



Office of the Chief Executive

735 Randolph Street, Suite 1900

Detroit, Michigan 48226

August 22, 2018

The Honorable
Board of Directors
Great Lakes Water Authority

Dear Chairman Hendrix and Directors:

Regarding: CEO's Report – August 22, 2018

The summer heat and 30 day or longer drought has been accompanied by only a modest increase in water pumpage over the same period in 2017, continuing to demonstrate that the declines in consumer usage across the country are here to stay. More significantly than the pumpage are the modest peak demands that came with these extreme weather conditions. In 2017, the Maximum Day Demand was 743, while year to date for 2018, the Maximum Day Demand was 708 MGD. In comparison, GLWA has 1740 MGD in treatment capacity. These trends continued to demonstrate the value and validity of GLWA's capacity management strategy for the water system.

GLWA is in an enviable position in the water sector, able to take advantage of the system's five (5) plants and transmission system flexibility, providing GLWA the ability to avoid capital investment in underutilized facilities. Projects in GLWA's transmission, treatment and pumping facilities continue to deploy the strategy outlined in the Water Masterplan to 'right-size' treatment and pumping while investing in long lived transmission pipes that further increase flexibility in the use of remaining facilities, providing for significant capital cost avoidance estimated on the order of \$40 million per annum.

Last week we were in New York meeting with the rating agencies as we contemplate a potential refunding transaction and issuance of new money bonds for the local DWSD sewer system. We were able to share the GLWA success story of our many accomplishments and recognitions to date and found the rating agencies very interested in the creative approaches that GLWA is employing to meet both the regional as well as the common challenges the sector is facing.

On Monday August 20, GLWA and DWSD met with the MDEQ to continue discussions regarding our National Pollutant Discharge Elimination System (NPDES) Permit renewal. The meeting was productive with both sides agreeing to do further review and continue the discussion in September.

PLANNING SERVICES

Asset Management and CIP Group

As part of the Asset Management Planning (CS-198) project, an all Asset Management Strategic Organization team meeting will occur on August 29, 2018 to review the success over the past year and to officially roll out the Strategic Asset Management Plan (SAMP) project throughout GLWA. Over the next five months, several key tasks will occur that provide momentum and a solid foundation for the successful completion of the SAMP. These upcoming tasks include:



- Certification of 25 team members in Principles of Asset Management, Institute of Asset Management.
- Utilization of the International Water Services Association of Australia (WSAA) asset management benchmarking assessment and roadmap planning tool to jumpstart team collaboration activities, provide a comparison of GLWA asset management process relative to peer organizations, and provide a baseline from which to gauge future improvements.
- Hosting an international Blue-Ribbon Panel of asset management experts to allow for the routine engagement by peers to share perspectives, lessons learned and new asset management concepts and practices.

GLWA is currently under contract negotiations and final scope development for project CS-271 related to the advisory services associated with the upgrade or replacement of an Enterprise Asset Management (EAM) system. This solicitation is to procure services to gather business and system requirements for the replacement of GLWA's Work and Asset Management system, develop a comprehensive system design, develop a request for proposals for an EAM application purchase and implementation and to provide oversight services for the system implementation.

The request for proposals for the Capital Improvement Program Delivery initiative (CS-271) is currently open and can be found at the following hyperlink:

<https://glwater.bonfirehub.com/opportunities/9542>

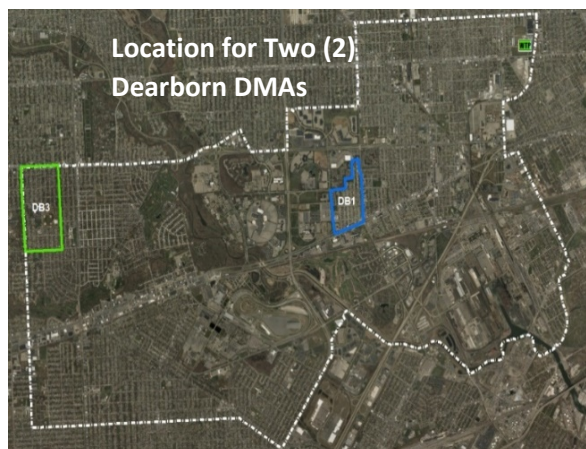
Questions regarding this solicitation are due September 17, 2018 and proposals are due October 5, 2018.

