



**Office of the Chief Executive**

735 Randolph Street, Suite 1900  
Detroit, Michigan 48226

October 24, 2018

The Honorable  
Board of Directors  
Great Lakes Water Authority

Dear Chairman Hendrix and Directors:

**Regarding: CEO's Report – October, 2018**

What a difference a year makes. One year ago, at this time, GLWA and its member-partners worked together to address a break in our 14 Mile water main that impacted nearly 300,000 residents in 11 communities. Through cooperation, coordination, and innovation we were able to promptly effectuate the necessary repairs and quickly restore service. This year, on October 17, we announced a new program to use technology to assess the condition of our water transmission mains and contribute to the sustainability of the GLWA system.

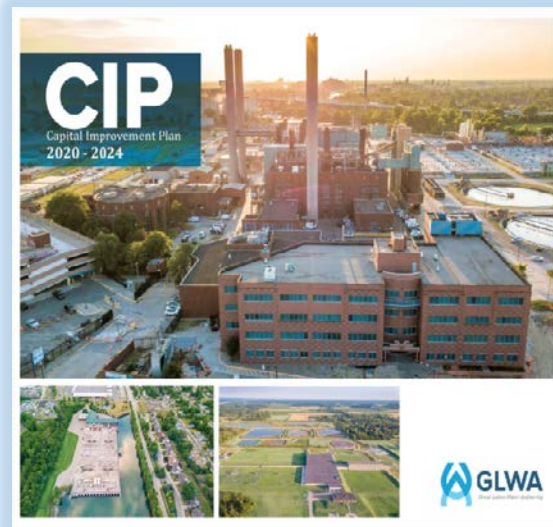
This new program utilizes SmartBall and PipeDiver technology to assess the conditions of our mains, in an effort to enhance our ability to gather data necessary to perform preventative maintenance saving time, money and interruptions for all concerned. The SmartBall technology, which will be utilized first, employs acoustic technology to detect leaks and gas pockets. The PipeDiver technology assesses the main to detect structural weaknesses. Both SmartBall and PipeDiver operate while the main remains pressurized and in operation, which is what makes it so state-of-the-art.

I am happy to report that our October 17<sup>th</sup> event was well covered by our local media. We look forward to updating the Board, our member-partners, and the communities we support on the results of these efforts.

Although he is quickly assimilating and taking on the presence of a veteran GLWA team member, I just wanted to note that Navid Mehran, GLWA's, Chief Operating Officer for Wastewater Operations has completed his first month with our team.

Tomorrow, October 25, 2018, Version 1 of the 2020 – 2024 Capital Improvement Plan (CIP), will be presented at the first Charges Roll-Out Meeting. GLWA’s engineers and project managers have been working diligently on delivering planned projects identified in the previous CIP, and they have also spent a tremendous amount of effort updating existing projects, developing business case evaluations for new projects and prioritizing and reprioritizing all projects within the 2020 - 2024 CIP.

We look forward to discussing the CIP with the Board and our member-partners in the months to come.



Congratulations to GLWA’s Southwest Laboratory which received the “Certificate of Excellence” in recognition of the quality of the laboratory in proficiency testing for WS-265 study from the Environmental Resource Associates (ERA). The laboratory has been recognized as a Laboratory of Excellence for achieving 100% acceptable data in this study, which included 270 participating laboratories. This achievement demonstrates Southwest laboratory’s commitment to superior quality.



Finally, congratulations to Yvette Hayes-Johnson, Mary Lynn Semegen, Christopher Steary and Mathew Mangatt, (pictured below) from GLWA’s Water Operations Group for being the 2018 Fall GLWA MPSI graduates! Participants will receive up to 3.2 continuing education credits for each hour of instruction from the MDEQ. This training is a unique approach at providing various organization’s operation leadership with the tools necessary to impact change in diverse climates.



*From left to right: Yvette Hayes-Johnson, Mary Lynn Semegen, Christopher Steary, and Mathew Mangatt*

## **PLANNING SERVICES**

The Enterprise Asset Management Advisory Services contract (CS-271) has been awarded to Jacobs for consulting services associated with the upgrade or replacement of an Enterprise Asset Management (EAM) system. We are very pleased to be working with Jacobs on this project and are expecting great efficiencies between their work on gathering business and system requirements for the replacement of GLWA's Work and Asset Management system (CS-271) and their work assisting our development of a strategic asset management plan (CS-198).

