Date: April 20, 2018
To: Great Lakes Water Authority Audit Committee
From: Jon Wheatley, Public Finance Manager
Re: Monthly Revenue \& Collections Report for February 2018

The Monthly Revenue \& Collections Report includes the following.

1. FY 2018 Retail and Wholesale Sewer Revenue
2. FY 2018 Retail and Wholesale Water Revenue
3. City of Highland Park Billings and Collections
4. City of Flint Billings and Collections
5. Water \& Sewer System Wholesale Accounts Receivable Aging Report

Note: Wholesale customer revenues are billed by the Great Lakes Water Authority
(GLWA). Pursuant to the terms of the lease agreement between the City of Detroit and the Great Lakes Water Authority, the Detroit Water \& Sewerage Department (DWSD) serves as GLWA's agent for billing activities for the City of Detroit retail customer class. All revenues collected by both GLWA and DWSD are deposited in a trust account in accordance with the GLWA Master Bond Ordinance.

## 1. FY 2018 Retail and Wholesale Sewer Revenue Report

Table 1 summarizes the unaudited FY 2018 billed revenues through February 28, 2018 and do not reflect collections of those revenues. It should also be noted that the revenues are shown in the month that the billed flow was accrued and not the following month when the bills are usually sent out to customers.

Table 1 - Combined DWSD and GLWA Wholesale FY 2018 Sewer Revenue

| Month | RETAIL SEWER CUSTOMERS |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | FY 2018 - Budget |  | FY 2018 - Actual |  | Variance |  |
|  | $\frac{\text { Volume }}{\text { Mcf }}$ | $\frac{\text { Revenue }}{\$}$ | $\frac{\text { Volume }}{\text { Mcf }}$ | $\frac{\text { Revenue }}{\$}$ | $\frac{\text { Volume }}{M c f}$ | $\frac{\text { Revenue }}{\$}$ |
| July | 260,000 | 24,615,100 | 244,512 | 24,624,820 | $(15,488)$ | 9,720 |
| August | 260,600 | 24,754,400 | 239,911 | 24,348,011 | $(20,689)$ | $(406,389)$ |
| September | 222,800 | 22,752,800 | 228,122 | 23,517,204 | 5,322 | 764,404 |
| October | 205,500 | 22,717,800 | 224,159 | 23,573,505 | 18,659 | 855,705 |
| November | 189,900 | 21,987,300 | 188,312 | 22,084,385 | $(1,588)$ | 97,085 |
| December | 204,400 | 22,774,800 | 190,811 | 21,937,291 | $(13,589)$ | $(837,509)$ |
| January | 195,300 | 22,296,100 | 213,373 | 22,944,848 | 18,073 | 648,748 |
| February | 198,300 | 23,060,600 | 193,452 | 21,926,685 | $(4,848)$ | $(1,133,915)$ |
| March | 203,000 | 23,026,900 | - | - | - | - |
| April | 189,300 | 22,215,900 |  | - | - | - |
| May | 219,400 | 23,798,700 |  | - |  | - |
| June | 251,500 | 24,635,500 |  | - | - |  |
| Total | 2,600,000 | 278,635,900 | 1,722,652 | 184,956,749 | $(14,148)$ | $(2,151)$$(2,151)$ |
| Subtotals ytd | 1,736,800 | 184,958,900 | 1,722,652 | 184,956,749 | $(14,148)$ |  |
| Achievement of Budget |  |  | 99.19\% 100.00\% |  |  |  |
| WHOLESALE SEWER CUSTOMERS |  |  |  |  |  |  |
| Month | FY 2018 - Budget |  | FY 2018 - Actual |  | Variance |  |
|  | Volume | Revenue | Volume | Revenue | Volume | Revenue |
|  | Mcf | \$ | Mcf | \$ | Mcf | \$ |
| July | N/A | 22,619,300 | N/A | 22,619,300 | N/A | - |
| August | N/A | 22,619,300 | N/A | 22,619,300 | N/A | - |
| September | N/A | 22,619,300 | N/A | 22,619,300 | N/A | - |
| October | N/A | 22,619,300 | N/A | 22,619,300 | N/A | - |
| November | N/A | 22,619,300 | N/A | 22,619,300 | N/A | - |
| December | N/A | 22,619,300 | N/A | 22,619,300 | N/A | - |
| January | N/A | 22,619,300 | N/A | 22,619,300 | N/A | - |
| February | N/A | 22,619,300 | N/A | 22,619,300 | N/A | - |
| March | N/A | 22,619,300 | N/A | - | N/A | - |
| April | N/A | 22,619,300 | N/A | - | N/A | - |
| May | N/A | 22,619,300 | N/A | - | N/A | - |
| June | N/A | 22,619,300 | N/A | - | N/A | - |
| Total |  | 271,431,600 |  | 180,954,400 |  | 0 |
| Subtotals ytd |  | 180,954,400 |  | 180,954,400 |  | 0 |
| Achievement of Budget |  |  | 100.00\% |  |  |  |
| TOTAL - ALL CUSTOMERS |  |  |  |  |  |  |
| Month | FY 2018 - Budget |  | FY 2018 - Actual |  | Variance |  |
|  | $\frac{\text { Volume }}{\text { Mcf }}$ | Revenue | Volume | Revenue | Volume | Revenue |
|  |  | \$ |  |  | Mcf | \$ |
| July | 260,000 | 47,234,400 | 244,512239,911 | 47,244,120 | $(15,488)$ | 9,720 |
| August | 260,600 | 47,373,700 |  | 46,967,311 | $(20,689)$ | $(406,389)$ |
| September | 222,800 | 45,372,100 | 228,122 | 46,136,504 | 5,322 | 764,404 |
| October | 205,500 | 45,337,100 | 224,159 | 46,192,805 | 18,659 | 855,705 |
| November | 189,900 | 44,606,600 | 188,312 | 44,703,685 | $(1,588)$ | 97,085 |
| December | 204,400 | 45,394,100 | 190,811 | 44,556,591 | $(13,589)$ | $(837,509)$ |
| January | 195,300 | 44,915,400 | 213,373 | 45,564,148 | 18,073 | 648,748 |
| February | 198,300 | 45,679,900 | 193,452 | 44,545,985 | $(4,848)$ | $(1,133,915)$ |
| March | 203,000 | 45,646,200 | 193,452 -44,545,985 |  | - | - |
| April | 189,300 | 44,835,200 | - - |  | - | - |
| May | 219,400 | 46,418,000 | - - |  | - | - |
| June | 251,500 | 47,254,800 | - - |  | - | - |
| Total | 2,600,000 | 550,067,500 | 1,722,652 | 365,911,149 | $(14,148)$ | $(2,151)$ |
| Subtotals ytd | 1,736,800 | 365,913,300 | 1,722,652 | 365,911,149 | $(14,148)$ | $(2,151)$ |
| Achievement of Budget |  |  | 99.19\% 100.00\% |  |  |  |