The Asset Management and CIP Work Group held on July 24, 2018 focused on Finance and Procurement initiatives. The Financial Services Team spoke on a variety of topics such as process improvements within their area and the Construction Work In Progress Report (CWIP). The team also discussed how technology and communication tools such as Bonfire and the Vendor Outreach event and Small Business Initiative helps to promote transparency and collaboration, as well as what is next on the horizon for the procurement team. Participants were encouraged by the work that is being done and look forward to seeing the future improvements. The next work group meeting on September 25, 2018 will be focused on Asset Management.

PLANNING SERVICES (continued)

System Analytics and Meter Operations Group (SA&MO)

The “Units of Service for Non-Master Metered Customers and System Water Audit” team continues to meet with the non-master metered member partners to plan and execute Phase 2 activities of the study. There are two district metered areas (DMAs) planned for City of Dearborn in Phase 2 of the study. The field equipment for the first DMA labelled DB1 in the figure on the right is in place as of August 3, 2018. The DMAs will collect the real-time field data to support the study. Similarly, there are four DMAs planned for the City of Detroit.



The System Analytics and Meter Operations group is finalizing updates to the Wholesale Automated Meter Reading (WAMR) Portal. The update will enable the site to be used on mobile devices. The group plans to roll out a test version of the site to a WAMR user group in the next month to test the solution and obtain feedback.

The West Side Sewer Modeling and Monitoring Program is ongoing. A progress meeting with the Michigan Department of Environmental Quality (MDEQ) was held in July 2018 that included discussions related to data analysis and model calibration. The fully calibrated model is expected on August 31, 2018. The next meeting with MDEQ on this effort is scheduled for September 17, 2018.

As a part of GLWAs capacity management efforts, SA&MO is performing hydraulic modeling and analysis for the Lake Huron Pump Upgrade Project. A Capacity Management Team has been formed to consider the wholistic implementation of this aspect of the Water Masterplan. This team held their first meeting in July.

Systems Planning Group

A workshop on Non-Revenue Water Benchmarking is being planned by the Water Management Best Practices Work Group. This workshop follows the success of the Water Storage Best Practices Workshop that occurred in May. The group determined the main objective of the workshop is to build a common understanding of:

- Non-revenue water, steeped in the AWWA definition;
- Related best practices (e.g. AWWA worksheet) and;
- Regional interconnectedness as it pertains to non-revenue water.

The date of the workshop is yet to be determined. If you are interested in participating in the planning, please contact outreach@glwater.org.

PLANNING SERVICES (continued)

The One Water Co-chairs will meet in August 2018 to plan the September 20, 2018 One Water Partnership Meeting that is being held at the VisTaTech Center at Schoolcraft College in Livonia. An invitation has been sent to members. If you are interested in attending, please contact outreach@glwater.org.

July Member Outreach Meeting Attendance	
<u>Meeting</u>	<u># Attended</u>
Water Analytical Work Group (7/17)	44
Wastewater Charges Work Group (7/18)	40
Asset Management/CIP Work Group (7/24)	44

The Regional Collaboration Group met in July 2018 to review data from two small storms and the impact the storms had on the regional wastewater system. Additional small storm data will be analyzed and then brought to the full Wastewater Master Plan Steering Team for review and discussion.

The Wastewater Master Plan Steering Team will meet in August to continue work in the following interest groups: Regional Operations Plan, Green Solutions, and Resource Recovery.

WASTEWATER OPERATING SERVICES

Wastewater Operations Group

The Water Resource Recovery Facility (WRRF) operations remained in substantial compliance with the Water Quality Standards for the month of July 2018. The single exception was due to one short discharge event that may not have fully flushed out the channels and may not represent the treated wastewater characteristics. As a result, the Rouge River Outfall exceeded limits for carbonaceous biochemical oxygen demand, total suspended solids, and total phosphorus.