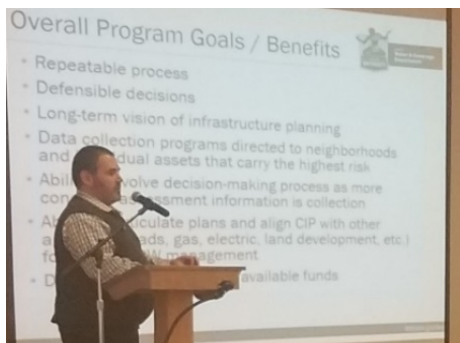
### ***Systems Planning Group***

The Water Analytical Work Group focused on Water Units of Service at the September 18, 2018 meeting. Black and Veatch shared information on Phase 2 implementation in the following areas:

- district metered areas,
- water treatment plant testing,
- transmission blow off valve assessment,
- master metering,
- WAMR meter testing protocols,
- the water audit approach and the process for the wholesale meter audit.

At the same meeting, Jon Wheatley shared summer water usage with the group and walked through the exceedance process review. Information on exceedances was mailed in October and will be discussed at the work group meeting on November 1, 2018.

## **PLANNING SERVICES** (continued)



The September 25<sup>th</sup> Asset Management & CIP Work Group meeting kicked off with a short debrief of the July meeting, which focused on Finance and Procurement. Overall, the feedback from the July meeting was positive and members are excited about the rollout of GLWA's procurement software, BonFire.

The remainder of the Asset Management & CIP work group meeting focused on Asset Management related topics. DWSD's Asset Manager, Sam Smalley, presented and

shared with the group DWSD's Asset Management and CIP Program. Mr. Smalley shared the infrastructure challenges DWSD faces, the creation and goals of their Capital Improvement Program Management Organization (CIPMO) and their go forward plan. Jody Caldwell, GLWA Asset Management Director, and Liz Kelly of Jacobs shared the purpose, goals and schedule of GLWA's Strategic Asset Management Plan (SAMP) with the group. The Strategic Asset Management Plan will provide GLWA with an asset management roadmap and improvement plan over the next 10 years. The meeting concluded with a high-level overview of GLWA's Transmission System Integrity Program, and an overview of the tools and approach for the condition assessment of the 14 Mile Transmission Main.

A flyer titled, "[From Your Yard to Our Waterways](#)" was distributed to members on October 3, 2018. The flyer was developed and reviewed by the Public Education Work Group and shares information and best practices on protecting drinking water with smart stormwater management at home. This flyer, and others like it, can be found on [www.glwater.org](http://www.glwater.org) under "Member Partner Resources." We encourage all members to share this information with their communities. If you or your community is interested in being a part of developing public education materials, or have an idea for materials, email [outreach@glwater.org](mailto:outreach@glwater.org) or attend the next Public Education Work Group meeting on December 6, 2018 at 1:30 p.m. at Cranbrook Institute.



The Wastewater Analytics Task Force met on October 5, 2018 and was focused around the Collection System. Sherri Gee and Chandan Sood provided updates of ongoing initiatives such as the Wayne County Agreements, Wastewater Master Plan, West Side Modeling, D+ Metering and Sewer SHARES. Suzanne Coffey shared GLWA's recommendation regarding Oakland County's Perry Street Diversion. Members agreed to allow Oakland County to adjust flow in this fiscal year to offset last fiscal year's additional flow volumes. Last year, Oakland County sent more flow to GLWA than planned due to a structural failure of the Clinton River WRRF in June of 2017. The System Analytics & Meter Operations team provided sewer meter maintenance updates.



## **PLANNING SERVICES** (continued)

The meeting concluded with Biren Saparia of Systems Control sharing initial results of the collection system inspection.

GLWA is partnering with Oakland County Water Resource Commissioner's (OCWRC) Office to share information regarding Site Sampling Stations. A number of member partners are interested in learning more about the stations due to the increase in water quality sampling that many communities will be facing. OCWRC has been using the site sampling stations for some time and has offered to share their experience and best practices with GLWA member partners on November 5, 2018 from 3pm-4pm at the Troy Community Center. An invitation will be going out soon. For more information regarding the event, contact [outreach@glwater.org](mailto:outreach@glwater.org).

