July 26, 2017

The Honorable
Board of Directors
Great Lakes Water Authority

Dear Chairman Daddow and Directors:


As the FY 2017 draws to a close, several notable milestones have been accomplished.

We have released a DRAFT of GLWA’s inaugural 5-year planning document for review. Starting with Highlights for the FY 2018 Budget: overachieving on The 4% Promise (no more than a 4% increase in annual revenue requirements) with a 1% reduction in Water and a 0.3% increase in Sewer; lowering the cost of debt by $27M (FY 2018 share of the $309M savings over the remaining life of bonds refunded in the fall of 2016) and a detailed set of objectives that demonstrate GLWA’s continuing commitment on the optimization path for effective and efficient operations. The plan includes charge highlights for FY 2018 as well, including: moderated charge increases for both Water and Sewer from initial proposals with final charges ≤2% for each system, expanded collaboration with others in the region leading to an agreement in principle for long-term service to Flint and a partnership with KWA and the Genesee County Drain Commissioner for reciprocal backup arrangements with mutual benefit.

Our experience through the exploration of charges this past season brought to the forefront the need to consider the balance of equity and stability in the charge development process as we move forward with a number of potential issues identified that could impact cost allocation and methodology. As a result, we have proposed a strategy and work plan that looks through the lens of our interests as partners to achieve equity without creating instability. We have a unique opportunity to consider this balance as we renew our partnering agreement that is the foundation for how we work together in our service to the communities served by the regional system through our partnership with others. Even as we have just wrapped up charges for FY 19, the conversation is starting now to understand the challenges for FY 19.

As the last day of July draws to a close, we are filing our completed GLWA FY 2016 audit with the State of Michigan. This inaugural audit captures the financial impact of the transaction that launched the Great Lakes Water Authority.

Lastly, mid-month, I was honored to be appointed to the Board of Directors of the National Association of Clean Water Agencies (NACWA). NACWA is focused on Peer to Peer and other partnering efforts in helping to build a strong and sustainable clean water future.
PLANNING SERVICES

Asset Management and CIP Group

Recently, members from GLWA’s Asset Management and CIP Group have participated in several meetings and conference calls related to the Michigan Infrastructure Asset Management Pilot program that was established by the State of Michigan through Michigan’s 21st Century Infrastructure Commission last year. The resulting pilot project is a year-long effort to development and implement an asset management system across transportation, water, wastewater, storm water, energy and broadband. Southeast Michigan is one of two regions across the state that will participate in the pilot. This is an exciting opportunity, and staff is actively participating in the development of the overall framework, as well as providing data to include within the pilot area.

A GLWA request for proposals for asset management planning services is currently available on the Michigan Inter-governmental Trade Network. In general, staff is looking for professional consulting services to assist in the development of an enterprise-wide Strategic Asset Management Plan, assistance with individual water and wastewater asset management plans, and partial implementation services.

The Asset Management and Capital Improvement Plan Customer Outreach Work Group’s next scheduled meeting will take place in September where there will be a presentation related to the Wastewater Asset Management Plan update that is required for submittal to the MDEQ in October. In addition, it is anticipated that new project business case evaluations will be reviewed at this time for new projects proposed for the fiscal year 2019 - 2023 Capital Improvement Plan.

Systems Planning Group

On July 13, 2017, the Communications Work Group in the Outreach Program held its third meeting. In preparation for this meeting, Systems Planning staff brought team members together from across operational areas to develop detailed process tables that are tied together by a communication plan.
The communication plan provides high level operational activities and details specific communication channels that are to be used at times when varying operational circumstances occur, such as a power failure. The work group meeting, held in Brownstown Township, was valuable. Attendees reviewed the tables and discussed specific examples. In addition to the tables and communication plan, the group reviewed and commented on a family of draft documents intended as boilerplate language for customization and use by customers during Boil Water Advisory circumstances. This family of templates includes a Frequently Asked Questions document that covers questions our customer communities receive most commonly during these emergency situations.

