduction to the topics and how they impact the proposed service charges for FY 2018. We’ll do so separately for the Water Charges and the Sewer Charges, although there are common themes with respect to the MOU topic.

We note that the *originally proposed* Water and Sewer Charges are delineated in our February 12, 2017 memorandum regarding “FY 2018 Cost of Service and Service Charge Recommendations”. Many of the analyses described in that report remain pertinent and applicable. This document has been prepared to summarize the original proposal and to briefly articulate the changes resulting in the final recommendations.

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### Water Charges

The *originally proposed* FY 2018 Water charge proposals were characterized by:

- A continuation of the amount of debt service assigned to the Local System (and directly charged to Detroit customers) contained in the FY 2016 and FY 2017 Budgets. This approach was being followed while GLWA and DWSD principals sought to establish the “Obligation Payable” (related to Local System assets) from DWSD to GLWA as part of the Lease implementation.
  - *The balance of the budgeted debt service was assigned to the Regional System and proportionally shared by all GLWA customers, including Detroit.*
- An overall initially proposed FY 2018 BUDGET that was equal to the FY 2017 BUDGET.
- A net negative budgeted revenue variance of approximately \$12.4 million, principally related to the expected departure of Genesee County, slightly offset by expected continued interim service to Flint for one quarter of FY 2018.
- An average increase in wholesale customer service charges of **4.0%**, entirely designed to address the Flint/GCDC budgeted revenue shortfall introduced above, as there was no need to increase charges for budget purposes.

The *final proposed* FY 2018 Water charge proposals are characterized by:

- A reallocation of debt service that reflects the tentative agreement reached by the GLWA and DWSD principals regarding the “Obligation Payable.”
  - *While the specifics of the full amortization schedule are still being worked out, the initial agreement regarding the amortization contemplates a FY 2018 “Obligation Payable” increase of approximately \$3.1 million, and a corresponding decrease of approximately \$3.1 million of Regional System debt service for FY 2018.*
- This change results in an overall proposed GLWA BUDGET for FY 2018 that is approximately one percent **lower** than the FY 2017 BUDGET.
- An increase in “short term” revenues from Flint/GCDC based on long-term service agreements with both of these customers that are in the final stages of negotiations.
  - *These agreements provide security to include an additional \$3.6 million of budgeted FY 2018.*
- An elimination of the originally budgeted deposit to the Budget Stabilization Fund required of the Detroit customer class.
  - *This approach aligns with the reduction in bad debt expense for the Detroit customer class reported as part of the FY 2016 financial statements.*
- With respect to the wholesale customer service charges, these adjustments produce a potential **\$6.7 million reduction in the wholesale revenue requirements included in the original proposal.**

- In coordination with GLWA management, we are recommending a reduction in the overall “revenue requirement from charges” equivalent to this amount. Implementation of this proposal will reduce the average “wholesale charge increase” from 4.0% to **2.0%**.
  - *Approximately half of this change is related to the reduction in the BUDGET associated with the Regional / Local debt service shift, with the remainder associated with the additional budgeted revenue from GCDC.*
  - *We are proposing to implement this adjustment by uniformly reducing each of the originally proposed charges (fixed monthly and commodity) for each wholesale Customer by 2% “across the board”. The accompanying schedule of proposed water charges attached to this memorandum has been computed in accordance with this premise.*

The following exhibit summarizes the changes in original and final Water Charge proposals, as introduced above.

	Original Proposals		Final Proposals				
	Annual Rev Req't	Budget/Charge Adjustment	Annual Rev Req't	Budget/Charge Adjustment	Rev Req't Variance	Impact Variance	
<u>Suburban Wholesale</u>							
1	Total Wholesale Revenue Requirement	331,213,300	0.0%	328,119,300	-0.9%	(3,094,000)	-0.9%
2	less: Non-Operating Revenue	(2,968,900)		(2,968,900)		0	
3	Total Wholesale Revenue Req't from Charges	328,244,400	-0.3%	325,150,400	-0.9%	(3,094,000)	-0.7%
4	less: Revenue from Non-Contract Customers	(4,000,000)		(7,600,000)		(3,600,000)	
5	Balance from Contract Customers	324,244,400		317,550,400		(6,694,000)	
6	Allocated to Suburban Wholesale	308,392,500	4.0%	302,419,800	2.0%	(5,972,700)	-2.0%
7	Allocated to Detroit	15,851,900		15,130,600		(721,300)	
<u>Allocated Detroit Revenue Req't (a)</u>							
8	GLWA Wholesale Service	15,851,900		15,130,600		(721,300)	
9	Local Debt Service - Pre Bifurcation	31,219,800		34,313,800		3,094,000	
10	Local Debt Service - Post Bifurcation	3,172,900		3,172,900		0	
11	Other Indirect Retail Revenue Req'ts	9,793,300		9,432,800		(360,500)	
12	Subtotal Detroit Wholesale and Indirect	44,186,000		46,919,500		2,733,500	

(a) Excludes Direct O&M, etc.

