



Monthly Financial Report Binder

October 2018

Presented to the Great Lakes Water Authority Audit Committee on January 18, 2019

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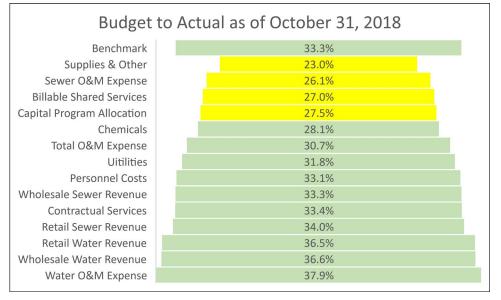


Revenue and Expense Budget to Actual¹ – Pro-rata Benchmark of 33.3%

Categories at +/- 5%:

Supplies & Other is expected as this category has a high number of annual one-time expenses.

Sewer O&M Expenses overall are lower. This is partly due to a project to refined centralized and administrative cost allocations in addition



to the types of maintenance and repair items in the "Supplies & Other" category above.

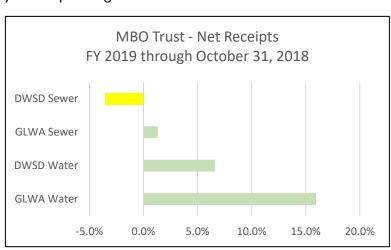
Billable Shared Services and Capital Program Allocation expense tracking has greatly improved in FY 2019 as a result of a new time keeping app. The shared services are based on actual time incurred. Capital programs variance analysis is expanding from cost center to individual level.

Master Bond Ordinance Budgetary Net Receipts

Overall cash flow for both GLWA and DWSD is positive. An area of watch is a shortfall for the DWSD Sewer system of \$3,242,333 or 3.6% of total receipts.

Other Topics

Highland Park's total receivable balance in \$40.5 million. FY 2019 cash receipts equal \$629,000.



The Pollutant Surcharge past due amounts associated with a services transfer remain outstanding pending receipt of a termination of services agreement (and therefore, confirmation of a termination date) between Wayne County. This impacts three townships impacted (Northville, Canton, and Plymouth).

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

¹ All amounts are GLWA entity-wide unless noted as water, sewer, and/or retail.



Budget to Actual Analysis

The Budget to Actual Analysis report includes the following three sections.

- 1. Revenue Requirement Budget Basis Analysis
- 2. Operations Budget Major Operations & Maintenance Budget Category
- 3. Operations & Maintenance Budget Major Budget Categories

Revenue Requirement Budget Basis Analysis

GLWA's annual revenue requirement aligns with a) the basis for calculating customer charges and b) the Master Bond Ordinance flow of funds. The budget basis is not the same as the full accrual basis used for financial reporting although the revenues and operations and maintenance expense are largely reported on an accrual basis. The primary deviation between the revenue requirement basis to financial reporting basis is the treatment of debt service, legacy pension obligations, and lease related activities. The Revenue Requirement Basis is foundational to GLWA's daily operations, financial plan, and of most interest to key stakeholders.

Table 1A – Water Revenue Requirement Budget and Table 1B – Sewer Revenue Requirement Budget presents a year-over-year budget to actual performance report. For both systems there were no budget amendments that changed the totals, therefore, only an "amended" budget column is represented. The revenue requirement budget is accounted for in the operations and maintenance fund for each system. Since this report is for October 2018, the pro-rata benchmark is 33.3% (4 of 12 months of the fiscal year).

Items of key interest discussed below are highlighted in gold on Tables 1A (Water) and 1B (Sewer).

- 1. For *both* systems, FY 2019 revenues are at or above target and are consistent with the prior year (FY 2018) at the same time.
- 2. The operations and maintenance (0&M) expense for the *water* system is above the pro-rata benchmark for FY 2019 at 37.9%. Conversely the *sewer* system 0&M expenses at 26.1% is less than the pro-rata benchmark. This variance between the funds is partly due to a project in-process to refine centralized and administrative cost allocations. It is likely that this will result in a budget amendment after the December 2018 close.
- 3. The remaining revenue requirements for *both* systems are generally funded on a 1/12th basis each month in accordance with the Master Bond Ordinance. The debt service amount shown on the table is accounted for on that same basis. In October 2018, the GLWA had a successful bond sale which will provide a positive budget variance for *both* systems. That amendment will be reported in a future month.



- 4. Overall total revenue requirements for *both* systems are in line with the benchmark. Detailed schedules related to revenues are provided in the *Wholesale Billings, Collections, and Receivables* section of this financial report binder.
- 5. For the sewer system, the FY 2019 year-to-date revenue requirements exceed revenues by \$8.4 million. This is a timing difference between revenues and revenue requirement (i.e. expenses) which is expected to be reversed by mid-fiscal year.

Table 1A - Water Revenue Requirement Budget (year-over-year)

Water System	FY2018 AMENDED BUDGET	 Y 2018 THRU 0/31/2017	Percent Year-to- Date	FY 2019 AMENDED BUDGET	 Y 2019 THRU 0/31/2018	Percent Year-to- Date
Revenues						
Wholesale Customer Charges	\$ 310,019,800	\$ 120,976,473	39.0%	\$ 307,382,500	\$ 116,713,693	38.0%
Retail Services Agreement	15,130,600	5,043,532	33.3%	20,181,400	6,775,368	33.6%
Investment Earnings	2,932,900	883,325	30.1%	3,802,300	1,158,458	30.5%
Other Revenues	35,900	78,742	219.3%	34,300	22,738	66.3%
Transfer In	-	112,437	0.0%	-	1,546,311	0.0%
Total Revenues	\$ 328,119,200	\$ 127,094,509	38.7%	\$ 331,400,500	\$ 126,216,568	38.1%
Revenue Requirements			•			
Operations & Maintenance Expense	\$ 121,562,500	\$ 25,388,209	20.9%	\$ 121,562,600	\$ 46,104,145	37.9%
O&M Legacy Pension	6,048,000	2,016,000	33.3%	6,048,000	2,016,000	33.3%
Debt Service	135,631,200	45,210,400	33.3%	134,214,600	44,738,200	33.3%
Accelerated Legacy Pension	6,268,300	2,089,433	33.3%	6,268,300	2,089,433	33.3%
Extraordinary Repair & Replacement						
Deposit	1,452,500	484,167	33.3%	-	-	0.0%
Lease Payment	22,500,000	7,500,000	33.3%	22,500,000	7,500,000	33.3%
Operating Reserve Deposit	323,700	107,900	33.3%	-	-	0.0%
Water Residential Assistance Program Improvement & Extension Fund	1,678,600	559,533	33.3%	1,673,400	557,800	33.3%
Deposit	32,654,400	-	0.0%	39,133,600	-	0.0%
Total Revenue Requirements	\$ 328,119,200	\$ 83,355,642	25.4%	\$ 331,400,500	\$ 103,005,578	31.1%
Net Difference		\$ 43,738,867			\$ 23,210,990	



Table 1B - Sewer Revenue Requirement Budget (year-over-year)

Sewer System		FY2018 AMENDED BUDGET		7 2018 THRU 0/31/2017	Percent Year-to- Date		FY 2019 AMENDED BUDGET		7 2019 THRU 0/31/2018	Percent Year-to- Date
Revenues		DODGET	_	0/31/201/	Date		DODGEI	_	0/31/2010	Date
Wholesale Customer Charges	\$	271,429,300	\$	90,477,200	33.3%	\$	271,296,300	\$	91,651,200	33.8%
Retail Services Agreement	Ψ	178,969,100	Ψ	59,656,400	33.3%	9	181,159,300	J	61,002,532	33.7%
Industrial Waste Control Charges		14,452,700		4,777,097	33.1%		15,000,800		3,080,500	20.5%
Pollutant Surcharges		5,099,000		2,149,994	42.2%		13,000,000		2,067,037	0.0%
Other Revenues		375.819		3,521,041	936.9%		485,200		2,067,037	43.3%
Investment Earnings		2,283,800		1,014,759	44.4%		4,085,700		1,835,387	44.9%
Transfer In		2,203,000		16,691	0.0%		4,005,700		449,138	0.0%
		-		10,091	0.0%		-		449,130	0.0%
Bad Debt Expense Recovery Total Revenues	\$	472 600 710	\$	161 612 102	34.2%	-\$	472.027.200	•	160 206 001	34.0%
	Þ	472,609,719	Þ	161,613,182	34.2%	3	472,027,300	Þ	160,296,091	34.0%
Revenue Requirements	_					_				
Operations & Maintenance Expense	\$	190,988,019		41,146,511	21.5%	\$	272,0.7,100	\$	49,892,303	26.1%
O&M Legacy Pension		10,824,000		3,608,000	33.3%		10,824,000		3,608,000	33.3%
Debt Service		205,859,900		68,619,967	33.3%		214,600,700		71,533,567	33.3%
Accelerated Legacy Pension		11,620,700		3,873,567	33.3%		11,620,700		3,873,567	33.3%
Extraordinary Repair & Replacement										
Deposit		2,283,100		761,033	33.3%		-		-	0.0%
Lease Payment		27,500,000		9,166,667	33.3%		27,500,000		9,166,667	33.3%
Operating Reserve Deposit		341,600		113,867	33.3%		-		-	0.0%
Water Residential Assistance Program Improvement & Extension Fund		2,313,700		771,233	33.3%		2,374,100		791,367	33.3%
Deposit		20,878,700		6,959,567	33.3%		14,028,400		4,676,133	33.3%
Operating Transfer Out		-		10,995,752	0.0%		-		25,123,611	0.0%
Total Revenue Requirements	\$	472,609,719	\$	146,016,163	30.9%	\$	472,027,300	\$	168,665,214	35.7%
Net Difference			\$	15,597,019				\$	(8,369,123)	

Operations & Maintenance Budget - Major Budget Categories

The year-over-year benchmark ratio as of October 31, 2018, is 33.3% (four months). When comparing FY 2019 to FY 2018 in Table 2, it would appear that the spending has increased. This is true in some instances; however, the greater impact is that the Financial Reporting & Accounting Team has implemented a full accrual basis for interim financial statements during FY 2018. This anomaly will decrease as we proceed through FY 2019.

In addition to the four major budget categories, an internal charge cost center for employee benefits is shown in the table below. If the number is positive, it indicates that the internal cost allocation rate charges to other cost centers is not sufficient. A negative number indicates a surplus in the internal cost center. A moderate surplus is preferred as it provides a hedge for mid-year benefit program cost adjustments (premiums adjust on January 1 each year) as well as managing risk as the program is partially self-insured.



Table 2 - Operations & Maintenance Budget - Major Budget Categories

Major Budget Categories	FY2018 AMENDED BUDGET	 2018 THRU 0/31/2017	Percent Year-to- Date	FY 2019 AMENDED BUDGET	 2019 THRU 0/31/2018	Percent Year-to- Date
Water	\$ 73,510,521	\$ 14,095,203	19.2%	\$ 66,596,200	\$ 23,151,267	34.8%
Sewer	124,106,353	24,409,218	19.7%	118,318,900	36,832,592	31.1%
Centralized	82,628,680	21,918,523	26.5%	99,044,500	28,918,919	29.2%
Administrative	32,304,965	7,446,865	23.1%	28,682,900	8,197,620	28.6%
Employee Benefits	 -	(1,335,089)	0.0%	 -	(1,103,950)	0.0%
Total Revenues	\$ 312,550,519	\$ 66,534,720	21.3%	\$ 312,642,500	\$ 95,996,448	30.7%

Alignment of Operations & Maintenance Budget Priorities – Expense Variance Analysis

The purpose of Table 3 is to evaluate whether the actual spend rate within a category is in alignment with the budget. Given the effort to develop an accurate budget, a variance is a red flag of a *potential* budget amendment or misalignment of priorities.

In total, the O&M expenses are at 30.7% which is reasonably close to the pro-rata benchmark of 33.3%. This positive variance equates to a dollar amount of \$8.2 million. The expense category commentary is provided below for items highlighted on Table 3.

Personnel Costs: The overall category is on target at 33.1% through October 2018.

Utilities: The overall category is slightly lower than the benchmark; coming in at 31.8%. Variances in this category are not unexpected given the seasonality of the operations. In comparing FY 2019 to FY 2018 the expenses appear more in line with the budget in FY 2019. This is due in large part to the month-end closing process improvements implemented during the latter half of FY 2018.

Supplies & Other: This category is lower than the benchmark; coming in at 23.0% through October 2018. An internal review is underway to better understand the causes for this variance. Given that the nature of the items in this category are subject to one-time expenses that do not occur evenly throughout the year, this variance is not a concern at this time.

Contractual Services: The overall category is on target at 33.4% through October 2018.

Chemicals: This category is lower than the benchmark; coming in at 28.1% through October 2018. This variance is not unexpected as usage varies throughout the year. Staff is working on enhancements to future monthly financial reports to correlate spending with operational metrics.



Capital Program Allocation: This category is lower than the benchmark; coming in at 27.5% through October 2018. In July 2018, GLWA launched a time keeping software (including an app), BigTime, to make it easier for team members to report their time spent on direct capital delivery. As we begin the close for December 2018, new processes are being evaluated to better understand and cure the shortfall. An update will be provided next month.

Shared Services: Most of the shared services reimbursement is labor which is also tracked via BigTime in addition to some annual fees for software licensing which do not occur evenly throughout the year. Staff is working to refine service level estimates and the budget with DWSD to evaluate the budgeted amount as we move toward the December 2018 close.

Table 3 - Expense Variance Analysis

Expense Categories Entity-wide	FY2018 AMENDED BUDGET	 7 2018 THRU 0/31/2017	Percent Year-to- Date		FY 2019 AMENDED BUDGET	FY 2019 PRORATED AMENDED BUDGET 4 MONTHS)	 7 2019 THRU 0/31/2018	Percent Year-to- Date	BU	FY 2019 RORATED DGET LESS FY 2019 ACTIVITY
2.1 Salaries & Wages	\$ 57,113,650	\$ 16,093,252	28.2%	\$	64,160,400	\$ 21,386,800	\$ 19,695,643	30.7%	\$	1,691,157
2.2 Workforce Development	661,576	156,384	23.6%		740.200	246,733	240,199	32.5%		6.534
2.3 Overtime	6,516,629	2,070,830	31.8%		6,756,300	2,252,100	2,471,162	36.6%		(219,062)
										. , ,
2.4 Employee Benefits	20,998,861	7,365,160	35.1%		22,255,300	7,418,433	8,391,163	37.7%		(972,730)
2.5 Transition										
Services 2.6 Personnel	13,865,178	2,130,367	15.4%		11,189,100	3,729,700	3,102,592	27.7%		627,108
Transition Adjustment	(1,557,200)	_	0.0%		(2,586,200)	(862,067)		0.0%		(862,067)
Personnel Costs	 97,598,695	27,815,993	28.5%	_	102,515,100	34,171,699	33,900,759	33.1%		270,940
	,,					,,			_	
3.1 Electric	42,324,400	8,754,096	20.7%		42,132,600	14,044,200	14,316,134	34.0%		(271,934)
3.2 Gas	7,029,500	720,612	10.3%		6,854,400	2,284,800	1,722,159	25.1%		562,641
3.3 Sewage Service	2,030,487	297,731	14.7%		2,544,000	848,000	668,395	26.3%		179,605
3.4 Water Service	4,587,600	884,071	19.3%		5,781,500	1,927,167	1,492,038	25.8%		435,129
Utilities	55,971,987	10,656,510	19.0%		57,312,500	19,104,167	18,198,726	31.8%		905,441
4.1 Chemicals	13,340,680	4,709,647	35.3%		16,620,900	5,540,300	4,674,541	28.1%		865,759
4.2 Supplies & Other	41,771,096	7,310,236	17.5%		36,405,600	12,135,200	8,369,976	23.0%		3,765,224
4.3 Contractual										
Services	113,680,175	20,346,151	17.9%		106,342,000	35,447,333	35,523,983	33.4%		(76,650)
5.1 Capital Program										
Allocation	(2,012,930)	(473,232)	23.5%		(4,000,000)	(1,333,333)	(1,101,147)	27.5%		(232,186)
5.2 Shared Services	(10,109,500)	(2,495,497)	24.7%		(9,123,100)	(3,041,033)	(2,466,440)	27.0%		(574,593)
7.0 Unallocated										
Reserve	2,310,615	-	0.0%		6,569,100	2,189,700	-	0.0%		2,189,700
8.0 Employee Benefits										
Fund	-	(1,335,089)	0.0%		-	-	(1,103,950)	0.0%		1,103,950
Total Expenses	\$ 312,550,819	\$ 66,534,719	21.3%	\$	312,642,100	\$ 104,214,033	\$ 95,996,448	30.7%	\$	8,217,585



The Basic Financial Statements report includes the following four tables.