DWSD Retail Billings: Table 1 shows the FY 2018 sewer usage and billed revenue which are provided by DWSD staff. As of February 28, 2018, the DWSD usage was at $99.19 \%$ of the budget and billed revenue was at $100.00 \%$ of budget.

GLWA Wholesale Customer Billings: Table 1 shows the FY 2018 sewer billed revenue. As a result of the sewer rate simplification which provides a more stable revenue stream, the wholesale sewer customers are billed a fixed monthly fee. The results of this effort can be seen as the billed revenue is at 100.00\% of budget through February 2018.

Total System Billings: Table 1 shows the FY 2018 combined DWSD and GLWA Wholesale sewer billed usage and billed revenue. Based on the combined, the GLWA Sewer System had billed revenues of $99.19 \%$ of budget based upon the most current information available as of this report.

## 2. FY 2018 Retail and Wholesale Water Revenue Report

Table 2 summarizes the unaudited FY 2018 wholesale customer water revenues billed by GLWA and the retail water revenues billed by DWSD. Please note these are billed revenues and do not reflect collections of those revenues. It should also be noted that the revenues are shown in the month that the billed flow was accrued and not the following month when the bills are usually sent out.

Table 2 - Combined DWSD and GLWA Wholesale FY 2018 Water Revenue Report

| Month | RETAIL WATER CUSTOMERS |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | FY 2018 - Budget |  |  | FY 2018 - Actual |  |  | Variance |  |
|  | Volume | Revenue | Unit Revenue | Volume | Revenue | Unit Revenue | Volume | Revenue |
|  | Mcf | \$ | \$/Mcf | Mcf | \$ | \$/Mcf | Mcf | \$ |
| July | 295,700 | 9,332,300 | 31.56 | 274,267 | 8,813,936 | 32.14 | $(21,433)$ | $(518,364)$ |
| August | 303,100 | 9,517,000 | 31.40 | 269,802 | 8,631,595 | 31.99 | $(33,298)$ | $(885,405)$ |
| September | 248,900 | 8,393,900 | 33.72 | 259,341 | 8,463,041 | 32.63 | 10,441 | 69,141 |
| October | 236,100 | 7,947,500 | 33.66 | 247,700 | 8,187,943 | 33.06 | 11,600 | 240,443 |
| November | 218,400 | 7,585,100 | 34.73 | 208,783 | 7,276,521 | 34.85 | $(9,617)$ | $(308,579)$ |
| December | 238,500 | 8,008,200 | 33.58 | 213,026 | 7,333,094 | 34.42 | $(25,474)$ | $(675,106)$ |
| January | 224,700 | 7,673,100 | 34.15 | 235,142 | 7,873,651 | 33.48 | 10,442 | 200,551 |
| February | 224,700 | 7,813,100 | 34.77 | 235,436 | 7,879,874 | 33.47 | 10,736 | 66,774 |
| March | 235,700 | 7,944,800 | 33.71 | - | - | - | - | - |
| April | 217,700 | 7,529,200 | 34.59 |  |  | - | - |  |
| May | 256,700 | 8,946,300 | 34.85 |  |  | - | - | - |
| June | 284,800 | 9,089,900 | 31.92 | - | - | - | - | - |
| Total | 2,985,000 | 99,780,400 | 33.43 | 1,943,498 | 64,459,654 | 33.17 | $(46,602)$ | $(1,810,546)$ |
| Subtotals ytd | 1,990,100 | 66,270,200 | 33.30 | 1,943,498 | 64,459,654 | 33.17 | $(46,602)$ | $(1,810,546)$ |
| Achievement of Budget |  |  |  | 97.66\% | 97.27\% |  |  |  |
| WHOLESALE WATER CUSTOMERS* |  |  |  |  |  |  |  |  |
| Month | FY 2018 - Budget |  |  | FY 2018 - Actual |  |  | Variance |  |
|  | Volume | $\frac{\text { Revenue }}{\$}$ | Unit Revenue | Volume | Revenue | Unit Revenue | Volume | $\frac{\text { Revenue }}{\$}$ |