**Sewer Charges**

The **originally proposed** FY 2018 Sewer charge proposals were characterized by:

- A continuation of the amount of debt service assigned to the Local System (and directly to Detroit customers) contained in the FY 2016 and FY 2017 Budgets. This approach was being followed while GLWA and DWSD principals sought to establish the “Obligation Payable” from DWSD to “Obligation Payable” (related to Local System assets) from DWSD to GLWA as part of the Lease implementation.
  - *The balance of the budgeted debt service was assigned to the Regional System and shared by all GLWA customers, including Detroit.*
- An overall initially proposed FY 2018 BUDGET that reflected a 2.0% increase compared to the FY 2017 BUDGET.

- An implementation of new Sewer SHARES that reflected the GLWA Administrative recommendation, which resulted in an effective cost shift (all else being equal) of approximately \$9.8 million from Detroit Customers to Suburban Customers.
  - *This recommendation sought to strategically reflect recommendations from a technical work group sponsored by the GLWA Customer Outreach initiative in a manner that embraced Rate Simplification concepts, and to balance alternative perspectives expressed during the review process.*
  - *The full technical recommendation would have produced a cost shift of approximately 12.0 million in the same direction, while ignoring the technical recommendations entirely would have essentially resulted in a \$3.1 million cost shift from Suburban Customers to Detroit Customers.*
- An average increase in wholesale customer service charges of 4.7%. This increase:
  - *Accommodated the 2.0% budget increase;*
  - *Implemented the GLWA Administrative Recommendation on SHARES;*
  - *Reflected a reduction in the budgeted / true-up bad debt expense related to Highland Park (and therefore a reduction in charges);*
  - *Resulted in a moderately wide degree of variable impact amongst Suburban Wholesale customers, resulting from the SHARE proposals.*

The **final proposed** FY 2018 Sewer charge proposals are characterized by:

- An approximate \$3.2 million reduction in proposed “new money” debt service included in the original budget expectations, as current CIP financing plans anticipate a delay in the budgeted bond sale;
- A reallocation of debt service that reflects the tentative agreement reached by the GLWA and DWSD principals regarding the “Obligation Payable”.
  - *While the specifics of the full amortization schedule are still being worked out, the initial agreement regarding the amortization contemplates a decrease of approximately \$4.8 million of Regional System debt service for FY 2018.*
- These two changes result in an overall 1.7% reduction in the originally proposed GLWA BUDGET for FY 2018. The final proposed FY 2018 BUDGET reflects an increase of approximately 0.3% compared to the FY 2017 BUDGET.
- An elimination of the originally budgeted deposit to the Budget Stabilization Fund required of the Detroit customer class.
  - *This approach aligns with the reduction in bad debt expense for the Detroit customer class reported as part of the FY 2016 financial statements.*
- Similarly, an elimination (for FY 2018) of the phased “bad debt true-up” for the Detroit retail customer class.
  - *This approach also aligns with the reduction in bad debt expense for the Detroit customer class reported as part of the FY 2016 financial statements.*
- An acceptance of the full technical proposal on the recommended SHARES, but . . .

- *Via an implementation plan to phase in the approximate \$12 million impact over two, equal steps in FY 2018 and FY 2019.*
- With respect to the wholesale customer service charges, these adjustments produce a potential **\$7.6 million reduction in the revenue requirements included in the original proposal.**
- In coordination with GLWA management, we are recommending a reduction in the overall “revenue requirement from charges” equivalent to this amount. Implementation of this proposal will reduce the average “wholesale charge increase” from 4.7% to **1.9%**.
  - *The proposed approach “narrows” the impact on various Suburban Wholesale customers, as the SHARE recommendations are implemented over a 2-year period. The accompanying schedule of proposed sewer charges have been computed in accordance with this premise.*

The following exhibit summarizes the changes in original and final Sewer Charge proposals, as introduced above.