- 1. Statement of Net Position All Funds Combined
- 2. Statement of Revenues, Expenses and Changes in Net Position All Funds Combined
- 3. Supplemental Schedule of Operations & Maintenance Expenses -All Funds Combined
- 4. Supplemental Schedule of Nonoperating Expenses All Funds Combined

GLWA utilizes four funds daily. At the macro level for financial reporting purposes, GLWA has two primary funds: *Water Fund* and *Sewage Disposal Fund*. These funds represent the combined total of four sub-funds for each system that are used to properly account for sources and uses of funds. Those sub-funds for each system are: *Operations & Maintenance Fund, Improvement & Extension Fund, Construction Bond Fund, and Capital Asset Fund.*

Statement of Net Position – All Funds Combined

Explanatory notes follow the Statement of Net Position shown in Table 1 below.

Table 1 – Statement of Net Position - All Funds Combined
As of October 31, 2018

	Water	Sewage Disposal	Total Business-type Activities	Comparative June 30, 2018
Assets				
Cash (a)	\$ 163,298,000	\$ 152,058,000	\$ 315,356,000	\$ 671,753,000
Investments (a)	402,798,000	299,287,000	702,085,000	343,235,000
Accounts Receivable	114,427,000	108,748,000	223,174,000	191,359,000
Due from Other Funds (b)	-	14,235,000	14,235,000	32,255,000
Other Assets (c)	606,980,000	456,694,000	1,063,674,000	985,888,000
Cash Held FBO DWSD Advance (d)	-	21,942,000	21,942,000	18,468,000
Capital Assets, net of depreciation	1,743,463,000	2,551,857,000	4,295,321,000	4,402,212,000
Construction Work in Process	165,446,000	173,470,000	338,916,000	288,052,000
Total Assets	3,196,412,000	3,778,292,000	6,974,704,000	6,933,222,000
Deferred Inflow (e)	103,926,000	199,419,000	303,345,000	332,992,000
Liabilities				
Liabilities – Short-Term (f)	143,652,000	147,114,000	290,766,000	270,446,000
Due to Other Funds (b)	14,235,000	-	14,235,000	32,255,000
Other Liabilities (g)	2,763,000	6,166,000	8,930,000	8,638,000
Cash Held FBO DWSD (d)	11,211,000	-	11,211,000	8,902,000
Liabilities – Long-Term (h)	3,124,920,000	3,877,235,000	7,002,155,000	6,998,296,000
Total Liabilities	3,296,781,000	4,030,516,000	7,327,297,000	7,318,537,000
Deferred Outflow (e)	70,346,000	63,211,000	133,558,000	126,432,000
Net Position Deficit (i)	\$ (66,789,000)	\$ (116,016,000)	\$ (182,806,000)	\$ (178,755,000)

Totals may be off due to rounding.



In general, the Statement of Net Position reflects a mature organization with no unexpected trends. One item of note as of October 31, 2018 is that there is a decrease in cash since June 30, 2018 which is offset by an increase in investments (highlighted in gold on the table). This is due to the engagement of an active investment management during the current fiscal year; hence the shift from cash to investments.

An ongoing challenge is the Net Position Deficit. The underlying causes took years to build (largely heavy use of debt to finance capital asset investment versus a strategic blend of debt, state revolving funds, and cash). This causes GLWA to have a high debt interest expense. The GLWA is regularly updating the FY 2030 forecast that will guide the path toward a positive Net Position.

Footnotes to Statement of Net Position

- a. Cash and Investments include restricted amounts.
- b. *Due from Other Funds* and *Due to Other Funds* is shown at the gross level for sub-fund activity.
- c. *Other Assets* primarily consists of the contractual obligation receivable from DWSD related to reimbursement of bonded indebtedness for local system improvements.
- d. Cash Held FBO Advance (for benefit of) DWSD and Cash Held FBO DWSD represents the net difference between DWSD retail cash received from customers and net financial commitments as outlined in the Master Bond Ordinance.
- e. *Deferred Inflow* and *Deferred Outflow* relate to financing activity and GLWA's share of the legacy General Retirement System (GRS) pension obligation.
- f. Liabilities Short-term include accounts payable, retainage payable, and certain accrued liabilities. Some items, such as compensated absences and worker's compensation, are reviewed periodically but are only adjusted on an interim basis if there is a material change.
- g. *Other Liabilities* account for the cash receipts set aside for the Budget Stabilization Fund and the Water Residential Assistance Program.
- h. *Liabilities Long-term* include bonds payable, lease payable, and legacy GRS pension liabilities.
- i. Net Position Deficit is defined by the accounting standards as the residual of all other elements presented in a statement of financial position. It is the difference between (a) assets and deferred outflows of resources and (b) liabilities and deferred inflows of resources. A net deficit occurs when the liabilities and deferred inflows exceed assets and deferred outflows. GLWA's net deficit is largely driven by an increase in depreciation expense as a result of the increase in the acquisition valuation approach for recording capital asset values in the opening Statement of Net Position on January 1, 2016. Efforts are underway to evaluate the net operating effect of this matter over the long term.



Statement of Revenues, Expenses and Changes in Net Position – All Funds Combined

This statement, shown in Table 2, is presented in summary format. The accrual basis of revenues and operations and maintenance expense vary from the revenue requirement basis presented in the *Budget to Actual Analysis* section of the October 2018 Financial Report Binder. Prior year ending balances are provided in the June 30, 2018 column as a reference for comparative purposes. Explanatory notes follow this statement.

Table 2 – Statement of Revenues, Expenses and Changes in Net Position
– All Funds Combined
For the Four Months ended October 31, 2018

		Water	Percent of Revenue		Sewage Disposal	Percent of Revenue	otal Business- pe Activities		omparative ne 30, 2018
Revenue	<u>,</u>	446 744 000	04.50/	,	04 654 000	F0 00/	200 265 000	<u>,</u>	F02 00C 000
Wholesale customer charges	\$	116,714,000	94.5%	\$	91,651,000	58.0%	\$ 208,365,000	\$	592,096,000
Local system charges		6,775,000	5.5%		61,003,000	38.6%	67,778,000		194,100,000
Industrial waste charges		47.000	0.00/		3,112,000	2.0%	3,112,000		14,335,000
Other revenue		17,000	0.0%		176,000	0.1%	193,000		4,455,000
Pollutant surcharges		-			2,067,000	1.3%	2,067,000		6,908,000
Bad Debt Recovery		-			-		-		-
Total Revenues	\$	123,506,000	100.0%	\$	158,009,000	100.0%	\$ 281,515,000	\$	811,895,000
Operating Expenses									
Operations and Maintenance Expenses		46,041,000	37.3%		49,695,000	31.5%	95,735,000		284,910,000
Depreciation		48,785,000	39.5%		59,787,000	37.8%	108,572,000		331,242,000
Total Operating Expenses		94,826,000	76.8%		109,481,000	69.3%	204,307,000		616,152,000
Operating Income		28,681,000	23.2%		48,527,000	30.7%	77,208,000		195,743,000
Total Nonoperating									
(Revenue)/Expense		35,035,000	28.4%		46,224,000	29.2%	81,259,000		271,662,000
Increase/(Decrease) in Net Position		(6,354,000)	(5.1%)		2,303,000	1.5%	(4,051,000)		(75,920,000)
Net Position Deficit, Beginning of year		(60,435,000)			(118,319,000)		(178,755,000)		(102,835,000)
Net Position Deficit,			-			-			
End of Year	\$	(66,789,000)	<u>=</u>	\$	(116,016,000)	<u>=</u>	\$ (182,806,000)	\$	(178,755,000)

Totals may be off due to rounding.



Water Fund

- ✓ The decrease in Water Fund Net Position is \$6 million.
- √ Wholesale water customer charges of \$116.7 million account for 94.5% of Water System revenues.
- ✓ Operating expenses of \$94.8 million represent 76.8% of total operating revenue. Depreciation is the largest operating expense at \$48.7 million or 51.4% of operating expense.
- ✓ Operating income after operating expenses (including depreciation) equals \$28.6 million or 23.2% of operating revenue.
- ✓ The largest category within nonoperating activities is interest expense of \$38.3 million.

Sewage Disposal Fund

- ✓ The increase in Sewer Net Position was \$2.3 million.
- ✓ Wholesale customer charges of \$91.6 million account for 58.0% of Sewer System revenues. Wholesale customer charges are billed one-twelfth each month based on an agreed-upon historical average "share" of each customer's historical flows which are formally revisited on a periodic basis. The result is no revenue shortfall or overestimation.
- ✓ Local system (DWSD) charges of \$61 million account for 38.6% of total operating revenues. These are also billed at one-twelfth of the annual revenue requirement.
- ✓ Operating expenses of \$109.4 million represent 69.3% of total operating revenue. Depreciation is the largest operating expense at \$59.7 million or 54.6% of total operating expense.
- ✓ Operating income after operating expenses (including depreciation) equals \$46.2 million or 29.2% of operating revenue.
- ✓ The largest category within nonoperating activities is interest expense of \$48.4 million.



Supplemental Schedule of Operations & Maintenance Expenses – All Funds Combined

This Supplemental Schedule of Operations & Maintenance Expenses (O&M) schedule is shown on the next page in Table 3. The accrual basis of operations and maintenance expense may vary from the revenue requirement basis presented in the Budget to Actual Analysis section of the October 2018 Financial Report Binder. Explanatory notes follow this schedule.

Table 3 – Supplemental Schedule of Operations & Maintenance Expenses

– All Funds Combined

For the Four Months ended October 31, 2018

Expenditure	,	Water	Percent of Total	age Disposal	Percent of Total	 Business- Activities	Percent of Total
•				System			
Chemicals	\$	1,909,000	4.1%	\$ 2,765,000	5.6%	\$ 4,675,000	4.9%
Contractual services		19,049,000	41.4%	16,422,000	33.0%	35,472,000	37.1%
Personnel							
Salaries & Wages		9,087,000	19.7%	14,003,000	28.2%	23,091,000	24.1%
Overtime		1,388,000	3.0%	1,083,000	2.2%	2,471,000	2.6%
Benefits		3,989,000	8.7%	3,298,000	6.6%	7,287,000	7.6%
Total Personnel		14,465,000	31.4%	18,384,000	37.0%	32,849,000	34.3%
Consultant and address		2 655 000	7.00/	4 45 4 000	0.00/	0.400.000	0.50/
Supplies and other		3,655,000	7.9%	4,454,000	9.0%	8,109,000	8.5%
Utilities							
Electric		9,789,000	21.3%	4,527,000	9.1%	14,316,000	15.0%
Gas		65,000	0.1%	1,657,000	3.3%	1,722,000	1.8%
Sewage		232,000	0.5%	436,000	0.9%	668,000	0.7%
Water		-	0.0%	1,492,000	3.0%	1,492,000	1.6%
Total Utilities		10,086,000	21.9%	8,113,000	16.3%	18,199,000	19.0%
Capital program							
allocation		(674,000)	-1.5%	(427,000)	-0.9%	(1,101,000)	-1.2%
Shared services							
allocation		(2,450,000)	-5.3%	(16,000)	0.0%	(2,466,000)	-2.6%
Operations and							
Maintenance							
Expenses	\$	46,041,000	100.0%	\$ 49,695,000	100.0%	\$ 95,735,000	100.0%

Totals may be off due to rounding.

- ✓ Core expenses for water and sewage disposal systems is utilities (19.0% of total O&M expenses) and chemicals (4.9%).
- ✓ Personnel (34.3%) of total O&M expenses include all salaries, wages, and benefits for employees as well as staff augmentation contracts that fill a vacant position (contractual transition services).
- ✓ Contractual services (37.1%) includes
 - Water System costs of sludge removal and disposal services at the Northeast,
 Southwest and Springwells Water Treatment Plants (approximately \$3.3 million);
 - Sewage Disposal System costs for the operation and maintenace of the biosolids dryer facility (approximately \$5.0 million); and



 Centralized and administrative contractual costs allocated to both systems for information technology, building maintenace, and other services.

Supplemental Schedule of Nonoperating Expenses – All Funds Combined

The Supplemental Schedule of Nonoperating Expenses – All Funds Combined is shown on Table 4 on the next page. Explanatory notes follow this schedule.

Table 4 – Supplemental Schedule of Nonoperating Expenses – All Funds Combined For the Four Months ended October 31, 2018

Nonoperating (Revenue)/Expense	Water	Sewage Disposal	Total Business- type Activities	Comparative June 30, 2018
Interest income contractual obligation	\$ (7,615,000)	\$ (5,006,000)	\$ (12,621,000)	\$ (38,857,000)
Investment earnings	(4,376,000)	(3,982,000)	(8,358,000)	(11,396,000)
Other nonoperating revenue	(333,000)	(3,000)	(336,000)	(430,000)
Interest expense				
Bonded debt	38,384,000	45,625,000	84,010,000	255,868,000
Lease obligation	5,912,000	7,226,000	13,138,000	39,702,000
Other obligations	1,656,000	531,000	2,187,000	4,825,000
Total interest expense	45,952,000	53,382,000	99,334,000	300,395,000
Other nonoperating expense	679,000	631,000	1,310,000	1,684,000
Amortization, issuance costs, debt	(461,000)	1,202,000	741,000	(8,684,000)
Amortization, raw water rights	1,189,000	-	1,189,000	2,081,000
(Gain) loss on disposal of capital assets	-	-	-	(2,463,000)
Loss on impairment of capital assets	-	-	-	654,000
Water Residential Assistance Program	-	-	-	3,756,000
Legacy pension expense				24,922,000
Total Nonoperating (Revenue)/Expense	\$ 35,035,000	\$ 46,224,000	\$ 81,259,000	\$ 271,662,000

Totals may be off due to rounding.

- ✓ Interest expense, the largest category of nonoperating expenses, is due to three sources below:
 - Bonded debt;
 - Lease obligation for the regional assets from the City of Detroit; and
 - Other obligations such as an obligation payable to the City of Detroit for an allocation BC Notes related to assumed DWSD liabilities; acquisition of raw water rights related to KWA Pipeline.
- ✓ Interest income on contractual obligation from DWSD.
- ✓ Investment earnings are expected to increase materially from the prior year due to the implementation of an active investment management strategy during the current fiscal year.



Financial Activity Charts

Chart 1 – Capital Outlay

Capital Outlay spend is **\$4,996,829** through October 31, 2018. The expenses in this chart do not reflect any activity in the Capital Improvement Program. The allocation is shown in the chart below.