Engineering & Maintenance Groups

The construction of the Rouge River Outfall Disinfection Project is progressing with a targeted construction completion date of April 1, 2019, as required by the NPDES permit. Current work efforts include interior coating of the sodium hypochlorite tanks, installation of pumping systems, electrical, plumbing, HVAC, fire suppression and process piping in the new hypo building. Also underway is construction of the primary effluent disinfection and metering facilities.

Construction related to the Rehabilitation of Rectangular Primary Clarifiers project and Aeration System Improvements project is also progressing.

WASTEWATER OPERATING SERVICES (continued)



Work in and around the Hypo Building is in progress

The WRRF Design Engineering Team conducted a mandatory pre-proposal meeting and site walk-through for the RFP - Professional Engineering Services for WRRF Rehabilitation of Pump Station No. 1 Improvements. There were over 30 vendors that attended.

The WRRF Maintenance Team solved a long-standing operational issue in July. Historically, one of the six primary sludge thickener tanks were used only for rain events due to its poor operation. A thorough examination of the thickening tank drawings revealed the suction line for this tank was mislabeled as a “drain.” The suction line was cleaned and televised, then the tank was placed back into service with greatly improved operations. This has increased primary thickening capacities by 20% with minimal expenses to the organization.

Ongoing efforts in restoring locker rooms at the WRRF have continued. Showers, lockers and floor tiles have been repaired in preparation for general cleaning and painting.

Installation of seagull deterrent facilities continues at the former Detroit Marine Terminal property. The WRRF has been praised for their efforts in controlling the seagull population by the Detroit Audubon Society. Seagull fatalities due to traffic on West Jefferson are markedly lower this year than previous years.

WASTEWATER OPERATING SERVICES (continued)

Industrial Waste Control (IWC) and Analytical Laboratory

GLWA submitted the Pretreatment Program to the Michigan Department of Environmental Quality (MDEQ) through the MiWaters system in November 2017. This program included GLWA rules adopted in 2016. A conference call with MDEQ was held in February 2018 that resulted in GLWA agreeing to make changes to the rules which require Board action. In July

2018, values in our Local Limits Evaluation Report were accepted by the MDEQ. With MDEQ's agreement with our Local Limits, GLWA has developed final changes to the GLWA rules and has scheduled an internal final review meeting with General Counsel to finalize the document for Board action. Following approval by the Board, the rules will be submitted to our member partners for concurrence and approval by supporting resolution before becoming effective.

CSO Control Program

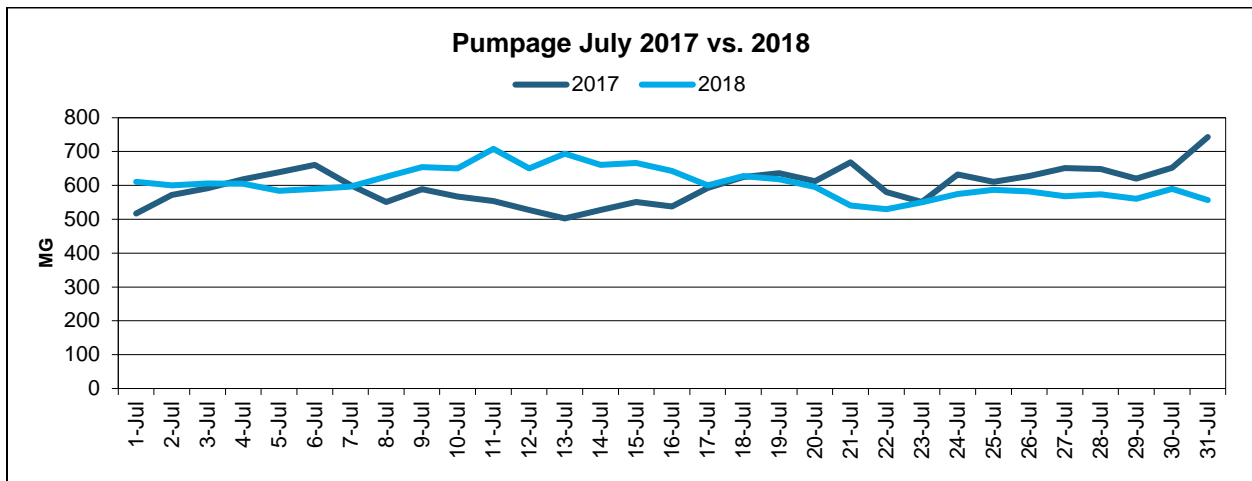
The GLWA CSO Control Program Team in partnership with the CSO Operations Team continue to identify, prioritize, and address facility maintenance, equipment, and logistics issues. A variety of projects to increase reliability and functionality are underway. The CSO Facility roof inspection project has been completed.