|  |  |  |  |  |  |  |  |  |
|  | Mcf |  | \$/Mcf | Mcf | \$ | \$/Mcf | Mcf |  |
| July | 1,712,100 | 31,705,800 | 18.52 | 1,721,500 | 32,819,241 | 19.06 | 9,400 | 1,113,441 |
| August | 1,615,000 | 30,914,600 | 19.14 | 1,573,478 | 31,520,853 | 20.03 | $(41,522)$ | 606,253 |
| September | 1,420,900 | 28,619,700 | 20.14 | 1,421,715 | 29,686,522 | 20.88 | 815 | 1,066,822 |
| October | 1,064,900 | 25,002,100 | 23.48 | 1,158,883 | 26,949,856 | 23.26 | 93,983 | 1,947,756 |
| November | 892,000 | 23,038,000 | 25.83 | 958,686 | 25,146,717 | 26.23 | 66,686 | 2,108,717 |
| December | 946,600 | 23,392,700 | 24.71 | 1,024,164 | 24,434,241 | 23.86 | 77,564 | 1,041,541 |
| January | 972,400 | 23,676,000 | 24.35 | 1,067,591 | 24,810,289 | 23.24 | 95,191 | 1,134,289 |
| February | 893,000 | 23,017,200 | 25.78 | 894,635 | 23,326,980 | 26.07 | 1,635 | 309,780 |
| March | 988,100 | 23,781,500 | 24.07 | - | - | - | - | - |
| April | 997,900 | 23,859,300 | 23.91 | - | - | - | - | - |
| May | 1,155,100 | 25,576,800 | 22.14 | - | - | - | - | - |
| June | 1,472,900 | 28,727,800 | 19.50 | - | - |  | - | - |
| Total | 14,130,900 | 311,311,500 | 22.03 | 9,820,653 | 218,694,698 | 22.27 | 303,753 | 9,328,598 |
| Subtotals ytd | 9,516,900 | 209,366,100 | 22.00 | 9,820,653 | 218,694,698 | 22.27 | 303,753 | 9,328,598 |
| Achievement of Budget |  | 7,651,500 | 103.19\% |  | 104.46\% |  |  |  |
| * Includes Revenues and Usage from the City of Flint. |  |  |  |  |  |  |  |  |
| Month | FY 2018 - Budget ${ }^{\text {TOTA }}$ |  |  | ALL CUSTOM |  |  |  |  |
|  |  |  |  | FY 2018 - Actual |  |  | Variance |  |
|  | Volume | Revenue | Unit Revenue | Volume | Revenue | Unit Revenue | Volume | Revenue |
|  |  |  |  |  |  |  |  |  |
|  | Mcf |  | \$/Mcf | Mcf | \$ | \$/Mcf | Mcf | \$ |
| July | 2,007,800 | 41,038,100 | 20.44 | 1,995,768 | 41,633,177 | 20.86 | $(12,032)$ | 595,077 |
| August | 1,918,100 | 40,431,600 | 21.08 | 1,843,280 | 40,152,447 | 21.78 | $(74,820)$ | $(279,153)$ |
| September | 1,669,800 | 37,013,600 | 22.17 | 1,681,056 | 38,149,562 | 22.69 | 11,256 | 1,135,962 |
| October | 1,301,000 | 32,949,600 | 25.33 | 1,406,583 | 35,137,799 | 24.98 | 105,583 | 2,188,199 |
| November | 1,110,400 | 30,623,100 | 27.58 | 1,167,469 | 32,423,237 | 27.77 | 57,069 | 1,800,137 |
| December | 1,185,100 | 31,400,900 | 26.50 | 1,237,190 | 31,767,335 | 25.68 | 52,090 | 366,435 |
| January | 1,197,100 | 31,349,100 | 26.19 | 1,302,733 | 32,683,940 | 25.09 | 105,633 | 1,334,840 |
| February | 1,117,700 | 30,830,300 | 27.58 | 1,130,072 | 31,206,854 | 27.61 | 12,372 | 376,554 |
| March | 1,223,800 | 31,726,300 | 25.92 | - | - | - | - | - |
| April | 1,215,600 | 31,388,500 | 25.82 | - | - | - | - | - |
| May | 1,411,800 | 34,523,100 | 24.45 | - | - | - | - | - |
| June | 1,757,----- | 37,--------- | 21.----- | --------------- | -------- | --- | ---------- | ---- |
| Total | 17,115,900 | 411,091,900 | 24.02 | 11,764,150 | 283,154,352 | 24.07 | 257,150 | 7,518,052 |
| Subtotals ytd | 11,507,000 | 275,636,300 | 23.95 | 11,764,150 | 283,154,352 | 24.07 | 257,150 | 7,518,052 |
| Achievement of Budget |  |  |  | 102.23\% | 102.73\% |  |  |  |