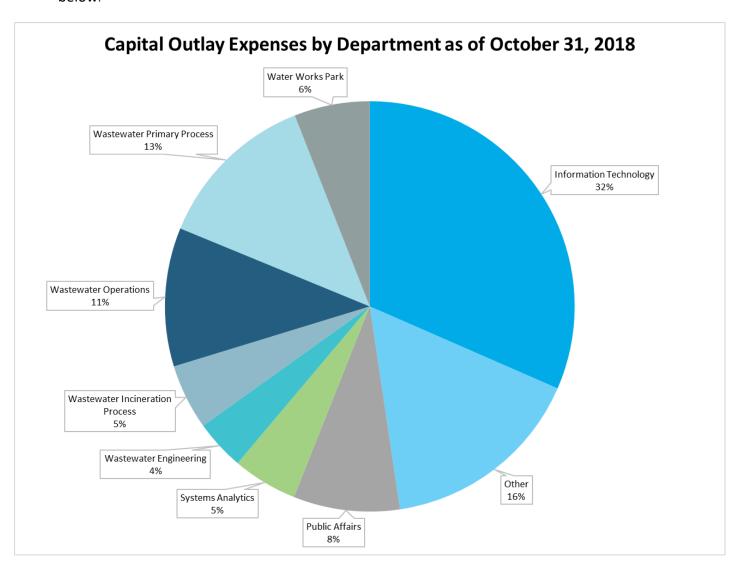
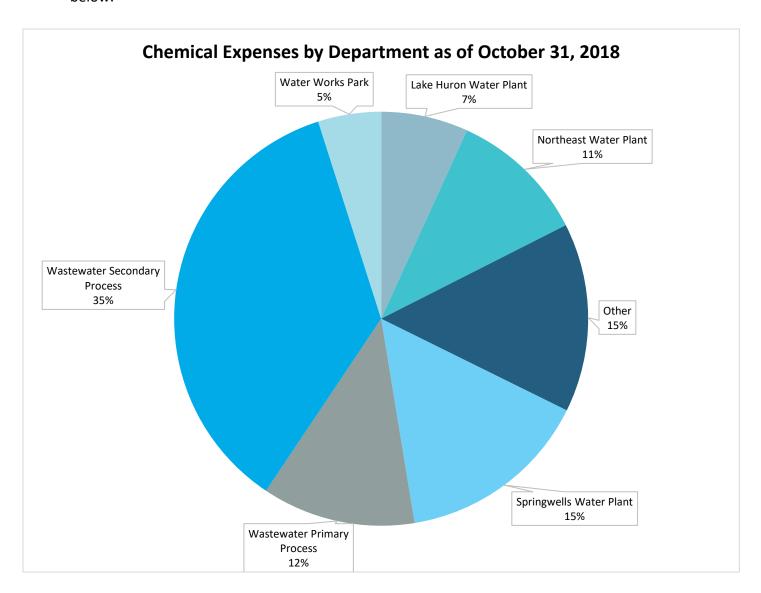




Chart 2 - Chemical Spend

Chemical spend is **\$4,674,541** through October 31, 2018. The allocation is shown in the chart below.

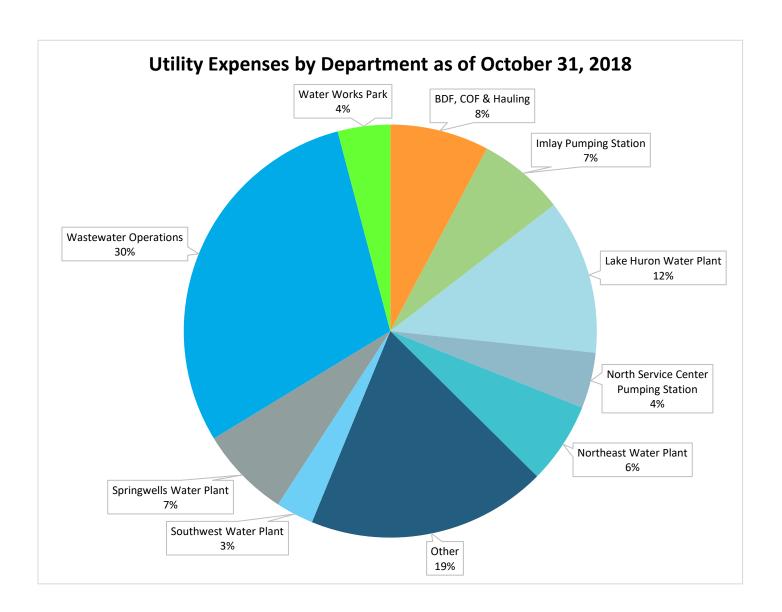


[&]quot;Other" includes CSO, portions of the Wastewater process and two departments from Water.



Chart 3 - Utility Spend

Utility spend is \$18,198,726 through October 31, 2018. The allocation is shown in the chart below.

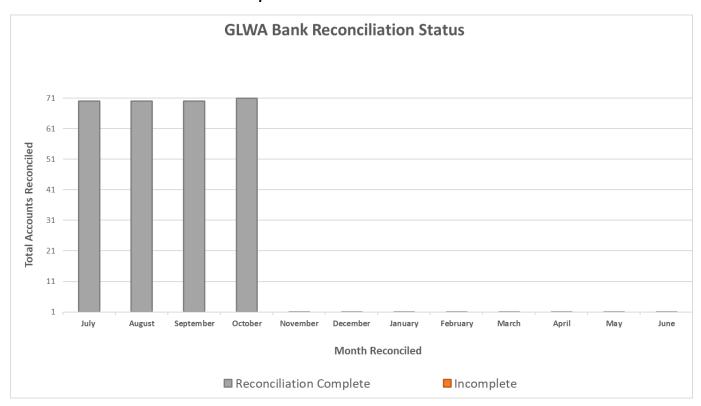




Financial Operations KPI

This key performance indicator shown in Chart 1 below provides a measure of the progress made in the month-end close process which includes bank reconciliations completed soon after month end.

Chart 1 - Bank Reconciliation Completion Status





This report includes the following:

- 1. Master Bond Ordinance (MBO) Required Transfers to Accounts Held by GLWA
- 2. Master Bond Ordinance (MBO) Required Transfers to Accounts Held by DWSD

MBO Transfers to Accounts Held by GLWA

GLWA Transfers: The Treasury Department completes required MBO transfers on the first business day of each month. Treasury completes these transfers in accordance with the Great Lakes Water Authority (GLWA) and Detroit Water & Sewerage Department (DWSD) budgets as approved and adopted by the GLWA Board of Directors and DWSD Board of Water Commissioners annually.

Monthly transfers for Operations & Maintenance, Pension, and Water Residential Assistance Program (WRAP) are one-twelfth of the annual, budgeted amount. Budget stabilization should not require additional funding due to new, baseline funding levels established as part of the April 2018 Memorandum of Understanding but is included to reflect historical activity. Treasury completes annual Extraordinary Repair & Replacement transfers as directed based on budget and year-end fund status.

Table 1 – GLWA Water Transfers reflects the required transfers for FY 2019 completed through October 1, 2018. The total transfers for FY 2016, FY 2017, and FY 2018 are also included to reflect historical activity. Since January 1, 2016, MBO transfers for Water totaling \$411,261,264 have been transferred to accounts held by GLWA.

Table 2 – GLWA Sewer Transfers reflects the required transfers for FY 2019 completed through October 1, 2018. The total transfers for FY 2016, FY 2017, and FY 2018 are also included to reflect historical activity. Since January 1, 2016, MBO transfers for Sewer totaling \$633,840,760 have been transferred to accounts held by GLWA.

Table 1 – GLWA Water Transfers

			WATER				
					Budget	Extraordinary Repair &	
	Operations &	Pension	Pension		Stabilization	Replacement	
	<u>Maintenance</u>	Sub Account	<u>Obligation</u>	WRAP	(For Benefit of DWSD)	<u>(ER&R)</u>	Total Water
Total FY 2016	\$71,052,000	\$6,037,100	\$10,297,200	\$1,983,300	\$2,326,900	\$606,000	\$92,302,500
Total FY 2017	111,879,600	6,037,200	10,297,200	2,077,200	360,000	-	130,651,200
Total FY 2018	121,562,604	6,048,000	10,695,696	2,159,400	-	-	140,465,700
FY 2019							
July 2018	10,393,475	504,000	891,308	171,683	-	-	11,960,466
August 2018	10,393,475	504,000	891,308	171,683	-	-	11,960,466
September 2018	10,393,475	504,000	891,308	171,683	-	-	11,960,466
October 2018	10,393,475	504,000	891,308	171,683	-	-	11,960,466
Total FY 2019	41,573,900	\$2,016,000	\$3,565,232	\$686,732	\$0	\$0	\$47,841,864
Total Water Since Jan 1 2016	\$346,068,104	\$20,138,300	\$34,855,328	\$6,906,632	\$2,686,900	\$606,000	\$411,261,264



Table 2 - GLWA Sewer Transfers

TUDIC 2 GEVVA SI	cvvci mansj	C/ 3					
			SEWER				
						Extraordinary	
					Budget	Repair &	
	Operations &	Pension	Pension		Stabilization	Replacement	
	<u>Maintenance</u>	Sub Account	<u>Obligation</u>	WRAP	(For Benefit of DWSD)	<u>(ER&R)</u>	Total Water
Total FY 2016	\$100,865,600	\$10,838,400	\$14,025,800	\$2,523,400	\$5,591,700	\$779,600	\$134,624,500
Total FY 2017	175,858,800	10,838,400	14,026,800	2,654,400	2,654,400	-	206,032,800
Total FY 2018	191,079,396	10,824,000	14,687,496	2,760,804	-	-	219,351,696
FY 2019							
July 2018	16,093,500	902,000	1,223,958	238,483	-	-	18,457,941
August 2018	16,093,500	902,000	1,223,958	238,483	-	-	18,457,941
September 2018	16,093,500	902,000	1,223,958	238,483	-	-	18,457,941
October 2018	16,093,500	902,000	1,223,958	238,483	-	-	18,457,941
Total FY 2019	\$64,374,000	\$3,608,000	\$4,895,832	\$953,932	\$0	\$0	\$73,831,764
Total Sewer Since Jan 1 2016	\$532,177,796	\$36,108,800	\$47,635,928	\$8,892,536	\$8,246,100	\$779,600	\$633,840,760

MBO Transfers to Accounts Held by DWSD

DWSD Transfers: The Treasury Department completes required MBO transfers on the first business day of each month. Treasury completes these transfers in accordance with the GLWA and DWSD budgets as approved and adopted by the GLWA Board of Directors and DWSD Board of Water Commissioners annually. GLWA Public Finance communicates planned transfers in advance of the first business day of each month and GLWA Treasury sends confirmation of transfers made to DWSD Treasury.

Monthly transfers for Operations & Maintenance and Pension are one-twelfth of the annual, budgeted amount. The annual lease payment, as stated in the Water & Sewer Lease Agreements, is \$22,500,000 for Water and \$27,500,000 for Sewer. The monthly lease transfer is one-twelfth of the amount as stated in the Lease agreements unless otherwise designated by DWSD. Per Section 3.5 of the Lease, the Lease payment may be used for (a) bond principal and interest for Local System Improvements, (b) bond principal and interest for the City's share of common-to-all System Improvements, and (c) Local System improvements.

Table 3 – DWSD Water Transfers reflects the required transfers for FY 2019 completed through October 1, 2018. The total transfers for FY 2016, FY 2017, and FY 2018 are also included to reflect historical activity. For FY 2016, \$2,326,900 of the lease payment was directed to offset a portion of debt service. For FY 2018, a DWSD budget adjustment resulted in a reduction in the lease transfer of \$1,875,000. For FY 2019, \$3,949,200 of the lease payment will be directed to offset a portion of debt service. This offset will be recognized over the year as a reduction in the monthly transfer amount. Since January 1, 2016, MBO transfers for Water totaling \$190,372,604 have been transferred to accounts held by DWSD.



Table 4 – DWSD Sewer Transfers reflects the required transfers for FY 2019 completed through October 1, 2018. The total transfers for FY 2016, FY 2017, and FY 2018 are also included to reflect historical activity. For FY 2016, \$19,991,500 of the lease payment was directed to offset a portion of debt service. For FY 2018, a DWSD budget adjustment resulted in a reduction in the lease transfer of \$9,166,664. For FY 2019, \$4,864,000 of the lease payment will be directed to offset a portion of debt service. This offset will be recognized over the year as a reduction in the monthly transfer amount. Since January 1, 2016, MBO transfers for Sewer totaling \$214,954,028 have been transferred to accounts held by DWSD.

Table 3 - DWSD Water Transfers

	W	/ATER		
	Operations &		Lease Payment	
Total FY 2016	<u>Maintenance</u> \$ 26,185,600	<u>Pension</u> \$ 4,262,700	(I&E Fund) \$ 20,173,100	<u>Total Water</u> \$ 50,621,400
Total FY 2017	\$ 33,596,400	\$ 4,262,400	\$ 22,500,000	\$ 60,358,800
Total FY 2018	\$ 35,059,704	\$ 4,272,000	\$ 20,625,000	\$ 59,956,704
FY 2019				
July 2018 August 2018	\$ 2,957,025 2,957,025	\$ 356,000 356,000	\$ 1,545,900 1,545,900	\$ 4,858,925 4,858,925
September 2018	2,957,025	356,000	1,545,900	4,858,925
October 2018	2,957,025	356,000	1,545,900	4,858,925
Total FY 2019	\$ 11,828,100	\$ 1,424,000	\$ 6,183,600	\$ 19,435,700
Total Water Since Jan 1 2016	\$106,669,804	\$ 14,221,100	\$ 69,481,700	\$ 190,372,604

Table 4 – DWSD <u>Sewer</u> Transfers

	S	EWER		
	Operations & Maintenance	Pension	Lease Payment (I&E Fund)	Total Sewer
Total FY 2016	\$ 19,774,300	\$ 2,861,800	\$ 7,508,500	\$ 30,144,600
Total FY 2017	\$ 41,535,600	\$ 2,862,000	\$ 27,500,000	\$ 71,897,600
Total FY 2018	\$ 60,517,992	\$ 2,856,000	\$ 18,333,336	\$ 81,707,328
FY 2019				
July 2018 August 2018 September 2018 October 2018	\$ 5,676,792 5,676,792 5,676,792 5,676,792	238,000 238,000	\$ 1,886,333 1,886,333 1,886,333 1,886,333	\$ 7,801,125 7,801,125 7,801,125 7,801,125
Total FY 2019	\$ 22,707,168	\$ 952,000	\$ 7,545,332	\$ 31,204,500
Total Sewer Since Jan 1 2016	\$144,535,060	\$ 9,531,800	\$ 60,887,168	\$ 214,954,028



Retail Revenues, Receivables, and Collections: Pursuant to the terms of the lease agreement between the City of Detroit and the Great Lakes Water Authority (GLWA), the Detroit Water & Sewerage Department (DWSD) serves as GLWA's agent for billing activities for the City of Detroit retail customer class. All water and sewer service collections from DWSD customers are deposited in a trust account and are administered in accordance with the GLWA Master Bond Ordinance.

The Monthly Retail Revenues, Receivables, & Collections Report includes the following.

- 1. DWSD Retail Water Revenue Billings and Collections
- 2. DWSD Retail Sewer Revenue Billings and Collections
- 3. DWSD Retail Water & Sewer System Accounts Receivable Aging Report

Note: Wholesale customer revenues are billed by the Great Lakes Water Authority.

DWSD Retail Water Billings and Collections

Retail Billing Basis: DWSD bills retail customers monthly. Customers are billed throughout the month in cycles based on a meter reading schedule beginning with residential accounts and ending with commercial and industrial customers.

Table 1 - DWSD Retail Billings shows the FY 2019 water usage and billed revenue which are provided by DWSD staff. As of October 31, 2018, the DWSD usage was at 99.36% of the budget and billed revenue was at 104.46% of budget.

DWSD Retail Water Collections: The collections represent payments made by DWSD retail customers. These receipts are deposited directly into a lockbox with a trustee for administration of the flow of funds defined by GLWA's Master Bond Ordinance.

Table 2 - Retail Water Collections shows collections by month for the past 12 months compared to collections for the prior year as well as the calculated difference between the periods.

Note: DWSD is working on the additional, billings to collections rolling average report requested by the GLWA Audit Committee at the December 21, 2018 meeting. That will be included in this report when made available by DWSD.