WATER OPERATIONS

Systems Control

July System Pumpage

Water pumpage for July 2018 was 1.3% higher than July 2017



WATER OPERATIONS

Energy, Research & Innovation

Energy Management compared billing information from June 2017, which was the first full month that the Atlas platform was online at the Adams Road Pumping Station, to June 2018, after operators were trained and informed how to utilize the tool. Comparing the kilowatt hours for the two months using DTE bills and normalizing the data to align the number of days billed shows a 19.85%-kilowatt hour (kwh) reduction in energy consumed. This pilot shows the value of analyzing existing data to operate more efficiently, and is a current example of continued operational optimization.

Research & Innovation (R&I) staff in collaboration with the University of Michigan Professor Dr. Glen Daigger presented the findings of the project on “Chemical and Biological Phosphorus Removal at One of the World’s Largest Water Resource Recovery Facilities” at the 2018 Michigan Water Environment Association (MWEA) conference. It was GLWA’s honor and privilege to share our story on phosphorous removal.

INFORMATION TECHNOLOGY

The IT Group finalized new policies to standardize and govern distribution and appropriate usage of personal computers and mobile devices. Those policies are 206.6 “Cell Phone Policy” and 206.7 “Computer Policy”. The IT Group finalized a second amendment to our existing AT&T contract which was approved by the Board of Directors in July, 2018. This amendment incorporates significant cost savings due to renegotiated pricing, a nearly \$3M dollar reduction in the Minimum Annual Revenue Commitment (MARC) and the resolution of billing disputes. Other benefits gained with this amendment include the optimization of services, the elimination of redundant technology and increased flexibility to terminate services without penalties.

The Security & Risk Team has noted a surge in 'bitcoin miner' attack attempts in the first half of 2018. 'Bitcoin miner' attacks attempt to steal processor cycles on computing resources (desktops, laptops, tablets, and smartphones) to run bitcoin calculations. Not only do these attacks potentially take processor cycles that would be used for legitimate business purposes, but they also serve as a launching point for further, more intrusive attacks. On average, GLWA's IT security defenses block roughly 100 'bitcoin miner' attack attempts per week.

The Security & Risk Team, in coordination with the American Water Works Association (AWWA), is hosting a cybersecurity workshop for Michigan water professionals, in Wyoming, Michigan, on December 6th. This is the second workshop in this series, for Michigan water professionals interested in increasing the cybersecurity of their infrastructures.

The Enterprise Applications Team, in collaboration with Systems Control completed development of the Geographic Information Systems (GIS) Water System Map. Data is taken from our operational software system incorporated into a map. This data is refreshed every 30 seconds and reflects the most recent information from the operational software system.

INFORMATION TECHNOLOGY (continued)

The Water System Map displays our WAMR meters that are outside of their designated pressure ranges, the pressure monitoring points that are out of range, and the pump stations with pressure readings that are out of range for reservoir levels and suction / discharge points.

The Line of Business Applications Team along with the Financial Services Area implemented a new time tracking system for GLWA team members who record time for capital projects and shared services. The new software is named BigTime, and GLWA team members began using it on July 1, 2018 for the beginning of the new fiscal year.