September Member Outreach Meeting Attendance	
Meeting	# Attended
<a href="#">Wastewater Master Plan Steering Team (9/7)</a>	32
<a href="#">Water Analytical Work Group (9/18)</a>	37
<a href="#">One Water Partnership (9/20)</a>	93
<a href="#">Asset Management/CIP Work Group (9/25)</a>	51

The Wastewater Master Plan Steering Team received information about early ideas for alternatives and future planning for the Water Resource Recovery Facility (WRRF). A panel discussion with CSO Facility staff covered considerations for developing the regional operating plan. The panel included Chris Nastally (GLWA), Biren Sapiria (GLWA), Gary Nirgo (OCWRC), Phil Argiroff (MDEQ), and Sam Smalley (DWSD). Interest group topics in October included Green Solutions, Regional Operating Plan, and Resource Recovery.

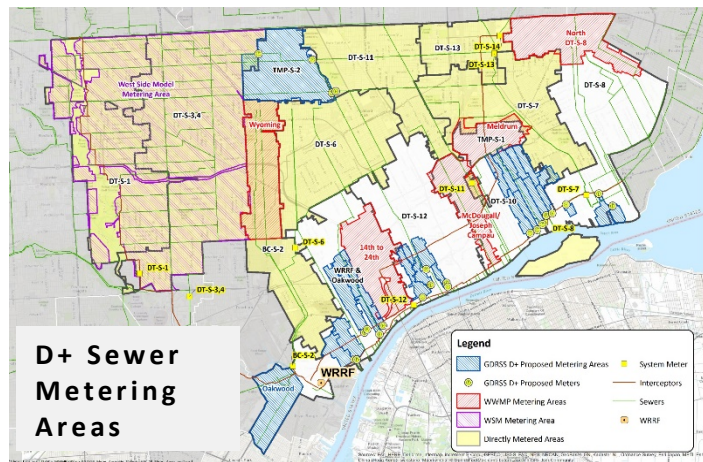
The Sewer SHAREs and Charges Methodology groups continue to meet regularly with member partners. The Charges Methodology group hosted a five-hour workshop on October 8, 2018 aimed at providing a shared understanding of the historical evolution of GLWA wastewater charges. Participants were provided with historical reference materials and presentations to aid in understanding.

The Sewer SHAREs group is meeting every other Friday and has reviewed data from the previous SHAREs analysis. Current topics of discussion include sampling strategy options and D+ Metering.

## **PLANNING SERVICES** (continued)

### ***System Analytics and Meter Operations Group (SA&MO)***

System Analytics and Meter Operations is heavily involved with the Sewer SHAREs Work Group. The D+ metering has most of the meters installed and the team is monitoring the data. Work to establish a methodology for applying the D+ meter data to the unmetered areas is ongoing. Mini models are currently being created and will be tested in the future to compare monitoring data with water usage and other parameters such as leakage and different types of land uses.



The “Units of Service for Non-Master Metered Customers and System Water Audit” project team continues to meet regularly with the non-master metered customers to plan and execute Phase 2 activities of the study. The first of two district metered areas (DMAs) for the city of Dearborn has been operational since August 30, 2018. The second DMA was operational on October 4, 2018. Similarly, there are four DMAs planned for the City of Detroit. Due to the challenges in the field, the DMAs in Detroit were delayed. The first two DMAs in the City of Detroit are scheduled to be operational the week of October 15th. The project team is scheduled to provide an update at the November 1, 2018 Water Analytical Work Group meeting.

System Analytics and Meter Operations hosted team members from Systems Planning and Field Services to participate in a Smartsheet Lunch and Learn event. SA&MO is working collaboratively with other groups and departments using Smartsheet to improve communication, data sharing, and real time updates.

The West Side Sewer Modeling and Monitoring project held a progress meeting with Michigan Department of Environmental Quality (MDEQ) on September 17, 2018. The project team also conducted a workshop for MDEQ. The final report of the project is due in November 2018.

The Greater Detroit Regional Sewer System (GDRSS) portal update is ongoing. An update on Sewer Meter Issues was presented at the Wastewater Analytics Task Force (WATF) Meeting on October 5, 2018. The issues are currently being tracked and updated via Smartsheet.