Table 1 – DWSD Retail <u>Water</u> Billings

			RETA	AIL WATER CUSTO	OMERS			
	FY	2019 - Budget/Goa	I		FY 2019 - Actual		FY 2019 - V	ariance
			Unit			Unit		
Month (1)	<u>Volume</u>	Revenue	<u>Revenue</u>	<u>Volume</u>	Revenue (2)	<u>Revenue</u>	<u>Volume</u>	<u>Revenue</u>
	Mcf	\$	\$/Mcf	Mcf	\$	\$/Mcf	Mcf	\$
July	269,000	9,424,500	35.04	300,613	10,203,409	33.94	31,613	778,909
August	273,100	9,377,700	34.34	302,476	9,833,149	32.09	29,376	455,449
September	270,500	8,494,300	31.40	221,531	8,996,692	40.61	(48,969)	502,392
October	233,800	8,165,900	34.93	215,104	8,010,524	37.24	(18,696)	(155,376)
November	224,500	7,750,100	34.52					
December	206,500	8,224,900	39.83					
January	226,600	7,978,800	35.21					
February	216,400	7,980,200	36.88					
March	213,300	8,163,900	38.27					
April	223,100	7,856,900	35.22					
May	211,000	9,109,200	43.17					
June	240,200	9,063,600	37.73					
Total	2,808,000	101,590,000	36.18	1,039,724	37,043,774	35.63	(6,676)	1,581,374
Subtotals ytd	1,046,400	35,462,400	33.89	1,039,724	37,043,774	35.63	(6,676)	1,581,374
Achievement of	Budget	·		99.36%	104.46%			

⁽¹⁾ Figures are stated as "Service Months"; that is, July figures represent bills issued in August, etc.

Table 2 - DWSD Retail Water Collections

	Water									
Month	Current Year	Prior Year	Variance	Ratio						
November	8,049,328	9,433,934	(1,384,606)	-14.68%						
December	8,265,636	8,571,649	(306,013)	-3.57%						
January	8,066,448	6,744,162	1,322,286	19.61%						
February	6,432,245	7,682,509	(1,250,265)	-16.27%						
March	8,280,635	8,218,506	62,129	0.76%						
April	9,226,675	6,977,199	2,249,477	32.24%						
May	8,969,019	8,568,632	400,387	4.67%						
June	7,940,939	7,141,568	799,371	11.19%						
July	7,375,402	8,357,505	(982,103)	-11.75%						
August	8,692,784	9,509,488	(816,704)	-8.59%						
September	9,766,449	8,949,906	816,543	9.12%						
October	9,015,400	9,528,528	(513,128)	-5.39%						
Rolling, 12-Month Total	100 080 960	99 683 586	_	·						

 Rolling, 12-Month Total
 100,080,960
 99,683,586

 Rolling, 12-Month Average
 8,340,080
 8,306,965

⁽²⁾ Retail Revenues include Miscellaneous Revenues and Penalties



DWSD Retail Sewer Billings and Collections

Retail billing basis: DWSD bills retail customers monthly. Customers are billed throughout the month in cycles based on a meter reading schedule beginning with residential accounts and ending with commercial and industrial customers.

Table 3 - DWSD Retail Sewer Billings shows the FY 2019 sewer billed revenue which are provided by DWSD staff. As of October 31, 2018, the DWSD usage was at 102.82% of the budget and billed revenue was at 99.32% of budget.

DWSD Retail Sewer Collections: The collections represent payments made by DWSD retail customers. These receipts are deposited directly into a lockbox with a trustee for administration of the flow of funds defined by GLWA's Master Bond Ordinance.

Table 4 – DWSD Retail Sewer Collections shows collections by month for the past 12 months compared to collections for the prior year as well as the calculated difference between the periods.

Note: DWSD is working on the additional, billings to collections rolling average report requested by the GLWA Audit Committee at the December 21, 2018 meeting. That will be included in this report when made available by DWSD.

Table 3 - DWSD Retail Sewer Billings

	RETAIL SEWER CUSTOMERS										
	FY 2019 - Bu	dget/Goal	FY 2019	- Actual	FY 2019 - Variance						
Month (1)	<u>Volume</u> <i>Mcf</i>	Revenue \$	<u>Volume</u> <i>Mcf</i>	Revenue (2)	<u>Volume</u> <i>Mcf</i>	<u>Revenue</u> \$					
July	242,100	27,423,400	273,862	27,711,606	31,762	288,206					
August	244,200	27,232,200	262,525	27,263,163	18,325	30,963					
September	239,600	25,367,500	221,660	25,413,790	(17,940)	46,290					
October	211,000	25,177,200	205,267	24,092,209	(5,733)	(1,084,991)					
November	197,600	23,861,000									
December	182,400	25,293,500									
January	198,600	24,852,800									
February	191,600	25,329,400									
March	191,000	25,474,500									
April	197,300	24,789,700									
May	187,300	26,205,200									
June	210,300	26,730,700									
Total	2,493,000	307,737,100	963,314	104,480,768	26,414	(719,532)					
Subtotals ytd	936,900	105,200,300	963,314	104,480,768	26,414	(719,532)					

Achievement of Budget/Goal

^{102.82% 99.32%}

⁽¹⁾ Figures are stated as "Service Months"; that is, July figures represent bills issued in August, etc.

⁽²⁾ Retail Revenues include Miscellaneous Revenues and Penalties



Table 4 - DWSD Retail Sewer Collections

	Sewer									
Month	Current Year	Prior Year	Variance	Ratio						
November	19,485,270	20,175,379	(690,109)	-3.42%						
December	19,522,952	19,500,639	22,313	0.11%						
January	18,308,458	16,792,983	1,515,475	9.02%						
February	17,495,563	18,149,650	(654,087)	-3.60%						
March	23,015,525	18,711,974	4,303,552	23.00%						
April	16,159,844	17,219,106	(1,059,262)	-6.15%						
May	18,341,298	20,046,357	(1,705,059)	-8.51%						
June	27,591,834	18,005,548	9,586,286	53.24%						
July	21,461,926	18,582,964	2,878,962	15.49%						
August	21,746,714	24,263,141	(2,516,427)	-10.37%						
September	23,727,505	21,320,358	2,407,147	11.29%						
October	23,938,933	23,786,903	152,030	0.64%						
Rolling 12-Month Total	250,795,821	236,555,002								
Rolling, 12-Month Average	20,899,652	19,712,917								

DWSD Retail Water and Sewer Accounts Receivable Aging Report

The DWSD detailed accounts receivable aging is categorized by customer category.

Table 5 is a summary of the total, current and non-current Water and Sewer receivables by category as of October 31, 2018. This now includes pre-bifurcation receivables transferred to DWSD as part of the April 2018 Memorandum of Understanding.

Table 5 – DWSD Retail Accounts Receivable Aging Report – Water & Sewer Combined

								Accounts Receivable
Sales Class	# of Accounts	A۱	vg. Balance	Current	> 30 Days	> 60 Days	> 180 Days	Balance
Residential	283,423	\$	299.07	\$ 12,809,069	\$ 7,242,016	\$ 14,722,463	\$ 49,988,859	\$ 84,762,407
				15.1%	8.5%	17.4%	59.0%	100.0%
Commerical	27,635		1,075.04	8,571,367	3,382,092	6,395,525	11,359,682	29,708,666
				28.9%	11.4%	21.5%	38.2%	100.0%
Industrial	4,650		2,625.44	3,933,980	1,203,267	2,598,884	4,472,143	12,208,273
				32.2%	9.9%	21.3%	36.6%	100.0%
Tax Exempt Entities	6,834		1,385.41	2,245,550	1,910,155	1,262,196	4,050,020	9,467,920
				23.7%	20.2%	13.3%	42.8%	100.0%
Government Entities	7,721		1,386.41	1,234,655	949,242	2,450,126	6,070,466	10,704,489
				11.5%	8.9%	22.9%	56.7%	100.0%
Subtotal - Active Accounts	330,263	\$	444.65	\$ 28,794,622	\$ 14,686,773	\$ 27,429,193	\$ 75,941,168	\$ 146,851,756
				19.6%	10.0%	18.7%	51.7%	100.0%
Inactive Accounts	253,155		61.85	161,663	194,646	996,669	14,304,113	15,657,092
				1.0%	1.2%	6.4%	91.4%	100.0%
Total	583,418	\$	278.55	\$ 28,956,285	\$ 14,881,419	\$ 28,425,862	\$ 90,245,281	\$ 162,508,848
% of Total A/R				17.8%	9.2%	17.5%	55.5%	100.0%
Water Fund	206,836		172.66	\$ 7,123,758	\$ 3,137,751	\$ 5,169,274	\$ 20,281,903	\$ 35,712,686
Sewer Fund	266,369		476.02	\$ 21,832,527	\$ 11,743,668	\$ 23,256,588	\$ 69,963,378	\$ 126,796,162
Total	583,418		278.55	\$ 28,956,285	\$ 14,881,419	\$ 28,425,862	\$ 90,245,281	\$ 162,508,848



The Monthly Wholesale Billings, Receivables, & Collections Report includes the following.

- 1. Wholesale Water Billings and Collections
- 2. Wholesale Sewer Billings and Collections
- 3. City of Highland Park Billings and Collections
- 4. Wholesale Water & Sewer Accounts Receivable Aging Report

Wholesale Water Billings and Collections

Wholesale Water Contracts: Great Lakes Water Authority (GLWA) provides wholesale water service to 87 member-partners through a variety of service arrangements.

Service Arrangement Type

Model Contract	81
Emergency	1
Older Contracts	5
Total	87

Note: Services are provided to the Detroit Water & Sewerage Department (DWSD) via a Water and Sewer Services Agreement (WSSA). See the "Retail Revenues, Receivables, and Collections Report" section of this monthly report.

Wholesale Water Billing Basis: Beginning with FY 2016, wholesale water charges were restructured to create a more stable revenue stream by using a historical rolling average to project customer volumes which accounts for 40% of the monthly charges and 60% of the annual customer revenue requirement as a monthly fixed charge.

Table 1 - Wholesale Water Billings shows the FY 2019 water billed usage and revenues. As of October 31, 2018, the billed usage was at 100.99% of budget and billed revenue at 100.92% of budget. Billings and usage from the City of Flint *are* included as they were assumed in the FY 2019 Budget.

Wholesale Water Collections: The collections represent payments made by wholesale customers. These receipts are deposited directly into a lockbox with a trustee for administration of the flow of funds defined by GLWA's Master Bond Ordinance.

Table 2 - Wholesale Water Collections shows collections by month for the past 12 months compared to collections for the prior year as well as the calculated difference between the periods. Variability in collections in the current year are associated with timing of the billing cycle. Bills for December, February and August were posted later than usual due to holiday conflicts and higher volumes of meter reads requiring review (associated with meter issues and water main breaks). While at times unavoidable, the GLWA billing team is identifying steps to prevent delays wherever possible.



Table 1 – FY 2019 Wholesale Water Billings Report

			WHOLE	SALE WATER CUST	TOMERS (2)			
	FY	2019 - Budget/Goa	I		FY 2019 - Actual		FY 2019 - V	ariance
			Unit			Unit		
Month (1)	<u>Volume</u>	<u>Revenue</u>	<u>Revenue</u>	<u>Volume</u>	<u>Revenue</u>	<u>Revenue</u>	<u>Volume</u>	<u>Revenue</u>
	Mcf	\$	\$/Mcf	Mcf	\$	\$/Mcf	Mcf	\$
July	1,632,120	30,347,500	18.59	1,800,256	32,122,653	17.84	168,136	1,775,153
August	1,518,130	29,405,800	19.37	1,490,896	29,144,135	19.55	(27,234)	(261,665)
September	1,354,440	27,424,800	20.25	1,333,455	27,129,781	20.35	(20,985)	(295,019)
October	1,091,580	24,826,000	22.74	1,027,086	24,636,482	23.99	(64,494)	(189,518)
November	912,260	23,273,500	25.51					
December	1,002,110	23,912,600	23.86					
January	1,019,240	24,133,400	23.68					
February	885,170	23,021,600	26.01					
March	1,000,060	23,933,100	23.93					
April	952,450	23,568,200	24.74					
May	1,116,620	25,296,500	22.65					
June	1,557,060	29,624,900	19.03					
Total	14,041,240	308,767,900	21.99	5,651,693	113,033,052	20.00	55,423	1,028,952
Subtotals ytd	5,596,270	112,004,100	20.01	5,651,693	113,033,052	20.00	55,423	1,028,952
Achievement of	Budget		-	100.99%	100.92%	-		_

⁽¹⁾ Figures are stated as "Service Months"; that is, July figures represent bills issued in August, etc. (2) Includes Revenues and Usage from the City of Flint

Table 2 - Wholesale Water Collections

		Water		
Month	Current Year	Prior Year	Variance	Ratio
November	27,261,391	28,016,358	(754,966)	-2.69%
December	22,125,972	26,654,068	(4,528,095)	-16.99%
January	32,002,334	23,595,948	8,406,386	35.63%
February	21,352,903	25,840,517	(4,487,613)	-17.37%
March	27,715,696	28,339,011	(623,315)	-2.20%
April	18,489,754	24,583,235	(6,093,480)	-24.79%
May	30,447,581	22,312,189	8,135,392	36.46%
June	21,815,013	24,337,730	(2,522,716)	-10.37%
July	21,923,590	28,138,726	(6,215,136)	-22.09%
August	31,920,586	25,280,453	6,640,133	26.27%
September	26,037,313	26,757,992	(728,038)	-2.72%
October	27,827,722	38,336,777	(10,509,055)	-27.41%
Rolling 12-Month Total	308 919 856	322 193 002	_	

Rolling 12-Month Total 308,919,856 322,193,002 25,743,321 26,849,417 Rolling, 12-Month Average

Note: The high October receipt volume in 2017 was an anomaly due to system outages causing bill delays in July.



Wholesale Sewer Billings and Collections

Wholesale Sewer Contracts: GLWA provides wholesale sewer service to 18 member-partners via multiple service arrangements.

Service Arrangement Type

Model Contract	11
Emergency	0
Older Contracts	7
Total	18

Note: Services are provided to the Detroit Water & Sewerage Department via a Water and Sewer Services Agreement (WSSA). See the "Retail Revenues, Receivables, and Collections Report" section of the monthly report.

Wholesale Sewer Billing Basis: Beginning in FY 2015, the "sewer rate simplification" initiative was applied which provides for a stable revenue stream and predictability for our member partners. Wholesale sewer customers are billed a fixed monthly fee based upon the annual revenue requirement.

Table 3 - Wholesale Sewer Billings shows the FY 2019 sewer billed revenue. Consistent with expectations as a result of sewer rate simplification, billed revenue is at 100.00% of budget through October 31, 2018.

Wholesale Sewer Collections: The collections represent payments made by wholesale customers. These receipts are deposited directly into a lockbox with a trustee for administration of the flow of funds defined by GLWA's Master Bond Ordinance.

Table 4 - Wholesale Sewer Collections shows collections by month for the past 12 months compared to collections for the prior year as well as the calculated difference between the periods. Variability in collections in the current year are associated with timing of the billing cycle.

The shift in wholesale sewer collection patterns is largely attributable to the timing of payments received from one customer. Starting in February 2018, Wayne County's (Rouge Valley, NE Wayne and Wayne County #3) payments were received just after the first of the calendar month for one invoice (showing no collection for the previous month) and the subsequent invoice was paid in the same calendar month. This pattern has continued through September 30, 2018. At no time during this period has Wayne County been over 45 days delinquent in its sewer payments to GLWA. Given the payment amount of \$6.8 million, this produces noticeable swings in collection volumes by month.