	Original Proposals			Final Proposals			Variance			
	Annual Rev Req't	Fixed Monthly Chg	Charge Adjustment	Annual Rev Req't	Fixed Monthly Chg	Charge Adjustment	Annual Rev Req't	Fixed Monthly Chg	Charge Adjustment	
<u>Suburban Wholesale</u>										
1	OMID	76,012,600	6,334,300	9.2%	72,815,900	6,068,000	4.6%	(3,196,700)	(266,300)	-4.6%
2	Rouge Valley	55,332,100	4,611,100	-0.3%	55,022,300	4,585,200	-0.8%	(309,800)	(25,900)	-0.6%
3	Oakland GWK	46,209,100	3,850,800	1.2%	45,751,500	3,812,600	0.2%	(457,600)	(38,200)	-1.0%
4	Evergreen Farmington	35,483,300	2,957,000	10.3%	33,733,200	2,811,100	4.8%	(1,750,100)	(145,900)	-5.4%
5	NE Wayne Co	25,379,000	2,114,900	5.2%	24,637,000	2,053,100	2.1%	(742,000)	(61,800)	-3.1%
6	Dearborn	20,325,500	1,693,700	3.7%	19,628,400	1,635,700	0.1%	(697,100)	(58,000)	-3.6%
7	Grosse Pointe Farms	2,756,200	229,700	3.3%	2,696,100	224,700	1.1%	(60,100)	(5,000)	-2.3%
8	Grosse Pointe Park	1,854,400	154,500	14.0%	1,739,500	145,000	7.0%	(114,900)	(9,500)	-7.1%
9	Melvindale	1,556,100	129,700	12.7%	1,468,200	122,300	6.3%	(87,900)	(7,400)	-6.4%
10	Farmington	1,171,900	97,700	5.6%	1,138,100	94,900	2.5%	(33,800)	(2,800)	-3.0%
11	Center Line	1,045,900	87,300	12.9%	986,200	82,200	6.5%	(59,700)	(5,100)	-6.4%
12	Allen Park	866,600	72,100	29.0%	771,000	64,300	14.7%	(95,600)	(7,800)	-14.2%
13	Highland Park	5,627,600	469,000	-3.3%	5,641,700	470,200	-3.0%	14,100	1,200	0.2%
14	Hamtramck	3,949,800	329,100	-3.3%	3,958,800	329,900	-3.1%	9,000	800	0.2%
15	Grosse Pointe	904,900	75,400	-3.9%	909,500	75,800	-3.5%	4,600	400	0.5%
16	Harper Woods	229,500	19,200	-4.4%	231,700	19,300	-3.5%	2,200	100	0.9%
17	Redford Township	255,200	21,300	-2.0%	254,700	21,200	-2.2%	(500)	(100)	-0.2%
18	Wayne County #3	45,700	3,900	-2.4%	45,500	3,800	-2.8%	(200)	(100)	-0.4%
19	Suburban Wholesale Total	279,005,400	23,250,700	4.7%	271,429,300	22,619,300	1.9%	(7,576,100)	(631,400)	-2.8%
20	Allocated Detroit Wholesale	179,295,600		-3.8%	178,969,200		-3.9%	(326,400)		-0.2%
21	Industrial Specific	19,651,300		0.6%	19,551,700		0.1%	(99,600)		-0.5%
22	Total GLWA Wholesale Service	477,952,300		1.0%	469,950,200		-0.6%	(8,002,100)		-1.6%
<u>Allocated Detroit Revenue Req't (a)</u>										
23	GLWA Wholesale Service	179,295,600			178,969,200			(326,400)		
24	Bad Debt True-Up	4,172,600			0			(4,172,600)		
25	Subtotal	183,468,200			178,969,200			(4,499,000)		
26	Local Debt Service - Pre Bifurcation	22,567,400			27,392,500			4,825,100		
27	Local Debt Service - Post Bifurcation	0			0			0		
28	Other Indirect Retail Revenue Req'ts	9,188,100			6,534,100			(2,654,000)		
29	Subtotal Detroit Wholesale and Indirect	215,223,700			212,895,800			(2,327,900)		

(a) Excludes Direct O&M, etc.

This discussion incorporates by reference the specific proposed charge schedules and the additional material that has been prepared to support these recommendations for Board consideration at the meeting scheduled for June 7, 2017.

We are prepared to discuss this matter at your convenience.

Great Lakes Water Authority  
Calculation of Final Proposed FY 2018 Wholesale Water Service Charges