Positive feedback has been received from the beta testers for the mobile compatible Wholesale Automated Meter Reading (WAMR) Portal. Several member partner suggestions have already been implemented. We will transition to the new system in October.

## **PLANNING SERVICES** (continued)

A custom data feed was developed and provided to Aquasight for integration with their AURA Early Warning Water Quality system. This project offers partnering communities a set of tools to empower them to proactively manage their water quality.

## **WASTEWATER OPERATING SERVICES**

### ***Wastewater Operations Group***

The Water Resource Recovery Facility (WRRF) operations were in compliance with the Water Quality Standards for the month of September 2018. Combined Sewer Overflow (CSO) Operations had one exceedance of the permit limit in Fecal coliform bacteria at the St. Aubin facility.

WRRF received the Utility of the Future Today Award at the 2018 Water Environment Federation Technical Exhibition and Conference (WEFTEC) for the beneficial reuse of biosolids.

On October 6, 2018, the WRRF experienced a power outage resulting from a lightning strike on the DTE Navarre-Maxwell substation. Operations and maintenance staff worked diligently to re-energize the equipment and bring the system back into normal operations in the shortest amount of time.

### ***Industrial Waste Control (IWC) Group***

GLWA continues with close correspondence with Michigan Department of Environmental Quality (MDEQ) to assess the situation of the emerging contaminant Per- and Polyfluoroalkyl Substances (PFAS).

IWC and MDEQ reached an agreement to survey all the remaining 95 significant industrial users (SIU) to verify if they are possible source of the PFAS compounds into the GLWA collection system.

GLWA IWC Operations Manager, Stephen Kuplicki, spoke at two events:

- Michigan National Association of Surface Finishers (MNASF) on PFAS as an emerging contaminant and GLWA's efforts in helping MDEQ and the SIUs in this PFAS initiative, in Mackinaw City on September 14, 2018.
- Water Environment Federation-Industrial Pretreatment Program (WEF-IPP) group on permit requirements in metal finishing, in East Lansing on September 27, 2018.

### ***Engineering & Maintenance Groups***

#### ***Construction Engineering***

The construction of Rouge River Outfall Disinfection Project is progressing with a targeted construction completion date of April 1, 2019, as required by the NPDES permit.

## **WASTEWATER OPERATING SERVICES** (continued)

The phase 1 construction completion (commissioning of the Hypo building with a fully functional sodium bi-sulphate and sodium hypochlorite systems) is currently planned for completion by December 18, 2018. Junction chamber 1 tie-in work is expected by late November. Restoration of the administration building parking area (including green infrastructure) is also expected to be complete in November 2018.



**Hypo building construction (both inside and outside the building) is nearing completion.**

The contract for rehabilitating the Central Offload Facility at WRRF was awarded to Walsh Construction with a start work date of October 22, 2018.

### *Design Engineering*

The WRRF Design Engineering Team has been working diligently to update their 2020 Capital Improvements Plan (CIP). After several meetings with GLWA's sewer partners, decisions were made to successfully realign the CIP to meet the 5-year plan. The sewer CIP database was recently updated and submitted to the CIP group for inclusion.

A typical capital project (Pump Station #2, below) was updated in the database to reflect changes in the 2020 CIP.



## WASTEWATER OPERATING SERVICES (continued)

The screenshot displays the 'frm Main Form' window for the GLWA FY 2020-2024 CIP. The current user is 'akhraizat' and the CIP# is '211005'. The project title is 'WRRF PS No. 2 Improvements Phase II'. The project status is 'Future Planned'. The project key areas of interest include 'System Redundancy - Reliability' (checked) and 'NE WTP Repurposing' (unchecked). The project engineer is 'Alfredo Lava', the manager is 'Ali Khraizat', and the managing department is 'WW Design Eng'. The date the original business case was prepared is '7/27/2016', and the year the project was added to the CIP is '2014'. The project class levels are 'Wastewater', 'WRRF', and 'Primary Treatment'. The fund and cost center is 'Wastewater - 5421-892211', the project jurisdiction is 'City of Detroit', and the lookup location is 'WRRF'. The project totals by fiscal year are as follows:

Prior Yr Actuals	FY19	FY20	FY21	FY22	FY23	FY24	FY25 and Beyond	Total
0	0	0	684	711	611	8,668	10,925	21,599

The interface also includes buttons for 'Save and Refresh Form Data', 'Add a New Blank Project', 'Project Totals By FY', and 'Save and Refresh Totals'. The record count is 1 of 26, and there is a search bar.