Table 3 – FY 2019 Wholesale <u>Sewer</u> Billings Report

	WHOLESALE SEWER CUSTOMERS									
	FY 2019 - Bu	udget/Goal	FY 2019	- Actual	FY 2019 -	Variance				
Month (1)	Volume (2)	<u>Revenue</u>	<u>Volume (2)</u>	<u>Revenue</u>	Volume (2)	<u>Revenue</u>				
	Mcf	\$	Mcf	\$	Mcf	\$				
July	N/A	22,912,800	N/A	22,912,800	N/A	-				
August	N/A	22,912,800	N/A	22,912,800	N/A	-				
September	N/A	22,912,800	N/A	22,912,800	N/A	-				
October	N/A	22,912,800	N/A	22,912,800	N/A	-				
November	N/A	22,912,800	N/A		N/A					
December	N/A	22,912,800	N/A		N/A					
January	N/A	22,912,800	N/A		N/A					
February	N/A	22,912,800	N/A		N/A					
March	N/A	22,912,800	N/A		N/A					
April	N/A	22,912,800	N/A		N/A					
May	N/A	22,912,800	N/A		N/A					
June	N/A	22,912,800	N/A		N/A					
Total		274,953,600		91,651,200		-				
Subtotals ytd		91,651,200		91,651,200		0				

Achievement of Budget

100.00%

Table 4 - Wholesale <u>Sewer</u> Collections

		Sewer		
Month	Current Year	Prior Year	Variance	Ratio
November	22,662,700	22,693,876	(31,176)	-0.14%
December	23,643,400	23,514,100	129,300	0.55%
January	22,057,972	21,835,338	222,634	1.02%
February	30,280,800	21,659,900	8,620,900	39.80%
March	15,552,000	21,878,700	(6,326,700)	-28.92%
April	27,812,417	22,502,725	5,309,692	23.60%
May	15,342,700	21,620,300	(6,277,600)	-29.04%
June	28,810,500	21,645,500	7,165,000	33.10%
July	16,179,117	22,732,006	(6,552,889)	-28.83%
August	28,384,600	21,949,300	6,435,300	29.32%
September	22,672,400	21,040,913	1,631,487	7.75%
October	16,105,200	21,902,800	(5,797,600)	-26.47%
Rolling 12-Month Total	269,503,806	264,975,457		

⁽¹⁾ Figures are stated as "Service Months"; that is, July figures represent bills issued in August, etc.

⁽²⁾ Not tracked as part of the wholesale sewer charges



City of Highland Park Billings and Collections

The City of Highland Park is provided water service pursuant to an emergency service basis. Sewer service is provided pursuant to a 1982 amended contract which indicates that the parties are guided in their legal relationship by a Michigan Supreme Court decision from 1949.

As of October 31, 2018, Highland Park had a delinquent balance of \$40.5 million, including \$32.3 million for wastewater treatment services, \$1.6 million for industrial waste control services, and \$6.6 million for water supply services.

Table 5 - City of Highland Park Billings and Collections Since 2012 provides a lifeto-date summary of the billing and collection history for Highland Park from June 30, 2012 to October 31, 2018. Please note the numbers below reflect the month the billing was sent and not the month the service was provided.

Chart 1 - City of Highland Park Billings and Collections – Past Twelve Months is provided to depict Highland Park's most current performance specific to Water and Sewer. Payments received-to-date are applied to Sewer at this time.

Table 5 - City of Highland Park Billings and Collections Since 2012

	 Water	 Sewer	IWC	_	umulative Total
June 30, 2012 Balance FY 2013 Billings FY 2013 Payments	\$ - 485,887 (65,652)	\$ 10,207,956 4,987,635 (2,206,211)	\$ 852,987 154,444 -	\$	11,060,943 5,627,966 (2,271,863
June 30, 2013 Balance FY 2014 Billings FY 2014 Payments	\$ 420,235 1,004,357 -	\$ 12,989,380 6,980,442 (1,612,633)	\$ 1,007,431 161,951	\$	14,417,046 8,146,750 (1,612,633
June 30, 2014 Balance FY 2015 Billings FY 2015 Payments	\$ 1,424,592 1,008,032 -	\$ 18,357,189 5,553,123 (1,444,623)	\$ 1,169,382 165,739 -	\$	20,951,163 6,726,894 (1,444,623
June 30, 2015 Balance FY 2016 Billings FY 2016 Payments	\$ 2,432,625 1,157,178 -	\$ 22,465,689 5,612,167 (2,022,335)	\$ 1,335,121 106,431 -	\$	26,233,435 6,875,776 (2,022,335
June 30, 2016 Balance FY 2017 Billings FY 2017 Payments	\$ 3,589,803 1,245,267 -	\$ 26,055,521 5,802,000 (2,309,186)	\$ 1,441,551 101,999 -	\$	31,086,875 7,149,265 (2,309,186
June 30, 2017 Balance FY 2018 Billings (12 Months) FY 2018 Payments (12 Months)	\$ 4,835,070 1,277,179 -	\$ 29,548,335 5,657,101 (4,108,108)	\$ 1,543,550 80,472 -	\$	35,926,954 7,014,752 (4,108,108
June 30, 2018 Balance FY 2019 Billings (4 Months) FY 2019 Payments (4 Months)	\$ 6,112,248 437,297 -	\$ 31,097,327 1,873,900 (629,017)	\$ 1,624,022 19,528 -	\$	38,833,597 2,330,726 (629,017
Balance as of October 31, 2018	\$ 6,549,545	\$ 32,342,210	\$ 1,643,551	\$	40,535,307



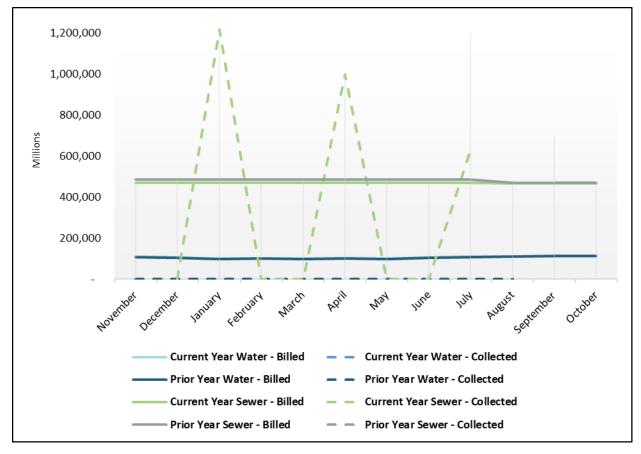


Chart 1 - City of Highland Park Water & Sewer Billings and Collections – Past Twelve Months

Note: Current and prior year water billing amounts are very close so the two lines are nearly overlapping when reviewed at this high-level.

Wholesale Water & Sewer Accounts Receivable Aging Report

The detailed accounts receivable aging is in the Appendix to this monthly report. This report reflects the wholesale receivables only and does not include DWSD. (Note: percentages vary from 100% due to rounding.)

Table 6 - **Wholesale Accounts Receivable Aging Report Summary** is a summary of the total, current and non-current receivables by category as of October 31, 2018.

Table 7 - Wholesale Accounts Receivable Aging Report, Net of Highland Park is the same summary *without* the past due balances for the City of Highland Park.

Table 8 - Wholesale Accounts Receivable Aging Report, Net of Highland Park and WTUA is a summary *without* the past due balances for the City of Highland Park and net of pending credits for certain Western Township Utilities Authority (WTUA). Credits for billed services are pending receipt of a final agreement from Wayne County to effectuate a transfer retroactive to July 1, 2018.



Table 6 - Wholesale Accounts Receivable Aging Report Summary

		Total	Current		46-74 Days		75-104 Days		>105 Days	
Water	\$	47,589,072.67	\$	40,559,858.44	\$	807,398.74	\$	109,567.53	\$	6,112,247.96
Sewer	\$	54,150,010.28	\$	22,275,699.50	\$	467,900.00	\$	467,900.00	\$	30,938,510.78
IWC	\$	2,970,434.14	\$	557,639.16	\$	(5,017.87)	\$	89,862.24	\$	2,327,950.61
Pollutant Surcharge	\$	1,322,709.53	\$	749,176.44	\$	47,722.42	\$	202,060.94	\$	323,749.73
Total	\$	106,032,226.62	\$	64,142,373.54	\$	1,318,003.29	\$	869,390.71	\$	39,702,459.08
	100.00% 60.49%		1.24%			0.82%		37.44%		

Table 7 - Wholesale Accounts Receivable Aging Report, Net of Highland Park

	Total		Current		46-74 Days		75-104 Days		>105 Days	
Water	\$ 41,039,527.43	\$	40,340,780.09	\$	698,747.34	\$	-	\$	-	
Sewer	\$ 21,807,799.50	\$	21,807,799.50	\$	-	\$	-	\$	-	
IWC	\$ 1,326,883.13	\$	549,097.06	\$	(5,017.87)	\$	85,629.38	\$	697,174.56	
Pollutant Surcharge	\$ 1,322,709.53	\$	749,176.44	\$	47,722.42	\$	202,060.94	\$	323,749.73	
Total	\$ 65,496,919.59	\$	63,446,853.09	\$	741,451.89	\$	287,690.32	\$	1,020,924.29	
	100.00%		96.87%	96.87% 1.13%		0.44%		1.56%		

Table 8 - Wholesale Accounts Receivable Aging Report, Net of Highland Park and WTUA

	Total		Current		46-74 Days		75-104 Days		>105 Days	
Water	\$ 41,039,527.43	\$	40,340,780.09	\$	698,747.34	\$	-	\$	-	
Sewer	\$ 21,807,799.50	\$	21,807,799.50	\$	-	\$	-	\$	-	
IWC	\$ 520,593.29	\$	476,353.54	\$	(5,017.87)	\$	49,257.62	\$	-	
Pollutant Surcharge	\$ 1,322,709.53	\$	749,176.44	\$	47,722.42	\$	202,060.94	\$	323,749.73	
Total	\$ 64,690,629.75	\$	63,374,109.57	\$	741,451.89	\$	251,318.56	\$	323,749.73	
	100.00%		97.96%	1.15%		0.39%			0.50%	

Note: The credit balance in the IWC 46-74 day column is due to an overpayment by the City of Wayne, which is resolved in November.



The Monthly Trust Receipts & Disbursements Report includes the following.

- 1. GLWA Trust Receipts & Disbursements Net Cash Flows and Receipts
- 2. DWSD Trust Receipts & Disbursements Net Cash Flows and Receipts
- Combined System Trust Receipts & Disbursements Net Cash Flows

GLWA Trust Receipts & Disbursements

Net Cash Flows and Receipts Basis: The trusts established pursuant to the Master Bond Ordinance (MBO) outline a flow of funds that governs the priority of the application of cash receipts from both the regional wholesale (i.e. Great Lakes Water Authority or GLWA) and local retail (i.e. Detroit Water & Sewerage Department) activities which are further separated by the water system and the sewage disposal system.

This report provides an ongoing status of the net cash flow of both organizations (GLWA and DWSD) to fund their allocated share of Master Bond Ordinance requirements in accordance with the leases for the regional systems. This report begins with the operational effective date of the GLWA on January 1, 2016.

Table 1 – GLWA Net Cash Flows from Trust Receipts & Disbursements provides a summary of cash receipt collections and required MBO transfers by fiscal year as well as a total of all activity for GLWA since inception at January 1, 2016. Fiscal year 2019 reflects four months of activity to date.

Through October 31, 2018 the water fund cash receipts exceeded MBO disbursements by 19% with a ratio of 12% since January 1, 2016. Through October 31, 2018, the sewer fund cash receipts exceeded MBO disbursements by 1% and by a ratio of 3% since January 1, 2016.

Chart 1 – GLWA 12-Month Net Receipts – Water outlines monthly cash receipt trends across two points of reference for the regional water system—current year and prior year. The black line at the zero highlights the minimum goal for net receipts.

Chart 2 – GLWA 12-Month Net Receipts – Sewer outlines monthly cash receipt trends across two points of reference for the regional sewer system—current year and prior year. The black line at the zero highlights the minimum goal for net receipts.



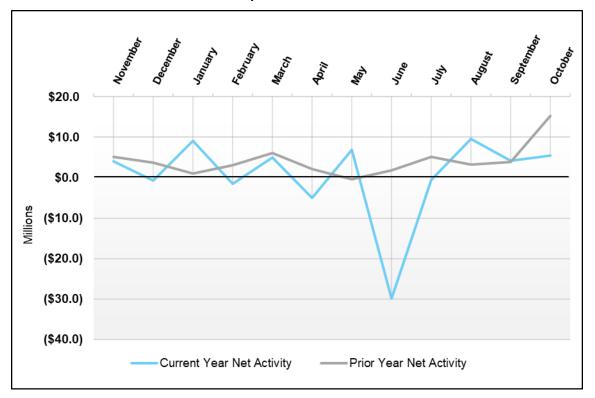
Table 1 – GLWA Net Cash Flows from Trust Receipts & Disbursements

		FY 2016	FY 2017	FY 2018	FY 2019-to- Date	Life-to-Date Total
	Water				Dute	Total
1	Receipts	\$ 149,624,282	352,432,096	337,488,663	116,587,803	956,132,844
2	MOU Adjustments	-	-	-		-
3	Adjusted Receipts	149,624,282	352,432,096	337,488,663	116,587,803	956,132,844
4	Disbursements	146,191,756	288,268,172	321,841,171	97,981,267	854,282,366
5	Net Receipts	\$ 3,432,526	64,163,924	15,647,492	18,606,536	101,850,478
6	Ratio of Receipts to	102%	122%	105%	119%	112%
	Disbursements					
	Sewer					
7	Receipts	\$ 232,310,973	469,205,156	474,946,332	152,303,304	1,328,765,765
8	MOU Adjustments	-	-	-		-
9	Adjusted Receipts	232,310,973	469,205,156	474,946,332	152,303,304	1,328,765,765
10	Disbursements	219,471,583	440,859,613	480,278,006	150,290,824	1,290,900,026
11	Net Receipts	\$ 12,839,390	28,345,543	(5,331,674)	2,012,480	37,865,739
12	Ratio of Receipts to	106%	106%	99%	101%	103%
	Disbursements					
	Combined					
13	Receipts	\$ 381,935,255	821,637,252	812,434,995	268,891,107	2,284,898,609
14	MOU Adjustments	-	-	-	-	-
15	Adjusted Receipts	381,935,255	821,637,252	812,434,995	268,891,107	2,284,898,609
16	Disbursements	365,663,339	729,127,785	802,119,177	248,272,091	2,145,182,392
17	Net Receipts	\$ 16,271,916	92,509,467	10,315,818	20,619,016	139,716,217
18	Ratio of Receipts to	104%	113%	101%	108%	107%
	Disbursements					

MOU Adjustments applies to DWSD and is shown here for consistency.

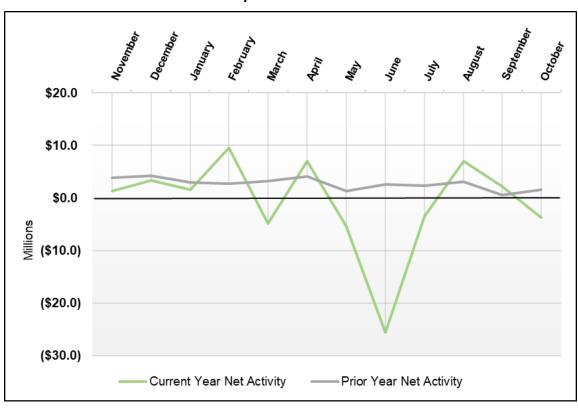


Chart 1 – GLWA 12-Month Net Receipts - Water



Note: June 2018 net activity reflects a year-end improvement and extension fund transfer.

Chart 2 – GLWA 12-Month Net Receipts – Sewer



Note: June 2018 net activity reflects a year-end improvement and extension fund transfer.



DWSD Trust Receipts & Disbursements

Net Cash Flows and Receipts Basis: The trusts established pursuant to the Master Bond Ordinance (MBO) outline a flow of funds that governs the priority of the application of cash receipts from both the regional wholesale (i.e. Great Lakes Water Authority or GLWA) and local retail (i.e. Detroit Water & Sewerage Department) activities which are further separated by the water system and the sewage disposal system.