DWSD Retail Billings: Table 2 shows the FY 2018 water billed usage and billed revenue which are provided by the DWSD staff. As of February 28, 2018, the DWSD usage was at $97.66 \%$ of budget and billed revenue was at $97.27 \%$ of budget.

GLWA Wholesale Customer Billings: Table 2 shows the FY 2018 water billed usage and billed revenues. Starting FY 2016, wholesale water charges were re-structured to create a more stable revenue stream by using a historical rolling average to project customer volumes and allocating $60 \%$ of the customer revenue requirement to the monthly fixed charge. As of February 28, 2018, the billed usage was at $103.19 \%$ of budget and billed revenue at $104.46 \%$ of budget. As noted in Table 2, revenues and usage from the City of Flint are included as they were assumed in the FY 2018 Budget.

Total System Billings: Table 2 shows the FY 2018 combined DWSD and GLWA Wholesale water billed usage and billed revenue. Based on the combined Retail and Wholesale Water billings, the GLWA Water System had billed usage of $102.23 \%$ of budget and billed revenues of $102.73 \%$ of budget based upon the most current information available as of this report.

## 3. City of Highland Park Billings and Collections

As of March 31, 2018, Highland Park had a delinquent balance of $\$ 38.1$ million, including $\$ 30.7$ million for wastewater treatment services, $\$ 1.6$ million for industrial waste control services, and $\$ 5.8$ million for water supply services. Table 3 provides a summary of the billing and collection history for Highland Park from June 30, 2012 to March 31, 2018 in the table below. Please note the numbers below reflect the month the invoice was sent and not the month the service was provided.
There were no payments received from the City of Highland Park during March 2018.