Community	Originally Proposed		Final Adjustment <b>-2.0%</b>	Adjusted Proposal	
	Fixed Mo \$/mo	Commodity \$/Mcf		Fixed Mo \$/mo	Commodity \$/Mcf
Allen Park	118,700	7.01		116,400	6.87
Almont Village	11,100	9.91		10,900	9.72
Ash Township	38,000	7.56		37,300	7.41
Belleville	15,800	8.81		15,500	8.64
Berlin Township	36,600	10.10		35,900	9.90
Brownstown Township	174,300	10.07		170,900	9.87
Bruce Twp	8,800	67.88		8,600	66.55
Canton Township	663,900	15.83		650,900	15.52
Center Line	24,200	5.94		23,700	5.82
Chesterfield Township	195,300	9.56		191,500	9.37
Clinton Township	400,500	7.93		392,600	7.77
Commerce Township	252,300	20.64		247,400	20.24
Dearborn	482,600	6.23		473,100	6.11
Dearborn Heights	194,300	7.33		190,500	7.19
Eastpointe	82,500	5.79		80,900	5.68
Ecorse	72,800	3.90		71,400	3.82
Farmington	50,000	8.44		49,000	8.27
Farmington Hills	455,800	9.96		446,900	9.76
Ferndale	50,100	5.91		49,100	5.79
Flat Rock	61,000	7.63		59,800	7.48
Fraser	66,500	8.36		65,200	8.20
Garden City	83,900	7.49		82,300	7.34
Gibraltar	23,900	11.05		23,400	10.83
Grosse Ile Township	65,200	12.62		63,900	12.37
Grosse Pt. Park	72,800	9.53		71,400	9.34
Grosse Pt. Shores	31,600	12.82		31,000	12.57
Grosse Pt. Woods	74,600	8.29		73,100	8.13
Hamtramck	34,800	4.72		34,100	4.63
Harper Woods	44,500	6.21		43,600	6.09
Harrison Township	73,100	6.32		71,700	6.20
Hazel Park	35,700	5.56		35,000	5.45
Huron Township	72,100	9.42		70,700	9.24
Imlay City	50,600	10.75		49,600	10.54
Imlay Twp	700	70.00		700	68.63
Inkster	93,800	7.68		92,000	7.53
Keego Harbor	15,500	11.90		15,200	11.67
Lapeer	70,600	10.05		69,200	9.85
Lenox Township	14,900	6.84		14,600	6.71
Lincoln Park	113,100	6.34		110,900	6.22
Livonia	695,800	11.28		682,200	11.06
Macomb Township	545,300	14.02		534,600	13.75
Madison Heights	103,300	5.87		101,300	5.75
Mayfield Twp	1,700	24.00		1,700	23.53

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Great Lakes Water Authority  
Calculation of Final Proposed FY 2018 Wholesale Water Service Charges

Community	Originally Proposed		Final Adjustment <b>-2.0%</b>	Adjusted Proposal	
	Fixed Mo \$/mo	Commodity \$/Mcf		Fixed Mo \$/mo	Commodity \$/Mcf
Melvindale	34,000	6.08		33,300	5.96
New Haven, Village of	17,900	10.06		17,500	9.86
N O C W A	1,189,200	10.22		1,165,900	10.02
Northville	38,300	9.54		37,500	9.35
Northville Township	310,300	18.68		304,200	18.31
Novi	453,600	13.25		444,700	12.99
Oak Park	67,900	5.43		66,600	5.32
Oakland Co. Drain Comm.	3,300	3.02		3,200	2.96
Plymouth	51,800	9.88		50,800	9.69
Plymouth Township	218,400	10.28		214,100	10.08
Redford Township	173,900	8.06		170,500	7.90
River Rouge	35,500	5.35		34,800	5.25
Riverview	46,700	8.36		45,800	8.20
Rockwood	15,200	11.43		14,900	11.21
Romeo	12,700	16.95		12,500	16.62
Romulus	188,400	7.69		184,700	7.54
Roseville	135,400	5.44		132,700	5.33
Royal Oak Township	11,400	7.69		11,200	7.54
S O C W A	1,167,900	7.24		1,145,000	7.10
Shelby Township	692,500	13.87		678,900	13.60
South Rockwood	5,200	8.06		5,100	7.90
Southgate	110,900	7.18		108,700	7.04
St. Clair County-Burtchville Twp	14,900	14.74		14,600	14.45
St. Clair County-Greenwood	20,300	14.23		19,900	13.95
St. Clair Shores	158,500	6.12		155,400	6.00
Sterling Heights	813,200	10.56		797,300	10.35
Sumpter Township	32,700	9.00		32,100	8.82
Sylvan Lake	12,000	14.30		11,800	14.02
Taylor	247,000	7.02		242,200	6.88
Trenton	108,400	9.62		106,300	9.43
Troy	686,800	12.04		673,300	11.80
Utica	30,200	9.94		29,600	9.75
Van Buren Township	148,000	9.21		145,100	9.03
Walled Lake	46,500	12.07		45,600	11.83
Warren	517,000	6.05		506,900	5.93
Washington Township	107,900	12.24		105,800	12.00
Wayne	141,500	11.94		138,700	11.71
West Bloomfield Township	492,200	14.94		482,500	14.65
Westland	307,800	7.76		301,800	7.61
Wixom	123,900	14.36		121,500	14.08
Woodhaven	104,400	13.43		102,400	13.17
Ypsilanti Comm Util Auth	553,800	8.96		542,900	8.78