The Wastewater Master Plan Steering Team continues to hold monthly meetings. The group is currently establishing desired outcomes and working on a draft mission statement. The meetings have been well attended and the Steering Team is making good progress.

An Analytical Work Group (AWG) Meeting was held on July 18, 2017 at Water Works Park. The meeting was very well attended with robust presentation from GLWA’s Procurement Team. The presentation provided an overview of the Procurement process, introduced the different Managers and functions of Procurement and allowed for attendees to request further information for follow up. The presentation was well received by our customers and many attendees from our vendor community. The next AWG meeting will be held on September 19, 2017 in Dearborn.

**System Analytics and Meter Operations Group**

The “Units of Service for Non-Master Metered Customers and System Water Audit” project team continues to make good progress. The project is proceeding on time with expected results coming in two phases. The first phase will update the units of service for Dearborn, Detroit Water and Sewerage Department (DWSD) and Highland Park later this year while the second phase, consisting of a more robust water audit, is planned to be completed mid next year. The team held meetings with the City of Dearborn and DWSD to collect additional data for the study. The project team is planning to perform district metering in the City of Dearborn and DWSD in the month of August. This is process where sample areas are set up and directly metered. The sample areas are known as District Metered Areas (DMAs). No DMAs are planned for the City of Highland Park due to its relatively small size. Regular project updates continue to be provided at the AWG meetings.

The West Side Sewer Modeling and Monitoring Program is ongoing. The monthly meeting with MDEQ was held on June 21, 2017. The project team will integrate with the Regional Wastewater Master Plan project as well as work being done by the Wastewater Analytical Task Force.
PLANNING SERVICES  (continued)

The meter data and the lessons learned from this project will be valuable in development of a plan for additional metering in the D+ area.

The System Analytics & Meter Operations group continues to roll out the Wholesale Automatic Meter Reading portal (WAMR) enhancements that were requested by the WAMR user community. The enhancements being rolled out include: availability of customer contract information, meter outage information, and the ability to create alerts which will allow customers to receive emails when their flows or pressures fall out of user set ranges. The team presented these updates at the AWG meeting held on July 18, 2017 at Water Works Park.

The Group also rolled out a daily email report that notifies our team members and GLWA Finance team members when customers exceed their hourly or daily contractual limits.

Energy Management Group

Energy Management has made significant progress since the start of the Aquasight pilot program at Adams Road Booster Station began in late March. With help from Systems Control Center and the IT Groups, we are able to collect and stream live data into the Aquasight dashboard. The platform processes the data every 20 seconds and provides analytics previously unavailable to GLWA, including system efficiency, cost per million gallons and pump health.

Energy Management, along with Water Operations and Systems Control will begin verifying the data and operational recommendations. Once the data has been validated, it is our intention to develop a process to implement the program system wide. An example of some of the statistics available through the dashboard can be seen below:
**PLANNING SERVICES** (continued)

*Research and Innovation*

Research and Innovation staff members were invited to speak at the US Department of Energy’s 2017 Bio economy Domestic Resources for a Vibrant Future Conference. This conference serves as a unique platform for representatives from industry, state and federal agencies, and Congress to interact and discuss the direction of bioenergy activities. GLWA delivered a presentation entitled “Laying the Path from Disposal Challenge to Opportunity” which described our biosolids circumstances, the energy generation opportunity and a methodology for sorting through the daunting number of options to arrive at the highest value option for the future.

**WASTEWATER OPERATING SERVICES**

*Wastewater Operations Group*

The Water Resource Recovery Facility (WRRF) was in compliance with all National Pollutant Discharge Elimination System (NPDES) and Michigan Department of Environmental Quality (MDEQ) water quality permits in the month of June 2017.

Annually, we are required to submit wet weather operational protocols to the MDEQ for their consideration. Presently, we are meeting monthly with the MDEQ to discuss our various aspects of these protocols. The meeting includes Combined Sewer Overflow, WRRF and Systems Control Center staff members as these three Groups work together during wet weather events to most effectively route and treat excess flows.