This report provides an ongoing status of the net cash flow of both organizations (GLWA and DWSD) to fund their allocated share of Master Bond Ordinance requirements in accordance with the leases for the regional systems. This report begins with the operational effective date of the GLWA on January 1, 2016.

Table 2 – DWSD Net Cash Flows from Trust Receipts & Disbursements provides a summary of cash receipt collections and required MBO transfers by fiscal year as well as a total of all activity for DWSD since inception at January 1, 2016. Fiscal year 2019 reflects four months of activity to date.

Through October 31, 2018 the local water fund cash receipts exceeded MBO disbursements by 7% with a historical ratio of cash receipts exceeding MBO disbursements at 4% since January 1, 2016.

Through October 31, 2018, the local sewer fund cash receipts fell short of MBO disbursements by -3% with a historic shortfall of -7% since January 1, 2016. DWSD has proposed a long-term plan to address this structural shortfall. The Reconciliation Committee also monitors this balance as part of its quarterly meetings.

Chart 3 – DWSD 12-Month Net Receipts – Water outlines monthly activity trends across two points of reference for the local water system—current year and prior year. The black line at the zero highlights the breakeven goal for net receipts.

Chart 4 – DWSD 12-Month Net Receipts – Sewer outlines monthly activity trends across two points of reference for the local sewer system—current year and prior year. The black line at the zero highlights the breakeven goal for net receipts.



Table 2 – DWSD Net Cash Flows from Trust Receipts & Disbursements

		FY 2016	FY 2017	FY 2018	FY 2019-to- Date	Life-to-Date Total
	Water				23.00	
1	Receipts	\$ 26,201,881	96,451,105	101,716,017	34,872,158	259,241,161
2	MOU Adjustments	18,446,100	-	-	-	18,446,100
3	Adjusted Receipts	44,647,981	96,451,105	101,716,017	34,872,158	277,687,261
4	Disbursements	47,809,552	93,066,144	93,049,457	32,564,900	266,490,053
5	Net Receipts	\$ (3,161,571)	3,384,961	8,666,560	2,307,258	11,197,208
6	Ratio of Receipts to	93%	104%	109%	107%	104%
	Disbursements					
	Sewer					
7	Receipts	\$ 65,256,734	233,723,367	247,975,470	90,995,763	637,951,334
8	MOU Adjustments	55,755,100	-	-	-	55,755,100
9	Adjusted Receipts	121,011,834	233,723,367	247,975,470	90,995,763	693,706,434
10	Disbursements	122,297,300	261, 963, 973	266,217,825	94,238,096	744,717,194
11	Net Receipts	\$ (1,285,466)	(28,240,606)	(18,242,355)	(3,242,333)	(51,010,760)
12	Ratio of Receipts to	99%	89%	93%	97%	93%
	Disbursements					
	Combined					
13	Receipts	\$ 91,458,615	330,174,472	349,691,487	125,867,921	897,192,495
14	MOU Adjustments	74,201,200	-	-	-	74,201,200
15	Adjusted Receipts	165,659,815	330,174,472	349,691,487	125,867,921	971,393,695
16	Disbursements	170,106,852	355,030,117	359,267,282	126,802,996	1,011,207,247
17	Net Receipts	\$ (4,447,037)	(24,855,645)	(9,575,795)	(935,075)	(39,813,552)
18	Ratio of Receipts to	97%	93%	97%	99%	96%
	Disbursements					

Note: The \$29,300,000 for the DWSD loan receivable balance is calculated as follows.

(1,285,466) FY 2016 Shortfall
(28,240,606) FY 2017 Shortfall
(29,526,072) Subtotal
238,264 June IWC not due until July
(29,287,808) FY 2017 Shortfall-to-Date

(29,300,000) FY 2017 Shortfall-to-Date, Rounded



Chart 3 - DWSD 12-Month Net Receipts - Water

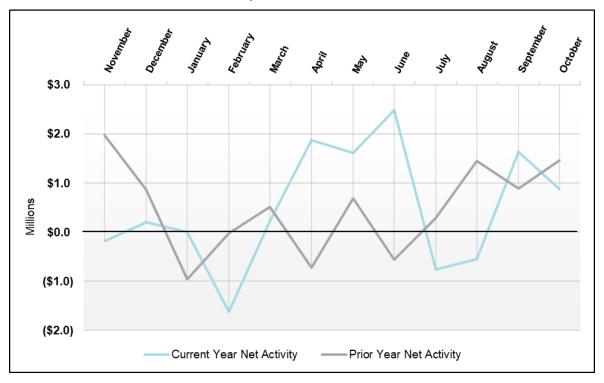
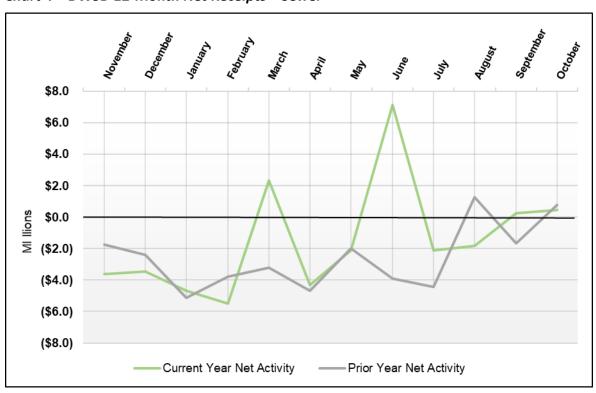


Chart 4 – DWSD 12-Month Net Receipts – Sewer





Combined System Trust Receipts & Disbursements

Net Cash Flows and Receipts Basis: The trusts established pursuant to the Master Bond Ordinance (MBO) outline a flow of funds that governs the priority of the application of cash receipts from both the regional wholesale (i.e. Great Lakes Water Authority or GLWA) and local retail (i.e. Detroit Water & Sewerage Department) activities which are further separated by the water system and the sewage disposal system.

Table 3 – Combined Net Cash Flows from Trust Receipts & Disbursements provides a summary of cash receipt collections and required MBO transfers by fiscal year as well as a total of all activity for GLWA since inception at January 1, 2016. Fiscal year 2019 reflects four months of activity to date.

Through October 31, 2018 the combined water system cash receipts exceeded MBO disbursements by 16% with a ratio of 10% since January 1, 2016. Through October 31, 2018, the combined sewer system cash receipts fell short of MBO disbursements by -1% and fell short slightly by a ratio of -1% since January 1, 2016.



Table 3 – Combined Net Cash Flows from Trust Receipts & Disbursements

					F	Y 2019-to-	Life-to-Date
		FY 2016	FY 2017	FY 2018	-	Date	Total
	Water						
1	Receipts	\$ 175,826,163	\$ 448,883,201	\$ 439,204,680	\$	151,459,961	1,215,374,005
2	MOU Adjustments	\$ 18,446,100	\$ -	\$ -	\$	-	18,446,100
3	Adjusted Receipts	194,272,263	448,883,201	439,204,680		151,459,961	1,233,820,105
4	Disbursements	194,001,308	381,334,316	414,890,628		130,546,167	1,120,772,419
5	Net Receipts	\$ 270,955	67,548,885	24,314,052		20,913,794	113,047,686
6	Ratio of Receipts to	100%	118%	106%		116%	110%
	Disbursements						
	Sewer						
7	Receipts	\$ 297,567,707	\$ 702,928,523	\$ 722,921,802	\$	243,299,067	1,966,717,099
8	MOU Adjustments	\$ 55,755,100	\$ -	\$ -	\$	-	55,755,100
9	Adjusted Receipts	353,322,807	702,928,523	722,921,802		243,299,067	2,022,472,199
10	Disbursements	341,768,883	702,823,586	746,495,831		244,528,920	2,035,617,220
11	Net Receipts	\$ 11,553,924	\$ 104,937	\$ (23,574,029)	\$	(1,229,853)	(13,145,021)
12	Ratio of Receipts to	103%	100%	97%		99%	99%
	Disbursements						
	Combined						
13	Receipts	\$ 473,393,870	\$ 1,151,811,724	\$ 1,162,126,482	\$	394,759,028	3,182,091,104
14	MOU Adjustments	\$ 74,201,200	\$ -	\$ -	\$	-	74,201,200
15	Adjusted Receipts	547,595,070	1,151,811,724	1,162,126,482		394,759,028	3,256,292,304
16	Disbursements	535,770,191	1,084,157,902	1,161,386,459		375,075,087	3,156,389,639
17	Net Receipts	\$ 11,824,879	\$ 67,653,822	\$ 740,023	\$	19,683,941	99,902,665
18	Ratio of Receipts to	102%	106%	100%		105%	103%
	Disbursements						

APPENDIX



Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
ALLEN PARK	\$197,925.63	\$197,925.63	\$0.00	\$0.00	\$0.00
ASH TOWNSHIP	\$136,056.92	\$136,056.92	\$0.00	\$0.00	\$0.00
BELLEVILLE	\$25,782.40	\$25,782.40	\$0.00	\$0.00	\$0.00
BERLIN TOWNSHIP	\$62,423.42	\$62,423.42	\$0.00	\$0.00	\$0.00
BROWNSTOWN TOWNSHIP	\$311,773.91	\$311,773.91	\$0.00	\$0.00	\$0.00
BRUCE TOWNSHIP	\$17,048.93	\$17,048.93	\$0.00	\$0.00	\$0.00
BURTCHVILLE TOWNSHIP	\$26,376.28	\$26,376.28	\$0.00	\$0.00	\$0.00
CANTON TOWNSHIP	\$847,529.24	\$847,529.24	\$0.00	\$0.00	\$0.00
CENTER LINE	\$38,426.02	\$38,426.02	\$0.00	\$0.00	\$0.00
CHESTERFIELD TOWNSHIP	\$746,298.71	\$746,298.71	\$0.00	\$0.00	\$0.00
FLINT	\$300,072.20	\$300,072.20	\$0.00	\$0.00	\$0.00
CLINTON TOWNSHIP	\$715,645.39	\$715,645.39	\$0.00	\$0.00	\$0.00
COMMERCE TOWNSHIP	\$326,270.22	\$326,270.22	\$0.00	\$0.00	\$0.00
DEARBORN	\$1,835,211.72	\$1,835,211.72	\$0.00	\$0.00	\$0.00
DEARBORN HEIGHTS	\$300,724.56	\$300,724.56	\$0.00	\$0.00	\$0.00
EASTPOINTE	\$386,743.42	\$253,298.08	\$133,445.34	\$0.00	\$0.00
ECORSE	\$128,763.18	\$128,763.18	\$0.00	\$0.00	\$0.00
FARMINGTON	\$85,104.30	\$85,104.30	\$0.00	\$0.00	\$0.00
FARMINGTON HILLS	\$793,901.29	\$793,901.29	\$0.00	\$0.00	\$0.00
FERNDALE	\$78,099.16	\$78,099.16	\$0.00	\$0.00	\$0.00
FLAT ROCK	\$103,880.02	\$103,880.02	\$0.00	\$0.00	\$0.00
FRASER	\$100,297.74	\$100,297.74	\$0.00	\$0.00	\$0.00
GARDEN CITY	\$294,439.18	\$279,938.34	\$14,500.84	\$0.00	\$0.00

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
GIBRALTAR	\$59,091.06	\$59,091.06	\$0.00	\$0.00	\$0.00
GROSSE ILE TOWNSHIP	\$99,371.46	\$99,371.46	\$0.00	\$0.00	\$0.00
GROSSE POINTE PARK	\$254,434.32	\$254,434.32	\$0.00	\$0.00	\$0.00
GROSSE POINTE SHORES	\$64,636.62	\$64,636.62	\$0.00	\$0.00	\$0.00
GROSSE POINTE WOODS	\$144,919.82	\$144,919.82	\$0.00	\$0.00	\$0.00
HAMTRAMCK	\$120,530.17	\$120,530.17	\$0.00	\$0.00	\$0.00
HARPER WOODS	\$151,519.87	\$151,519.87	\$0.00	\$0.00	\$0.00
HARRISON TWP	\$274,518.53	\$274,518.53	\$0.00	\$0.00	\$0.00
HAZEL PARK	\$59,039.77	\$59,039.77	\$0.00	\$0.00	\$0.00
HIGHLAND PARK	\$6,549,545.24	\$219,078.35	\$108,651.40	\$109,567.53	\$6,112,247.96
HURON TOWNSHIP	\$123,082.94	\$123,082.94	\$0.00	\$0.00	\$0.00
IMLAY CITY	\$116,099.62	\$116,099.62	\$0.00	\$0.00	\$0.00
IMLAY TOWNSHIP	\$1,172.18	\$1,172.18	\$0.00	\$0.00	\$0.00
INKSTER	\$206,124.19	\$206,124.19	\$0.00	\$0.00	\$0.00
KEEGO HARBOR	\$25,843.47	\$25,843.47	\$0.00	\$0.00	\$0.00
LAPEER	\$251,808.23	\$248,828.86	\$2,979.37	\$0.00	\$0.00
LENOX TOWNSHIP	\$6,281.25	\$6,281.25	\$0.00	\$0.00	\$0.00
LINCOLN PARK	\$612,857.55	\$401,872.60	\$210,984.95	\$0.00	\$0.00
LIVONIA	\$2,641,043.85	\$2,641,043.85	\$0.00	\$0.00	\$0.00
MACOMB TWP	\$1,001,791.90	\$1,001,791.90	\$0.00	\$0.00	\$0.00
MADISON HEIGHTS	\$167,012.37	\$167,012.37	\$0.00	\$0.00	\$0.00
MAYFIELD TOWNSHIP	\$5,388.09	\$5,388.09	\$0.00	\$0.00	\$0.00

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
MELVINDALE	\$54,361.06	\$54,361.06	\$0.00	\$0.00	\$0.00
NEW HAVEN	\$135,581.76	\$135,581.76	\$0.00	\$0.00	\$0.00
NOCWA	\$4,432,336.81	\$4,432,336.81	\$0.00	\$0.00	\$0.00
NORTHVILLE	\$210,843.61	\$134,444.62	\$76,398.99	\$0.00	\$0.00
NORTHVILLE TOWNSHIP	\$494,927.98	\$494,927.98	\$0.00	\$0.00	\$0.00
NOVI	\$780,032.82	\$780,032.82	\$0.00	\$0.00	\$0.00
OAK PARK	\$113,659.48	\$113,659.48	\$0.00	\$0.00	\$0.00
OAKLAND CO DR COM	\$7,820.84	\$7,820.84	\$0.00	\$0.00	\$0.00
PLYMOUTH	\$94,396.83	\$94,396.83	\$0.00	\$0.00	\$0.00
PLYMOUTH TOWNSHIP	\$380,505.16	\$380,505.16	\$0.00	\$0.00	\$0.00
REDFORD TOWNSHIP	\$255,051.57	\$255,051.57	\$0.00	\$0.00	\$0.00
RIVER ROUGE	\$50,742.47	\$50,742.47	\$0.00	\$0.00	\$0.00
RIVERVIEW	\$78,865.00	\$78,865.00	\$0.00	\$0.00	\$0.00
ROCKWOOD	\$25,581.51	\$25,581.51	\$0.00	\$0.00	\$0.00
ROMEO	\$25,237.01	\$25,237.01	\$0.00	\$0.00	\$0.00
ROMULUS	\$347,454.55	\$347,454.55	\$0.00	\$0.00	\$0.00
ROSEVILLE	\$220,527.27	\$220,527.27	\$0.00	\$0.00	\$0.00
ROYAL OAK TOWNSHIP	\$18,521.13	\$18,521.13	\$0.00	\$0.00	\$0.00
SOCWA	\$4,386,465.47	\$4,386,465.47	\$0.00	\$0.00	\$0.00
SHELBY TOWNSHIP	\$1,258,181.23	\$1,258,181.23	\$0.00	\$0.00	\$0.00
SOUTH ROCKWOOD	\$9,641.78	\$9,641.78	\$0.00	\$0.00	\$0.00
SOUTHGATE	\$371,465.84	\$371,465.84	\$0.00	\$0.00	\$0.00
GREENWOOD TOWNSHIP	\$201,285.88	\$133,552.67	\$67,733.21	\$0.00	\$0.00