BigTime replaces the manual, Excel-based processes that were previously in place. Use of BigTime is expected to improve the quantity, quality, and timeliness of information captured, while reducing the amount of time spent capturing the information. BigTime will better enable GLWA to track and charge for time spent on activities for DWSD and to track and capitalize time spent on capital projects.

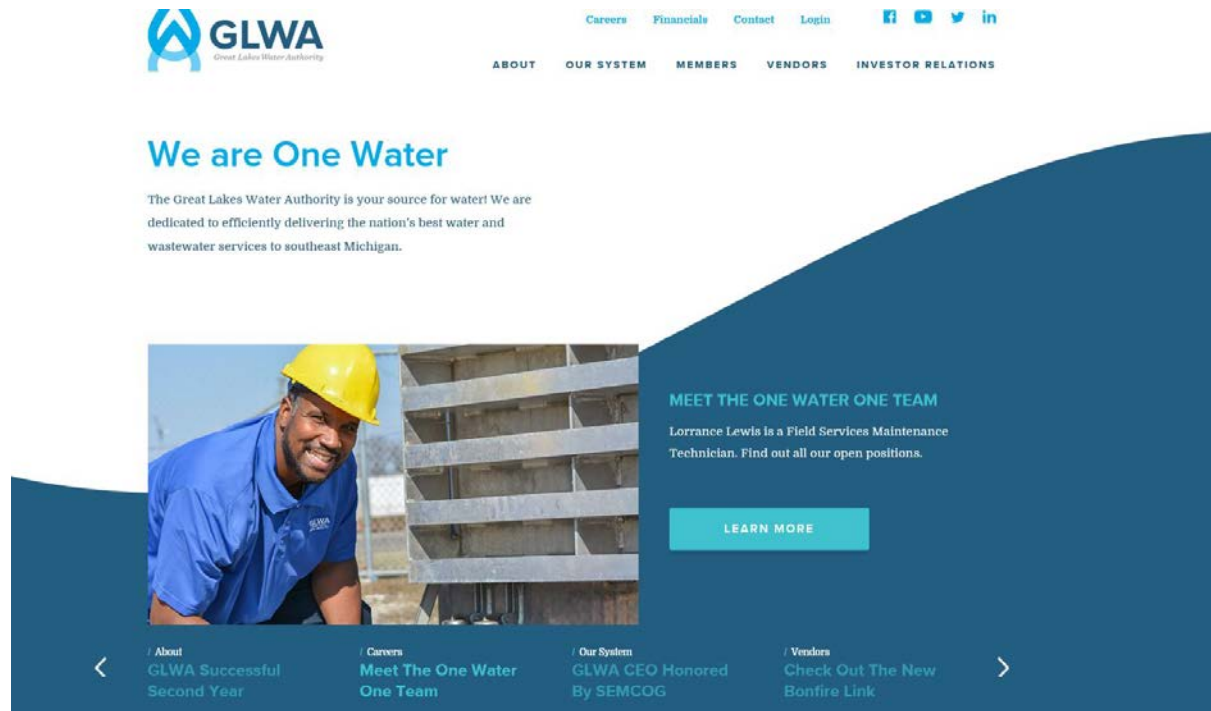
The Project Management Office (PMO) is currently managing 27 active projects and processing 14 project requests.

PUBLIC AFFAIRS GROUP

GLWA has launched its new, redesigned public website. The Public Affairs Team partnered with the Information Technology Enterprise Applications Team and website design experts Skidmore Studios to develop a new website that is user-friendly and creates an engaging experience for users. The redesign was guided by team member feedback from the 2018 Internal Communications Survey, including a new focus on our team members and member partners. Users can expect a website that is easier and more intuitive to navigate, and automatically adapts to any mobile platform. Key new features include a dynamic home page that has a section with four sliding images that Public Affairs can update at a moment's notice, an emergency banner that will appear at the top of all pages when there is a boil water advisory or other important system information to share, rotating team member highlights on the career page, and new facility photos throughout. Images and information will be updated regularly to keep a fresh appeal and to provide the most current information possible.