*Engineering & Maintenance Groups*

*Fire Remediation*

The remediation of the area of Incinerator Complex II that was damaged by the March 2016 fire is almost complete with six of eight incinerators available for service. Some restoration work and capacity testing remains to be completed. Other systems supporting incineration are scheduled to be completed by October 2017.

*Biosolids Dryer Facility (BDF)*

The BDF required performance testing has been completed and the BDF regularly meets production limits set by GLWA. Final construction efforts are underway for both recycle bin modification and sulfur dioxide scrubber installation. Currently, one of four trains has the modified recycle bin installed. All recycle bin and scrubber installation work is scheduled to be completed by the end of the year.
WASTEWATER OPERATING SERVICES  (continued)

Rouge River Outfall Disinfection Project

The contractor, CDM Constructors Inc., has started the phase II work (design completion and construction) with a targeted construction completion date of April 1, 2019, as required by the NPDES permit. Current work efforts include relocation of buried utilities, pile driving for the new sodium hypochlorite building and review of the 90% design documents.

Maintenance

Team building and communications training has begun with Team Leaders. In addition to the very important preventative and corrective maintenance activities which are the mainstay of this group, efforts to improve grounds at the WRRF are being taken with a focus on nuisance birds and sidewalk and WRRF internal road repairs.

WATER OPERATIONS

Systems Control

System Pumpage

Total pumpage for June 2017 was 10.7% lower than last year.

Sewer Condition Assessment

Inspection continues on the Northwest Interceptor from June into July. The Sewer Condition Assessment program is on track to achieve the monthly target of 11,188 feet, just over two miles.
**WATER OPERATIONS** (continued)

The Northwest Interceptor (NWI) parallels the Rouge River and collects combined sewage from the East-West sewers serving the Rouge River Valley, Dearborn, Allen Park, and Melvindale. The diameter of the NWI varies from 4 ft-0 in. in the northern section to 10 ft-0 in. where it joins the Oakwood interceptor.

**INFORMATION TECHNOLOGY**

Starting on Sunday July 23, GLWA experienced an IT hardware failure in one of the Authority's main data center storage devices which prevented users from accessing several key applications and file shares on the network. After working around the clock, the IT Team working in concert with contracted staff and problem solving with DWSD was able to resolve the issue and all systems and data were fully restored as of the end of the day August 1. The hardware that failed was planned for replacement, and during restoration, several applications were moved to the new devices where testing was well underway prior to the failure. The failed hardware contained internal drive redundancies which functioned as intended and 100 percent of data and all applications were recovered.

The IT Infrastructure and Security teams improved the operating system security patch compliance of the Windows workstations and servers to over 95%. We are also working to decommission a handful of systems running obsolete, unsupported operating systems. Once the decommissioning work is complete, GLWA will be at 99% security patch compliance on the Windows workstations and servers.

The IT Security and Risk Management team, along with the Security team led by Chief Jones, is participating in Department of Homeland Security critical infrastructure security reviews. To date, these reviews have been done at the Belle Isle Intake and the Water Resource Recovery Facility. Upcoming reviews will be held at Water Works Park, and the Lake Huron Water Treatment Plant.

The IT Applications Delivery team has implemented the ability to attach documents to WAM requisitions for all users. Job aids were developed, and 19 sessions for 124 people took place throughout June and July. This new feature eliminates the need to e-mail quotes and other attachments separately from the requisition and makes the attachments available for viewing, by users with the proper permissions, in WAM and BS&A.

The IT Service Delivery Team has successfully completed the implementation of GovDelivery. GovDelivery is a communications tool that allows authorized users to send e-mails, SMS messages, and automated phone calls to targeted groups, which can be pre-configured in the system. It also allows people to subscribe to e-mail updates.

GovDelivery includes the ability for branding by using templates that can be built in the system. Currently, Public Affairs, Security, Organizational Development, and Information Technology are using GovDelivery.

The IT Security and Risk Management team has led the rollout of cybersecurity awareness training to all GLWA email addresses.
INFORMATION TECHNOLOGY (continued)

This training raises users’ awareness of and knowledge about cybersecurity safe practices, and is part of a comprehensive cybersecurity program that is designed to mitigate the cybersecurity risks that GLWA faces.