Table 3 - City of Highland Park Billings and Collections

|  | Water |  | Sewer |  | IWC |  | Cumulative Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| June 30, 2012 Balance | \$ | - | \$ | 10,207,956 | \$ | 852,987 | \$ | 11,060,943 |
| FY 2013 Billings |  | 485,887 |  | 4,987,635 |  | 154,444 |  | 5,627,966 |
| FY 2013 Payments |  | $(65,652)$ |  | $(2,206,211)$ |  | - |  | $(2,271,863)$ |
| June 30, 2013 Balance | \$ | 420,235 | \$ | 12,989,380 | \$ | 1,007,431 | \$ | 14,417,046 |
| FY 2014 Billings |  | 1,004,357 |  | 6,980,442 |  | 161,951 |  | 8,146,750 |
| FY 2014 Payments |  | - |  | $(1,612,633)$ |  | - |  | $(1,612,633)$ |
| June 30, 2014 Balance | \$ | 1,424,592 | \$ | 18,357,189 | \$ | 1,169,382 | \$ | 20,951,163 |
| FY 2015 Billings |  | 1,008,032 |  | 5,553,123 |  | 165,739 |  | 6,726,894 |
| FY 2015 Payments |  | - |  | $(1,444,623)$ |  | - |  | $(1,444,623)$ |
| June 30, 2015 Balance | \$ | 2,432,625 | \$ | 22,465,689 | \$ | 1,335,121 | \$ | 26,233,435 |
| FY 2016 Billings |  | 1,157,178 |  | 5,612,167 |  | 106,431 |  | 6,875,776 |
| FY 2016 Payments |  | - |  | $(2,022,335)$ |  | - |  | $(2,022,335)$ |
| June 30, 2016 Balance | \$ | 3,589,803 | \$ | 26,055,521 | \$ | 1,441,551 | \$ | 31,086,875 |
| FY 2017 Billings |  | 1,245,267 |  | 5,802,000 |  | 101,999 |  | 7,149,265 |
| FY 2017 Payments |  | - |  | $(2,309,186)$ |  | - |  | $(2,309,186)$ |
| June 30, 2017 Balance | \$ | 4,835,070 | \$ | 29,548,335 | \$ | 1,543,550 | \$ | 35,926,954 |
| FY 2018 Billings (9 Months) |  | 966,680 |  | 4,246,500 |  | 60,592 |  | 5,273,772 |
| FY 2018 Payments (9 Months) |  | - |  | $(3,111,091)$ |  | - |  | $(3,111,091)$ |
| Balance as of March 31, 2018 | \$ | 5,801,749 | \$ | 30,683,743 | \$ | 1,604,142 | \$ | 38,089,635 |

## 4. Water \& Sewer System Wholesale Accounts Receivable Aging Report

Table 4 is a summary of the total, current and non-current receivables by category as of March 31, 2018. Table 5 is the same summary without the past due balances for the City of Highland Park. The detailed accounts receivable aging is attached to this report. This report reflects the wholesale receivables only and do not include DWSD. (Note: percentages vary from $100 \%$ due to rounding.)

Table 4 - Wholesale Accounts Receivable Aging Report

|  | Total |  | Current |  | 46-74 Days |  | 75-104 Days |  | >105 Days |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Water | \$ | 35,109,915.74 | \$ | 29,511,763.13 | \$ | 101,547.68 | \$ | 106,041.53 | \$ | 5,390,563.40 |
| Sewer | \$ | 50,241,343.78 | \$ | 20,027,799.50 | \$ | 470,200.00 | \$ | 470,200.00 | \$ | 29,273,144.28 |
| IWC | \$ | 2,821,275.70 | \$ | 890,391.17 | \$ | 55,922.44 | \$ | - | \$ | 1,874,962.09 |
| Pollutant Surcharge | \$ | 997,453.25 | \$ | 613,873.86 | \$ | 133,986.11 | \$ | 40,355.53 | \$ | 209,237.75 |
| Total | \$ | 89,169,988.47 | \$ | 51,043,827.66 | \$ | 761,656.23 | \$ | 616,597.06 | \$ | 36,747,907.52 |
|  |  | 100.00\% |  | 57.24\% |  | 0.85\% |  | 0.69\% |  | 41.21\% |

Table 5 - Wholesale Accounts Receivable Aging Report, Net of Highland Park

|  | Total |  | Current |  | 46-74 Days |  | 75-104 Days |  | >105 Days |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Water | \$ | 29,308,166.02 | \$ | 29,308,166.02 | \$ | - | \$ | - | \$ | - |
| Sewer | \$ | 19,557,599.50 | \$ | 19,557,599.50 | \$ | - | \$ | - | \$ | - |
| IWC | \$ | 1,217,133.17 | \$ | 877,460.65 | \$ | 49,262.64 | \$ | - | \$ | 290,409.88 |
| Pollutant Surcharge | \$ | 997,453.25 | \$ | 613,873.86 | \$ | 133,986.11 | \$ | 40,355.53 | \$ | 209,237.75 |
| Total | \$ | 51,080,351.94 | \$ | 50,357,100.03 | \$ | 183,248.75 | \$ | 40,355.53 | \$ | 499,647.63 |
|  |  | 100.00\% |  | 98.58\% |  | 0.36\% |  | 0.08\% |  | 0.98\% |