PUBLIC AFFAIRS GROUP (continued)

Here is a snapshot of the new homepage:



In support of GLWA’s efforts related to seeking an increase to the Authority’s bond ratings, Public Affairs produced a nearly seven-minute video that highlights GLWA’s commitment to asset management and the CIP process, and captures the “bench strength” of the leadership team not in attendance at the Rating Agency Meetings. The video will be included in our on-going social media efforts, and on our new website.

Continuing our brand recognition and community outreach efforts, approximately 2,000 GLWA-branded collapsible water bottles were provided to both Wayne County and the City of Detroit for their annual back-to-school fairs.

SECURITY AND INTEGRITY

During the month of July and August, the Security and Integrity Group’s Hazmat Team has gone live servicing WRRF for all Hazmat and Confined Space related calls for service.

Security and Integrity is finalizing its planning for the multi-agency Homeland Security emergency preparedness Table-Top Exercise for August 30th at the Lake Huron Water Plant.

ENTERPRISE RISK MANAGEMENT

The mediation process regarding insurance proceeds related to the March 2016 fire at Complex II Incineration continues. We do not have a timeframe for concluding this matter; the mediation umpire has recently requested additional information/documentation on certain items before he renders his final decision. Prior to the start of mediation, the insurance provider's offer stood at \$16.2 million. GLWA's demand was \$17.4 million, of which over \$12 million has been advanced.

September marks the start of GLWA's annual insurance policy renewals for: Property, Public Officials and Employment Practices Liability, Pollution Legal Liability, and Casualty (General Liability, Automobile, and Workers' Compensation) all of which expire on or about December 31, 2018.

Preliminary meetings with GLWA's Information Technology team and new broker, Marsh, regarding Cyber/Network Security risks and the potential need for a tailored risk-transfer insurance policy will take place on August 23.

The Board approved a three-year extension for GLWA's third-party administrator subject to negotiated pricing and, in that regard, we expect to finalize that contract extension well before the current contract expires on December 31, 2018.

ORGANIZATIONAL DEVELOPMENT

Benefits

Open Enrollment is tentatively scheduled for November 1 – 19, 2018. In preparation for Open Enrollment, OD Benefits has met with all current benefit carriers and vendors. Renewal rates have been requested. BCBSM and HAP are still compiling their renewal packages.

The Executive Committee of AFL-CIO Employer Purchasing Coalition has begun the RFP process for Pharmacy Benefit Manager services. CVS Caremark has been notified of our intent to terminate the existing agreement June 30, 2019, and they have been invited to participate in the RFP process. Due to numerous negative service issues, we are reviewing proposals from vision providers.

Recruiting

Staff count for July 2017 was **890** and July 2018 is **975** resulting in **9.55%** increase (based on staff count in 2017 to present). Beginning January 1, 2018 to date, we have hired 148 new team members.

The Chief Operating Officer Recruitment for Wastewater Operations remains open. First round interviews were concluded. Final interviews are concluding this week.

ORGANIZATIONAL DEVELOPMENT (continued)

Training

Between July 1, 2018 and July 31, 2018, GLWA:

- Provided 2302 hours of training and development.
- Provided training and development to 377 GLWA team members (more than one course per team member).
- Facilitated 15 courses in Safety, Water Operations, Wastewater Operations and Technology.

STAFF KUDOS

Kudos to Mini Panicker, Engineer – Systems Control Center, for being appointed to serve on the Collection System Committee for the Water Environment Federation (WEF). Mini has been managing GLWA’s sewer condition management program and has been an active participant at WEF’s Collection System Symposium. WEF is a not-for-profit association that provides technical education and training for thousands of water quality professionals who clean water and return it safely to the environment. WEF members have proudly protected public health, served their local communities, and supported clean water worldwide since 1928.

FINANCIAL SERVICES GROUP

The Financial Services Group August Report will follow as an attachment to the Chief Executive Officer’s Report.