The IT Business Intelligence team has kicked off a project to provide the Finance Area with the ability to generate ad-hoc reports from a data mart containing merged data from BS&A and Ceridian DayForce. This will reduce the amount of time involved relative to manual processing and analyses performed in Microsoft Excel, ensure data integrity and reduce the amount of manipulation needed to produce a report.

The IT Service Delivery team issued 45 new tablets to DWSD Maintenance & Repair crews for field use for accessing organizational data and Service Link applications. The allocation of additional tablets involved coordination with DWSD leadership and GLWA application teams, to coordinate and train field crews with application and device training.

The IT Project Management Office (PMO) has successfully rolled out a new project intake and prioritization process that ensures GLWA leverages IT resources to implement projects with the greatest benefit to the organization. Business cases are developed for each potential project in collaboration with the requesting business unit. The project is scored based on standard criteria that reflect how valuable the project will be to GLWA and how able the organization is to execute the project. The scored projects are presented to the IT Steering Committee along with an analysis of available capacity for additional project work. In July, the IT Steering Committee approved four of seven projects, based on capacity and score.

PUBLIC AFFAIRS GROUP

On July 20, 2017, CEO McCormick conducted her final 2016 Year in Review employee town hall meeting, with the team at the Lake Huron Water Treatment Facility. Now that all GLWA facilities have been reached, a video of the Town Hall is being finalized and will be published to the GLWA Intranet for viewing by all GLWA team members.

As a part of the implementation of GLWA's internal communications strategy, Public Affairs is in the pre-production stage of first "One Water News" video broadcast. This 30-minute program will present feature stories on GLWA's Hungry Leaders leadership training series, a behind the scenes look at the role WRWF's clarifiers play in the treatment process, the harm that "flushables" can do to our sewer system, GLWA's EITC-I Apprenticeship Program, and much more. It is our goal to produce this video broadcast once a quarter.

SECURITY AND INTEGRITY

During the month of June, the Security and Integrity Group has finalized the Security Forum presentation, in addition to the FEMA 310 Threat and Hazard Identification and Risk Assessment.
SECURITY AND INTEGRITY

GLWA Security and Integrity has completed the Threat and Vulnerability Assessment for WWP and the Huron facilities, but continues to work on the WWP Evacuation Plan.

With the GLWA Shared Services arrangement for DWSD Security ending as of July 1, transition of this service back to DWSD was concluded in July.

ORGANIZATIONAL DEVELOPMENT

Efforts are continuing for updates to the GLWA training program. Efforts include an updated curriculum for the mandatory Safety and Leadership classes that impact team members and Managers, as well as the implementation of the Cornerstone Learning Management System that is scheduled for implementation in August 2017.

There have been seven (7) new hires since the June 2017 CEO Report. New Employee Orientation continues on the last Friday of each month. Our current staff count is 870.

Review of Annual Performance Evaluations for GLWA team members is underway. Organizational Development is currently reviewing a new Performance Evaluation tool for use during the 2017-2018 Period.

FINANCIAL SERVICES GROUP

Financial Reporting and Accounting

We are excited to confirm that new inventory reporting for the Work and Asset Management system (WAM) is live and currently in use. This results in a more efficient process, eliminates waste, simplifies ordering, and will generate efficient reporting for users.

The following numbers represent the Accounts Payable team activity for the month of June:

<table>
<thead>
<tr>
<th>June 2017 - Accounts Payable Activity</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Checks Issued</td>
<td>1,433</td>
</tr>
<tr>
<td>Vendors Paid</td>
<td>327</td>
</tr>
<tr>
<td>Dollar Amount Paid</td>
<td>$ 24,451,432.57</td>
</tr>
<tr>
<td>Average # of Invoices Processed Per Day</td>
<td>68</td>
</tr>
</tbody>
</table>

The inaugural annual financial audit will be filed on the extended due date of July 31, 2017. Staff and auditors have already begun planning for the FY 2017 audit with a due date of December 31, 2017.