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
ST. CLAIR SHORES	\$460,999.15	\$460,999.15	\$0.00	\$0.00	\$0.00
STERLING HEIGHTS	\$2,738,680.64	\$2,738,680.64	\$0.00	\$0.00	\$0.00
SUMPTER TOWNSHIP	\$58,931.41	\$58,931.41	\$0.00	\$0.00	\$0.00
SYLVAN LAKE	\$20,013.20	\$20,013.20	\$0.00	\$0.00	\$0.00
TAYLOR	\$804,862.77	\$804,862.77	\$0.00	\$0.00	\$0.00
TRENTON	\$386,981.47	\$386,981.47	\$0.00	\$0.00	\$0.00
TROY (SEOC)	\$1,235,000.95	\$1,235,000.95	\$0.00	\$0.00	\$0.00
UTICA	\$52,100.99	\$52,100.99	\$0.00	\$0.00	\$0.00
VAN BUREN TOWNSHIP	\$629,341.24	\$601,865.71	\$27,475.53	\$0.00	\$0.00
VILLAGE OF ALMONT	\$19,500.47	\$19,500.47	\$0.00	\$0.00	\$0.00
WALLED LAKE	\$82,438.10	\$82,438.10	\$0.00	\$0.00	\$0.00
WARREN	\$893,227.16	\$893,227.16	\$0.00	\$0.00	\$0.00
WASHINGTON TOWNSHIP	\$449,066.61	\$449,066.61	\$0.00	\$0.00	\$0.00
WAYNE	\$235,131.63	\$235,131.63	\$0.00	\$0.00	\$0.00
WEST BLOOMFIELD TWP (C-O)	\$2,042,872.88	\$2,042,872.88	\$0.00	\$0.00	\$0.00
WESTLAND	\$1,176,831.91	\$1,176,831.91	\$0.00	\$0.00	\$0.00
WIXOM	\$221,203.18	\$221,203.18	\$0.00	\$0.00	\$0.00
WOODHAVEN	\$455,773.02	\$290,543.91	\$165,229.11	\$0.00	\$0.00
YCUA	\$877,722.49	\$877,722.49	\$0.00	\$0.00	\$0.00
TOTAL WATER ACCOUNTS	\$47,589,072.67	\$40,559,858.44	\$807,398.74	\$109,567.53	\$6,112,247.96

			46 84 -		. 105 -
Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
ALLEN PARK	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CENTER LINE	\$85,599.50	\$85,599.50	\$0.00	\$0.00	\$0.00
DEARBORN	\$1,614,400.00	\$1,614,400.00	\$0.00	\$0.00	\$0.00
FARMINGTON	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GROSSE POINTE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GROSSE POINTE FARMS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GROSSE POINTE PARK	\$150,100.00	\$150,100.00	\$0.00	\$0.00	\$0.00
HAMTRAMCK	\$330,200.00	\$330,200.00	\$0.00	\$0.00	\$0.00
HARPER WOODS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
HIGHLAND PARK	\$32,342,210.78	\$467,900.00	\$467,900.00	\$467,900.00	\$30,938,510.78
MELVINDALE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
EVERGREEN-FARMINGTON	\$2,881,500.00	\$2,881,500.00	\$0.00	\$0.00	\$0.00
OMID	\$6,458,100.00	\$6,458,100.00	\$0.00	\$0.00	\$0.00
REDFORD TOWNSHIP	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
OAKLAND COUNTY GWK DD	\$3,747,700.00	\$3,747,700.00	\$0.00	\$0.00	\$0.00
WAYNE COUNTY-AREA #3	\$4,100.00	\$4,100.00	\$0.00	\$0.00	\$0.00
WAYNE COUNTY N.E.	\$2,056,000.00	\$2,056,000.00	\$0.00	\$0.00	\$0.00
ROUGE VALLEY	\$4,480,100.00	\$4,480,100.00	\$0.00	\$0.00	\$0.00
TOTAL SEWER ACCOUNTS	\$54,150,010.28	\$22,275,699.50	\$467,900.00	\$467,900.00	\$30,938,510.78

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
ALLEN PARK	\$648.82	\$648.82	\$0.00	\$0.00	\$0.00
AUBURN HILLS (C-O)	\$20,034.68	\$20,034.68	\$0.00	\$0.00	\$0.00
AUBURN HILLS (E-F)	\$375.19	\$375.19	\$0.00	\$0.00	\$0.00
BERKLEY	\$2,901.33	\$2,901.33	\$0.00	\$0.00	\$0.00
BEVERLY HILLS	\$999.14	\$999.14	\$0.00	\$0.00	\$0.00
BINGHAM FARMS	\$1,066.57	\$1,066.57	\$0.00	\$0.00	\$0.00
BIRMINGHAM (SEOC)	\$16,766.16	\$11,177.44	\$0.00	\$5,588.72	\$0.00
BIRMINGHAM (E-F)	\$2,376.69	\$2,376.69	\$0.00	\$0.00	\$0.00
BLOOMFIELD HILLS	\$1,539.41	\$1,539.41	\$0.00	\$0.00	\$0.00
BLOOMFIELD TOWNSHIP	\$7,251.80	\$7,251.80	\$0.00	\$0.00	\$0.00
CANTON TOWNSHIP	\$422,605.14	\$38,132.92	\$0.00	\$19,066.46	\$365,405.76
CENTER LINE	\$3,683.10	\$3,683.10	\$0.00	\$0.00	\$0.00
DEARBORN	\$36,466.92	\$36,466.92	\$0.00	\$0.00	\$0.00
CITY OF FARMINGTON (E-F)	\$279.12	\$279.12	\$0.00	\$0.00	\$0.00
CITY OF ROCHESTER	\$3,725.23	\$3,725.23	\$0.00	\$0.00	\$0.00
CLARKSTON	\$282.82	\$282.82	\$0.00	\$0.00	\$0.00
CLAWSON	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CLINTON TOWNSHIP	\$25,575.63	\$25,575.63	\$0.00	\$0.00	\$0.00
DEARBORN HEIGHTS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DETROIT METRO WC AIRPORT	\$106.64	\$106.64	\$0.00	\$0.00	\$0.00
EASTPOINTE	\$19,170.15	\$12,815.06	\$0.00	\$6,355.09	\$0.00
FARMINGTON	\$2,886.83	\$2,886.83	\$0.00	\$0.00	\$0.00
FARMINGTON HILLS	\$24,375.14	\$24,238.27	\$0.00	\$136.87	\$0.00

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
CITY OF FERNDALE	\$3,581.42	\$3,581.42	\$0.00	\$0.00	\$0.00
FRASER	\$4,960.88	\$4,960.88	\$0.00	\$0.00	\$0.00
GARDEN CITY	\$6,103.24	\$6,103.24	\$0.00	\$0.00	\$0.00
GROSSE POINTE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GROSSE POINTE FARMS	\$2,088.99	\$2,088.99	\$0.00	\$0.00	\$0.00
GROSSE POINTE PARK	\$1,182.65	\$1,182.65	\$0.00	\$0.00	\$0.00
GROSSE POINTE SHORES	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GROSSE POINTE WOODS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
HAMTRAMCK	\$4,175.13	\$4,175.13	\$0.00	\$0.00	\$0.00
HARPER WOODS	\$1,892.64	\$1,892.64	\$0.00	\$0.00	\$0.00
HARRISON TWP	\$3,138.32	\$3,138.32	\$0.00	\$0.00	\$0.00
HAZEL PARK	\$3,364.08	\$3,364.08	\$0.00	\$0.00	\$0.00
HIGHLAND PARK	\$1,643,551.01	\$8,542.10	\$0.00	\$4,232.86	\$1,630,776.05
HUNTINGTON WOODS	\$286.18	\$286.18	\$0.00	\$0.00	\$0.00
INDEPENDENCE	\$4,772.12	\$4,772.12	\$0.00	\$0.00	\$0.00
INKSTER	\$11,119.74	\$11,119.74	\$0.00	\$0.00	\$0.00
KEEGO HARBOR	\$686.05	\$686.05	\$0.00	\$0.00	\$0.00
LAKE ORION	\$803.30	\$803.30	\$0.00	\$0.00	\$0.00
LATHRUP	\$1,406.81	\$1,406.81	\$0.00	\$0.00	\$0.00
LENOX TOWNSHIP	\$814.23	\$650.72	\$0.00	\$163.51	\$0.00
LIVONIA	\$40,286.02	\$40,286.02	\$0.00	\$0.00	\$0.00
MACOMB TWP	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
MADISON HEIGHTS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MELVINDALE	\$3,629.99	\$3,629.99	\$0.00	\$0.00	\$0.00
NEW HAVEN	\$611.43	\$611.43	\$0.00	\$0.00	\$0.00
NORTHVILLE	\$4,321.94	\$4,321.94	\$0.00	\$0.00	\$0.00
NORTHVILLE TOWNSHIP	\$101,409.93	\$9,148.06	\$0.00	\$4,574.03	\$87,687.84
NOVI	\$17,395.28	\$17,395.28	\$0.00	\$0.00	\$0.00
OAK PARK	\$6,783.95	\$6,783.95	\$0.00	\$0.00	\$0.00
OAKLAND TOWNSHIP	\$440.84	\$440.84	\$0.00	\$0.00	\$0.00
ORCHARD LAKE VILLAGE	\$375.09	\$375.09	\$0.00	\$0.00	\$0.00
ORION TOWNSHIP (C-O)	\$5,458.73	\$5,458.73	\$0.00	\$0.00	\$0.00
OXFORD TOWNSHIP	\$1,015.02	\$1,015.02	\$0.00	\$0.00	\$0.00
OXFORD VILLAGE	\$1,259.16	\$1,259.16	\$0.00	\$0.00	\$0.00
PLEASANT RIDGE	\$273.77	\$273.77	\$0.00	\$0.00	\$0.00
PLYMOUTH	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PLYMOUTH TOWNSHIP	\$282,274.77	\$25,462.54	\$0.00	\$12,731.27	\$244,080.96
REDFORD TOWNSHIP	\$2,020.50	\$2,020.50	\$0.00	\$0.00	\$0.00
CHESTERFIELD TOWNSHIP	\$12,164.91	\$12,164.91	\$0.00	\$0.00	\$0.00
ROCHESTER HILLS	\$18,276.49	\$18,276.49	\$0.00	\$0.00	\$0.00
ROMULUS	\$926.07	\$926.07	\$0.00	\$0.00	\$0.00
ROSEVILLE	\$14,830.15	\$14,830.15	\$0.00	\$0.00	\$0.00
ROYAL OAK	\$13,504.72	\$13,504.72	\$0.00	\$0.00	\$0.00
ROYAL OAK TOWNSHIP	\$880.00	\$880.00	\$0.00	\$0.00	\$0.00
SHELBY TOWNSHIP	\$12,073.37	\$12,073.37	\$0.00	\$0.00	\$0.00

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
SOUTHFIELD (E-F)	\$28,416.89	\$28,416.89	\$0.00	\$0.00	\$0.00
SOUTHFIELD (SEOC)	\$3,802.43	\$3,802.43	\$0.00	\$0.00	\$0.00
ST. CLAIR SHORES	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
STERLING HEIGHTS	\$31,167.84	\$31,167.84	\$0.00	\$0.00	\$0.00
TROY (E-F)	\$384.09	\$384.09	\$0.00	\$0.00	\$0.00
TROY (SEOC)	\$37,027.70	\$14.27	\$0.00	\$37,013.43	\$0.00
UTICA	\$1,181.50	\$1,181.50	\$0.00	\$0.00	\$0.00
VAN BUREN TOWNSHIP	\$2,044.19	\$2,044.19	\$0.00	\$0.00	\$0.00
VILLAGE OF FRANKLIN	\$65.69	\$65.69	\$0.00	\$0.00	\$0.00
WASHINGTON TOWNSHIP	\$1,381.10	\$1,381.10	\$0.00	\$0.00	\$0.00
WATERFORD TOWNSHIP	\$12,332.55	\$12,332.55	\$0.00	\$0.00	\$0.00
WAYNE	\$(5,017.87)	\$0.00	\$(5,017.87)	\$0.00	\$0.00
WEST BLOOMFIELD TWP (C-O)	\$944.01	\$944.01	\$0.00	\$0.00	\$0.00
WEST BLOOMFIELD TWP (E-F)	\$6,325.77	\$6,325.77	\$0.00	\$0.00	\$0.00
WESTLAND	\$23,122.82	\$23,122.82	\$0.00	\$0.00	\$0.00
TOTAL IWC ACCOUNTS	\$2,970,434.14	\$557,639.16	\$(5,017.87)	\$89,862.24	\$2,327,950.61

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
3M COMPANY	\$4,989.66	\$4,989.66	\$0.00	\$0.00	\$0.00
A & R PACKING CO., LLC	\$4,408.74	\$4,408.74	\$0.00	\$0.00	\$0.00
AACTRON	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ACADEMY PACKING CO.	\$302.06	\$302.06	\$0.00	\$0.00	\$0.00
ACME RUSTPROOF	\$2.32	\$2.32	\$0.00	\$0.00	\$0.00
ADVANCED RESOURCE RECOVERY	\$604.97	\$604.97	\$0.00	\$0.00	\$0.00
AEVITAS SPECIALITY SERVICES	\$6,392.28	\$6,392.28	\$0.00	\$0.00	\$0.00
ALEXANDER & HORNUNG	\$5,556.29	\$5,556.29	\$0.00	\$0.00	\$0.00
ALEXANDER & HORNUNG	\$24,414.86	\$24,414.86	\$0.00	\$0.00	\$0.00
ALEXANDER & HORNUNG	\$1,386.24	\$1,386.24	\$0.00	\$0.00	\$0.00
ALGAL SCIENTIFIC CORPORATION	\$16,533.05	\$0.00	\$1,392.94	\$1,596.70	\$13,543.41
ALL CHEM CORP, LLC.	\$(105.20)	\$0.00	\$0.00	\$0.00	\$(105.20)
ALPHA STAMPING COMPANY	\$856.07	\$856.07	\$0.00	\$0.00	\$0.00
AMERICAN WASTE TECH INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ATWATER IN THE PARK	\$57.60	\$57.60	\$0.00	\$0.00	\$0.00
AUTOMOTIVE FINISH	\$7.66	\$7.66	\$0.00	\$0.00	\$0.00
AXLE BREWING COMPANY, LLC	\$174.15	\$174.15	\$0.00	\$0.00	\$0.00
B. NEKTAR MEADERY	\$1.22	\$1.22	\$0.00	\$0.00	\$0.00
BAFFIN BREWING COMPANY	\$528.31	\$0.00	\$0.00	\$0.00	\$528.31
BARON INDUSTRIES	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BARTZ BAKERY	\$83.86	\$83.86	\$0.00	\$0.00	\$0.00
BASTONE BREWERY	\$51.81	\$51.81	\$0.00	\$0.00	\$0.00
BATCH BREWING COMPANY	\$ (263.56)	\$0.00	\$0.00	\$0.00	\$ (263.56)