LEGAL

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

Respectfully submitted,



Sue F. McCormick
Chief Executive Officer

SFM/dlr

Office of the General Counsel – August, 2018

- ***NPDES Permit Renewal and ACO Dismissal:*** The Office continues to support this initiative and has retained an expert to assist in this endeavor. The Office prepared and submitted the renewal application for the Permit and materials on financial capability. GLWA received the draft Permit and is reviewing it.
- ***Legislative Updates:*** The Office continues to support HB 4806 which contains amendments to the exception to governmental immunity, regarding liability for sewer back up claims. GLWA continues to cooperate with member partners on the Lead and Copper Rules as well.
- ***Gordie Howe International Bridge:*** Pursuant to the Uniform Relocation Act, MDOT has requested a meeting to discuss its requirement to offer advisory relocation services to GLWA, e.g. the benefits that GLWA is entitled to and the services MDOT can provide; to push MDOT's demand for a January 1, 2019 possession date, including whether this may require a double relocation; and to secure access to the site for testing. MDOT and GLWA continue to work together to discuss the relocation. Recently, the parties are working together to negotiate a utility easement.
- ***Water Contract Reopener Negotiations:*** The model water contract prescribes specified periods at which the parties are encouraged to renegotiate the contract max day and peak hour values. At the December One Water Partnership meeting, the customer membership voted to move all contracts to the same reopener schedule. Beginning in March 2018, GLWA embarked on negotiations with 55 customers over an 8-month period to effectuate this request. Customers who did not have a reopener this past Fall were divided into 8 roughly regional groups and randomly assigned a negotiation month between March and October. In June, the team met with Grosse Pointe Shores, Grosse Pointe Woods, Hamtramck, Harper Woods, Hazel Park, Oak Park and Warren with a targeted for approval by early September. In July, the team met with Commerce, Farmington, Farmington Hills, Novi, SOCWA and Walled Lake are underway and targeted for approval by early October.
- ***Water Contract Negotiations:*** The Office has begun discussions with the City of Dearborn related to a model water contract.
- ***Environmental and Workplace Safety Compliance:*** The Office continues to work with the COO and team leaders from both the water and sewer systems to comply with regulations and to respond to any alleged violations.
- ***Operations:*** The Office prepared access and maintenance agreements as requested by water and wastewater operations.

- **Record Retention Policy:** The Office is drafting a record retention policy for GLWA.
- **Industrial Pretreatment Program:** The Office continued to work with the Industrial Waste Control Group and external stakeholders on finalizing and implementing an updated IPP and overseeing the current program.
- **Member Outreach:** The Office continues to be an active participant in Member Outreach sessions.
- **Main Relocations:** The Office continues to support water operations in its discussions with community stakeholders regarding water main relocations.
- **Third Feed to WRRF:** The Office continues to work with DTE and Conrail to identify the most cost-effective method to construct and operate a third feed to WRRF. The Office negotiated terms to purchase property from Conrail and has filed condemnation actions.
- **Civil Litigation:** The Office continues to vigorously defend actions against GLWA. Since the last report, GLWA received a complaint alleging specific performance of a settlement agreement and complaints seeking to vacate a roadway that GLWA may have utilities lying underneath the roadway. In addition, GLWA continues to pursue its action against Highland Park for the collection of unpaid water and sewer invoices
- **Labor Relations:** The Office continues to provide legal advice to Organizational Development on labor relations and employment matters.
- **Arbitration:** The Office is preparing for an arbitration pursuant to the Leases.
- **Northeast Pump Station:** GLWA will work with OMIDD to begin drafting an operating agreement between the parties.
- **Procurement:** The Office continues to assist GLWA’s Procurement Team negotiate contracts, change orders and amendments and interpret contractual provisions. The Office is also assisting with the Procurement Policy.
- **Canfield Water Main Break:** The Office is assisting in investigating the cause of the main break.

- **Past Month’s Statistics:**

Contracts reviewed as to form:	16
Contracts drafted or revised:	7
Subpoenas/Information requests received:	4
Subpoenas/Information responded to:	6