Transformation

The Transformation Team is updating GLWA Lean training materials to meet the Lean certification requirements of the American Society for Quality (ASQ). ASQ is the leading certifier of Lean proficiency.
While requiring a more thorough mastery of Lean concepts, ASQ certification will provide our Green Belts a more widely recognized level of excellence. It will also provide the same level of recognition for the GLWA Lean program.

**Internal Audit & Data Analytics**

The Internal Audit & Data Analytics (IADA) team is pleased to share that the pre-assistance to the Shared Services “true-up” is nearing completion. This encompasses documentation of the procedures that encompass the 22 areas of services shared between GLWA and DWSD.

IADA participated in the year end physical inventory count organized by the Logistics and Materials team. Through organization, excellent team work, and persistence, Logistics and Materials finished inventory an entire day ahead of schedule and with significant upgrades in controls and independent verification by the Data Analytics team. It should also be noted IADA coordinated the site visits by GLWA’s external auditors from Rehmann Robson who made site visits, test counts, and observations during the FY 2017 year-end inventory.

**Procurement**

The following numbers represent the Construction & Contract Services activity through the month of June 2017:

<table>
<thead>
<tr>
<th>Month</th>
<th>January</th>
<th>February</th>
<th>March</th>
<th>April</th>
<th>May</th>
<th>June</th>
<th>YTD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>1</td>
<td>-</td>
<td>2</td>
<td>1</td>
<td>7</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td>Consultant</td>
<td>9</td>
<td>8</td>
<td>7</td>
<td>2</td>
<td>6</td>
<td>14</td>
<td>46</td>
</tr>
<tr>
<td>Design/Build</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>Legal Services</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Grand Total</td>
<td>13</td>
<td>9</td>
<td>11</td>
<td>4</td>
<td>14</td>
<td>18</td>
<td>69</td>
</tr>
<tr>
<td>Value</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>$995</td>
<td>$ -</td>
<td>$654</td>
<td>$1,637</td>
<td>$37,652</td>
<td>$10,093</td>
<td>$51,031</td>
</tr>
<tr>
<td>Consultant</td>
<td>2,512</td>
<td>1,773</td>
<td>3,214</td>
<td>69</td>
<td>8,637</td>
<td>20,380</td>
<td>36,585</td>
</tr>
<tr>
<td>Design/Build</td>
<td>3,590</td>
<td>-</td>
<td>321</td>
<td>-</td>
<td>100</td>
<td>-</td>
<td>4,011</td>
</tr>
<tr>
<td>Legal Services</td>
<td>750</td>
<td>250</td>
<td>50</td>
<td>-</td>
<td>-</td>
<td>350</td>
<td>1,400</td>
</tr>
<tr>
<td>Grand Total</td>
<td>$7,847</td>
<td>$2,023</td>
<td>$4,239</td>
<td>$1,705</td>
<td>$46,389</td>
<td>$30,823</td>
<td>$93,027</td>
</tr>
</tbody>
</table>

**June 2017 - Contracts in Process**

<table>
<thead>
<tr>
<th>Month</th>
<th>Quantity</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>$88,047</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>$69,139</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>$37,452</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>$78</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>$1,495</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>$27</td>
<td></td>
</tr>
<tr>
<td>67</td>
<td>$196,238</td>
<td></td>
</tr>
</tbody>
</table>
FINANCIAL SERVICES GROUP (continued)

**Treasury**

The Treasury team continues to move forward in establishing standardized processes and procedures to support the cash management requirements for GLWA. In the coming weeks, GLWA will implement a new remote deposit capture (RDC) process for all wholesale receipts. RDC allows scanned payment information to be sent from our offices directly to the bank for deposit. The implementation of this process improves identification of wholesale vs. retail receipts which will streamline the reconciliation process.