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
BAYS MICHIGAN CORPORATION	\$325.96	\$325.96	\$0.00	\$0.00	\$0.00
BEIRUT BAKERY, INC.	\$(2.12)	\$(2.12)	\$0.00	\$0.00	\$0.00
BETTER MADE SNACK FOOD	\$23,069.05	\$23,069.05	\$0.00	\$0.00	\$0.00
BLACK LOTUS BREWING CO.	\$174.45	\$72.32	\$0.00	\$72.91	\$29.22
BOZEK'S MARKET	\$64.34	\$64.34	\$0.00	\$0.00	\$0.00
BREW DETROIT	\$6,161.96	\$6,161.96	\$0.00	\$0.00	\$0.00
BROADWAY MKT CORNED BEEF	\$ (76.29)	\$0.00	\$0.00	\$0.00	\$(76.29)
BROOKS BREWING, LLC.	\$108.92	\$108.92	\$0.00	\$0.00	\$0.00
CANTON BREW WORKS	\$142.63	\$72.32	\$0.00	\$70.31	\$0.00
CAPITAL REPRODUCTIONS	\$1.76	\$1.76	\$0.00	\$0.00	\$0.00
CF BURGER CREAMERY	\$19,267.96	\$19,267.96	\$0.00	\$0.00	\$0.00
CHILANGO'S BAKERY	\$2,078.59	\$55.38	\$23.73	\$20.74	\$1,978.74
CINTAS CORP MACOMB TWP.	\$53,517.86	\$53,517.86	\$0.00	\$0.00	\$0.00
CINTAS CORPORATION	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CINTAS CORPORATION	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CITY LAUNDRY, INC.	\$5.80	\$5.80	\$0.00	\$0.00	\$0.00
CLASSIC CONTAINER CORP.	\$639.64	\$639.64	\$0.00	\$0.00	\$0.00
COCA-COLA REFRESHMENTS USA,	\$4,402.32	\$4,402.32	\$0.00	\$0.00	\$0.00
COSTCO WHOLESALE STORE	\$5,925.01	\$5,925.01	\$0.00	\$0.00	\$0.00
COSTCO WHOLESALE STORE	\$687.07	\$687.07	\$0.00	\$0.00	\$0.00
COSTCO WHOLESALE STORE	\$2,183.40	\$2,183.40	\$0.00	\$0.00	\$0.00
COSTCO WHOLESALE STORE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

Customer News	Total Due	Current	46 74 Davis	75 104 Davis	>10F Davis
COUNTRY FRESH DAIRY CO.	\$33,506.41	\$33,506.41	46 - 74 Days \$0.00	75 - 104 Days \$0.00	>105 Days \$0.00
CROSS CHEMICAL COMPANY, INC.	\$3,701.26	\$2,154.95	\$0.00	\$0.00	\$1,546.31
DARLING INGREDIENTS, INC.	\$6,973.58	\$6,973.58	\$0.00	\$0.00	\$0.00
DAVE'S SAUSAGE FACTORY 2	\$373.49	\$373.49	\$0.00	\$0.00	\$0.00
DEARBORN BREWING	\$37.91	\$37.91	\$0.00	\$0.00	\$0.00
DEARBORN SAUSAGE	\$8,307.37	\$8,307.37	\$0.00	\$0.00	\$0.00
DEARBORN SAUSAGE CO., INC.	\$10,639.00	\$10,639.00	\$0.00	\$0.00	\$0.00
DETROIT BEER	\$117.69	\$117.69	\$0.00	\$0.00	\$0.00
DETROIT LINEN SERVICE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DETROIT METRO WC AIRPORT	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DETROIT RIVERTOWN BREWERY CC	\$2,333.81	\$2,333.81	\$0.00	\$0.00	\$0.00
DETROIT SAUSAGES CO INC	\$16.78	\$16.78	\$0.00	\$0.00	\$0.00
DETRONIC INDUSTRIES, INC.	\$132.28	\$132.28	\$0.00	\$0.00	\$0.00
DIFCO LABORATORIES, INC.	\$22,248.73	\$22,248.73	\$0.00	\$0.00	\$0.00
DIVERSIFIED CHEM TECH. INC.	\$164.29	\$164.29	\$0.00	\$0.00	\$0.00
DOMESTIC UNIFORM RENTAL	\$2,103.65	\$2,103.65	\$0.00	\$0.00	\$0.00
DOMESTIC UNIFORM RENTAL	\$3,219.11	\$3,219.11	\$0.00	\$0.00	\$0.00
E.W. GROBBEL'S SONS, INC.	\$3,250.75	\$3,250.75	\$0.00	\$0.00	\$0.00
EASTERN MARKET BREWING COMP#	\$136.78	\$136.78	\$0.00	\$0.00	\$0.00
ENVIROSOLIDS, L.L.C.	\$177,761.09	\$16,440.32	\$0.00	\$161,320.77	\$0.00
EQ DETROIT, INC.	\$426.09	\$426.09	\$0.00	\$0.00	\$0.00
EQ DETROIT, INC.	\$1,901.81	\$1,901.81	\$0.00	\$0.00	\$0.00
EQ DETROIT, INC.	\$(1,238.68)	\$0.00	\$0.00	\$0.00	\$(1,238.68)

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
EQ DETROIT, INC.	\$(4,580.80)	\$0.00	\$0.00	\$0.00	\$(4,580.80)
ETON ST BREWERY- GRIFFIN CLA	\$3,719.16	\$3,719.16	\$0.00	\$0.00	\$0.00
EXTRUDE HONE CORPORATION	\$60.40	\$60.40	\$0.00	\$0.00	\$0.00
EXTRUDEHODE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
FARMINGTON BREWING COMPANY	\$68.97	\$68.97	\$0.00	\$0.00	\$0.00
FAYGO BEVERAGES, INC.	\$421,643.57	\$104,526.02	\$38,612.25	\$31,357.72	\$247,147.58
FORD NEW MODEL PROGRAM	\$1,628.21	\$1,628.21	\$0.00	\$0.00	\$0.00
FOUNDERS BREWING COMPANY	\$84.69	\$84.69	\$0.00	\$0.00	\$0.00
FRESH-PAK	\$2,645.18	\$2,645.18	\$0.00	\$0.00	\$0.00
FRESH-PAK	\$8,633.45	\$8,633.45	\$0.00	\$0.00	\$0.00
GENERAL LINEN SUPPLY CO.	\$63,114.40	\$12,222.82	\$6,817.45	\$5,587.17	\$38,486.96
GLOBAL TITANIUM, INC.	\$3,541.00	\$3,541.00	\$0.00	\$0.00	\$0.00
GLOBAL TITANIUM, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GRANITE CITY FOOD & BREWERY	\$111.98	\$111.98	\$0.00	\$0.00	\$0.00
GRANITE CITY FOOD & BREWERY	\$61.44	\$61.44	\$0.00	\$0.00	\$0.00
GRANITE CITY FOOD & BREWERY	\$245.32	\$115.99	\$0.00	\$129.33	\$0.00
GREAT BARABOO BREWING CO.	\$(2,187.50)	\$0.00	\$0.00	\$0.00	\$(2,187.50)
HACIENDA MEXICAN FOODS	\$3,329.67	\$0.00	\$543.81	\$649.55	\$2,136.31
HENKEL CORPORATION	\$575.97	\$32.78	\$0.00	\$0.00	\$543.19
HOME STYLE FOOD INC.	\$4,955.67	\$4,955.67	\$0.00	\$0.00	\$0.00
HOOD CLEANERS	\$210.36	\$0.00	\$0.00	\$0.00	\$210.36
HOUGHTON INTERNATIONAL INC.	\$187.93	\$187.93	\$0.00	\$0.00	\$0.00

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
HOUGHTON INTERNATIONAL INC.	\$200.19	\$200.19	\$0.00	\$0.00	\$0.00
HOUGHTON INTERNATIONAL INC.	\$2,859.82	\$2,859.82	\$0.00	\$0.00	\$0.00
HUNTINGTON CLEANERS	\$487.05	\$487.05	\$0.00	\$0.00	\$0.00
INDUSTRIAL METAL COATING	\$612.61	\$612.61	\$0.00	\$0.00	\$0.00
ISLAMIC SLAUGHTER HOUSE	\$1,374.37	\$1,374.37	\$0.00	\$0.00	\$0.00
ITALIAN BUTTER BREAD STICKS	\$9.49	\$9.49	\$0.00	\$0.00	\$0.00
J & G FOOD PRODUCTS, INC.	\$53.15	\$53.15	\$0.00	\$0.00	\$0.00
JAMEX BREWING CO.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
KAR NUT PRODUCTS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
KOWALSKI SAUSAGES, CO.	\$593.37	\$593.37	\$0.00	\$0.00	\$0.00
LA MICHOACANA FLOUR TORTILLA	\$610.09	\$610.09	\$0.00	\$0.00	\$0.00
LA MICHOACANA FLOUR TORTILLA	\$(10.01)	\$0.00	\$0.00	\$0.00	\$(10.01)
LEAR CORPORATION DBA EAGLE C	\$5,975.88	\$5,975.88	\$0.00	\$0.00	\$0.00
LIBERTY STREET PROD. BREWERY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
LILY'S SEAFOOD GRILL & BREWE	\$55.97	\$55.97	\$0.00	\$0.00	\$0.00
MACDERMID, INC.	\$101.95	\$101.95	\$0.00	\$0.00	\$0.00
MCNICHOLS POLISHING & ANODIZ	\$15.29	\$15.29	\$0.00	\$0.00	\$0.00
MELLO MEATS INC, - KUBISCH S	\$83.92	\$83.92	\$0.00	\$0.00	\$0.00
METROPOLITAN BAKERY	\$610.77	\$610.77	\$0.00	\$0.00	\$0.00
MIBA HYDRAMECHANICA CORP.	\$231.26	\$231.26	\$0.00	\$0.00	\$0.00
MICHIGAN DAIRY	\$83,832.75	\$83,832.75	\$0.00	\$0.00	\$0.00
MICHIGAN PROD. MACHINING	\$2,095.20	\$2,095.20	\$0.00	\$0.00	\$0.00
MICHIGAN SOY PRODUCTS CO.	\$641.43	\$641.43	\$0.00	\$0.00	\$0.00

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
MIDWEST WIRE PRODUCTS, INC.	\$(2.94)	\$0.00	\$0.00	\$0.00	\$ (2.94)
MILANO BAKERY	\$1,003.62	\$1,003.62	\$0.00	\$0.00	\$0.00
MILTON CHILI CO.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MINNIE MARIE BAKERS, INC	\$3,668.63	\$3,668.63	\$0.00	\$0.00	\$0.00
MISTER UNIFORM & MAT RENTALS	\$80.14	\$80.14	\$0.00	\$0.00	\$0.00
MOTOR CITY BREWING WORKS	\$(23.25)	\$0.00	\$0.00	\$0.00	\$ (23.25)
NATIONAL CHILI COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
NATIONAL CHILI COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
NATIONAL CHILI COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
NORTH CENTER BREWING COMPANY	\$94.69	\$94.69	\$0.00	\$0.00	\$0.00
NORTHERN LAKES SEAFOOD & MEA	\$76.36	\$76.36	\$0.00	\$0.00	\$0.00
OAKWOOD BAKERY	\$160.58	\$160.58	\$0.00	\$0.00	\$0.00
PELLERITO FOODS INC.	\$2,310.62	\$2,310.62	\$0.00	\$0.00	\$0.00
PEPSI COLA, INC.	\$20,878.29	\$20,878.29	\$0.00	\$0.00	\$0.00
PERSONAL UNIFORM SERVICE, IN	\$33.38	\$33.38	\$0.00	\$0.00	\$0.00
PETRO ENVIRON TECH, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PINE TREE ACRES, INC.	\$31,548.82	\$31,548.82	\$0.00	\$0.00	\$0.00
PLATING SPEC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
POWER VAC OF MICHIGAN, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PREMIER PLATING, LLC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PRODUCTION SPRING, LLC.	\$797.64	\$797.64	\$0.00	\$0.00	\$0.00
QUALA SERVICES, LLC	\$350.79	\$350.79	\$0.00	\$0.00	\$0.00

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
RAY'S ICE CREAM CO.	\$98.50	\$98.50	\$0.00	\$0.00	\$0.00
RED SPOT PAINT #409139	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
RIVER ROUGE BREWING COMPANY	\$955.66	\$955.66	\$0.00	\$0.00	\$0.00
ROAK BREWING CO. LLC	\$3,487.94	\$691.24	\$0.00	\$823.50	\$1,973.20
ROCHESTER MILLS BEER COMPANY	\$273.14	\$273.14	\$0.00	\$0.00	\$0.00
ROCHESTER MILLS PROD BREWERY	\$2,005.73	\$2,005.73	\$0.00	\$0.00	\$0.00
RTT	\$23,842.21	\$123.61	\$243.03	\$331.65	\$23,143.92
SEAFARE FOODS, INC.	\$58.57	\$58.57	\$0.00	\$0.00	\$0.00
SHERWOOD BREWING COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
SMITH-WATKINS, LLC	\$787.22	\$787.22	\$0.00	\$0.00	\$0.00
SPRAYTEK, INC.	\$4,105.96	\$21.02	\$14.92	\$24.25	\$4,045.77
SWEETHEART BAKERY, INC.	\$787.51	\$148.58	\$74.29	\$76.34	\$488.30
THE CROWN GROUP-LIVONIA PLAN	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
THE ROYAL OAK BREWERY	\$(1,531.50)	\$0.00	\$0.00	\$0.00	\$(1,531.50)
TOM LAUNDRY CLEANERS	\$34.86	\$34.86	\$0.00	\$0.00	\$0.00
TRAFFIC JAM & SNUG	\$104.44	\$104.44	\$0.00	\$0.00	\$0.00
TURRI'S ITALIAN FOODS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
TURRI'S ITALIAN FOODS	\$24,900.79	\$24,900.79	\$0.00	\$0.00	\$0.00
U-METCO, INC.	\$2,882.60	\$2,882.60	\$0.00	\$0.00	\$0.00
UNCLE RAYS SNACKS, LLC	\$75,753.55	\$75,753.55	\$0.00	\$0.00	\$0.00
UNCLE RAYS SNACKS, LLC	\$16,350.26	\$16,350.26	\$0.00	\$0.00	\$0.00
UNIQUE LINEN SERVICES, INC.	\$79.16	\$79.16	\$0.00	\$0.00	\$0.00
UNITED FISH DISTRIBUTORS	\$11.90	\$11.90	\$0.00	\$0.00	\$0.00

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
UNITED LINEN SERVICE, LLC.	\$297.02	\$297.02	\$0.00	\$0.00	\$0.00
UNITED MEAT & DELI	\$629.45	\$629.45	\$0.00	\$0.00	\$0.00
US ECOLOGY MICHIGAN	\$(2,032.12)	\$0.00	\$0.00	\$0.00	\$(2,032.12)
US ECOLOGY ROMULUS, INC.	\$6,148.09	\$6,148.09	\$0.00	\$0.00	\$0.00
USHER OIL SERVICES	\$3,940.58	\$3,940.58	\$0.00	\$0.00	\$0.00
VERNDALE PRODUCTS	\$12,536.41	\$12,536.41	\$0.00	\$0.00	\$0.00
VERNDALE PRODUCTS, INC.	\$5,011.59	\$5,011.59	\$0.00	\$0.00	\$0.00
VERNOR FOOD PRODUCTS	\$64.15	\$64.15	\$0.00	\$0.00	\$0.00
WIGLEY'S MEAT PROCESS	\$316.12	\$316.12	\$0.00	\$0.00	\$0.00
WINTER SAUSAGE MFG. CO.	\$858.85	\$858.85	\$0.00	\$0.00	\$0.00
WINTER SAUSAGE MFG. CO.	\$(185.30)	\$(185.30)	\$0.00	\$0.00	\$0.00
WOLVERINE PACKING CO	\$7,177.94	\$7,177.94	\$0.00	\$0.00	\$0.00
WOLVERINE PACKING CO.	\$2,503.81	\$2,503.81	\$0.00	\$0.00	\$0.00
WOODWARD AVENUE BREWERS	\$219.55	\$219.55	\$0.00	\$0.00	\$0.00
TOTAL POLLUTANT SURCHARGE	\$1,322,709.53	\$749,176.44	\$47,722.42	\$202,060.94	\$323,749.73