**WRAP Update**

The Water Residential Assistance Program (“WRAP”) has completed its first year of assisting water and sewer customers within the Great Lakes Water Authority service area. WRAP began accepting applications for residential customer assistance on March 2, 2016, with the first community to opt into WRAP being the City of Detroit. Subsequently, outreach meetings were held in Wayne, Oakland and Macomb Counties to educate GLWA customer communities on details of the WRAP and what was required to “opt-in” to the program. Since those meetings, Wayne Metro, along with the Community Action Alliance partners, have been working with individual communities to get them opted into the WRAP. As of May 31, 2017, 62 communities have opted into the program, an increase of two communities since April 2017.

Below is a summary of committed and spent WRAP funds, as well as home audits and home repairs performed through May 31, 2017 for the City of Detroit and Suburban participants.

<table>
<thead>
<tr>
<th>WRAP Funding Status</th>
<th>Detroit</th>
<th>Suburban</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>As of May 31, 2017</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scheduled Appointments</td>
<td>11,667</td>
<td>3,306</td>
<td>14,973</td>
</tr>
<tr>
<td>Completed Pre-Applications</td>
<td>10,865</td>
<td>3,120</td>
<td>13,985</td>
</tr>
<tr>
<td>Households Assisted</td>
<td>2,924</td>
<td>1,789</td>
<td>4,713</td>
</tr>
<tr>
<td>Shutoffs Avoided</td>
<td>2,492</td>
<td>421</td>
<td>2,913</td>
</tr>
<tr>
<td>Home Audits</td>
<td>937</td>
<td>205</td>
<td>1,142</td>
</tr>
<tr>
<td>Number of Home Repairs</td>
<td>594</td>
<td>115</td>
<td>709</td>
</tr>
<tr>
<td>Amount of Home Repairs</td>
<td>$374,991</td>
<td>$76,510</td>
<td>$451,500</td>
</tr>
<tr>
<td>Average Cost of Home Repair</td>
<td>$631</td>
<td>$665</td>
<td>$637</td>
</tr>
<tr>
<td>Total Bill Assistance Committed</td>
<td>$832,988</td>
<td>$562,989</td>
<td>$1,395,977</td>
</tr>
<tr>
<td>Total Arrearage Assistance Committed</td>
<td>$1,627,163</td>
<td>$543,471</td>
<td>$2,170,634</td>
</tr>
<tr>
<td>Total Assistance Committed</td>
<td>$2,460,151</td>
<td>$1,106,459</td>
<td>$3,566,610</td>
</tr>
<tr>
<td>FY 2016 &amp; FY 2017 WRAP Funds Uncommitted*</td>
<td>($177,498)</td>
<td>$3,680,712</td>
<td>$3,503,214</td>
</tr>
<tr>
<td>FY 2016 Uncommitted Funds Reallocated to Detroit</td>
<td>$1,664,833</td>
<td>($1,664,833)</td>
<td>0</td>
</tr>
<tr>
<td>Net FY 2016 &amp; FY 2017 Funds Uncommitted</td>
<td>$1,487,335</td>
<td>$2,015,879</td>
<td>$3,503,214</td>
</tr>
<tr>
<td>Total Bill and Arrearage Assistance Paid to Date:</td>
<td>$625,986</td>
<td>$128,968</td>
<td>$754,954</td>
</tr>
</tbody>
</table>

* Does not include previously committed amounts returned to the Detroit assistance budget from households dropping out of the program.
TRAINING AND STAFF DEVELOPMENT

Congratulations to Water Operations team members Abdul Rahman (F-3) and John C. Tom (S-1) for passing their Water Operations license exam taken on May 3, 2017. Drinking Water regulations mandate any drinking water system or portion of the system which has been classified in accordance with Michigan Department of Environmental Quality (MDEQ) rules, shall be under the supervision of an operator in charge, who shall be certified in the system. The purpose of operator certification is to demonstrate that he or she possesses the skill, knowledge, experience, and education necessary to operate a system successfully.

LEGAL

General Counsel's July Report is an attachment to the Chief Executive Officer’s Report.

Respectfully submitted,

Sue F. McCormick
Chief Executive Officer

SFM/dlr