### *Maintenance*

The WRRF Maintenance Team has been working with the GLWA Transformation Team to effectively manage the janitorial services contractor at the WRRF. Zones have been established throughout the WRRF to create increased awareness and accountability. Maintenance also worked on budgeting and planning activities, along with maintaining a focus on completing the September preventative work orders. The Maintenance Team continues to work alongside the Operations Team to optimize equipment uptime and plant efficiency.

### *CSO Control Program Team*

The CSO Team hit a big milestone in October by getting the RFP for the CSO Facilities Assessment Project advertised. This project is envisioned to be the road map for the CSO Facilities in making large capital projects to the facilities to restore proper operations and improving the facilities to meet future requirements in our NPDES permit and other drivers, such as the Wastewater Masterplan.

## **WASTEWATER OPERATING SERVICES** (continued)


GLWA anticipates starting the project at the beginning of FY 20. Major elements in this project are as follows; 3-D virtual tour and laser scan of all above/below ground areas at each facility similar to the adjacent photo, system-wide CSO asset audit and WAM update, criticality and condition assessment of assets, generation of a scheduled replacement plan, a 20-year CIP and Needs Assessment in accordance to the SRF Project Plan requirements, and tying into the GLWA CIP process, and the development of reporting tools for reporting on the status of the CSO Control Program.



**Virtual Tour snap shot @ Conner Creek Screening Building**

The CSO Team also updated the CSO Program in the CIP Database this past month entering in plans for future projects to address immediate needs at the CSO Facilities. Projects are in various phases of procuring design services or preparing bidding documents for construction bidding. Improvements to the electrical system at Lieb are in bid document preparation. The CSO Team is working on developing several agreements for maintenance/repair specialty equipment throughout

our facilities. Equipment includes transit time Accusonic flow meters, electrical switchgear and motor control centers at the CSO Facilities. In the meantime, maintenance is wrapping up on the Connor Creek Switchgear. Most of the equipment was in good condition. Also, some issues were addressed as a part of this work to restore functionality and reliability to the electrical system.

		<b>LV MCC BREAKER/STARTER TEST</b>		MOTOR CITY ELECTRIC 9440 GRINNELL DETROIT MI 48213 (313) 921-5300	
CUSTOMER	GLWA	DATE	7/17/2018	PAGE	89 of 222
PLANT	Connor Creek CSO	AMBIENT TEMP.	30 °C	JOB #	718629
SUBSTATION	Mechanical Rm - MCC#2	HUMIDITY	51 %	ASSET ID	14585 MCCB
EQUIP ID	14585 MCCB	TEST STATUS	Pass		
EQUIPMENT LOCATION					
AS FOUND CELL / CUBICLE: Cell 1E / SCG-5					
		REPAIRS NEEDED:	No	REPAIRS MADE:	No
		READY FOR USE:	Yes		
AS LEFT CELL / CUBICLE: Cell 1E / SCG-5					
MANUFACTURER: Square D					
BRKR/FUSE RATING:		50 Amp	DATE MANUFACTURED:		Model 6
BRKR/FUSE MODEL:		FCP34050	INSTRUCTION BOOK:		80459-641-01D
CONTROL FUSE:		NA	VOLTAGE RATING:		480V
		FACTORY ORDER NO.	14184793-014.002	STARTER SIZE: NA	
		OVERLOADS:	NA	CPT VA: NA	

***Preview of Connor Breaker Test Document***

## **WATER OPERATIONS**

### **Southwest Water Treatment Plant**

#### *Water Treatment Plant Review Courses*

Beginning Monday September 10, Ronald Hayes (Plant Manager) began his Water Treatment Review Course I. This is 10-week course which covers a host of water treatment subjects with the purpose of preparing team members for the Michigan Department of Environmental Quality (MDEQ) certification exams. The sessions are every Monday and Thursday from 4:30 p.m. to 6:30 p.m. Presently, the class has 25 team members representing different GLWA sites.

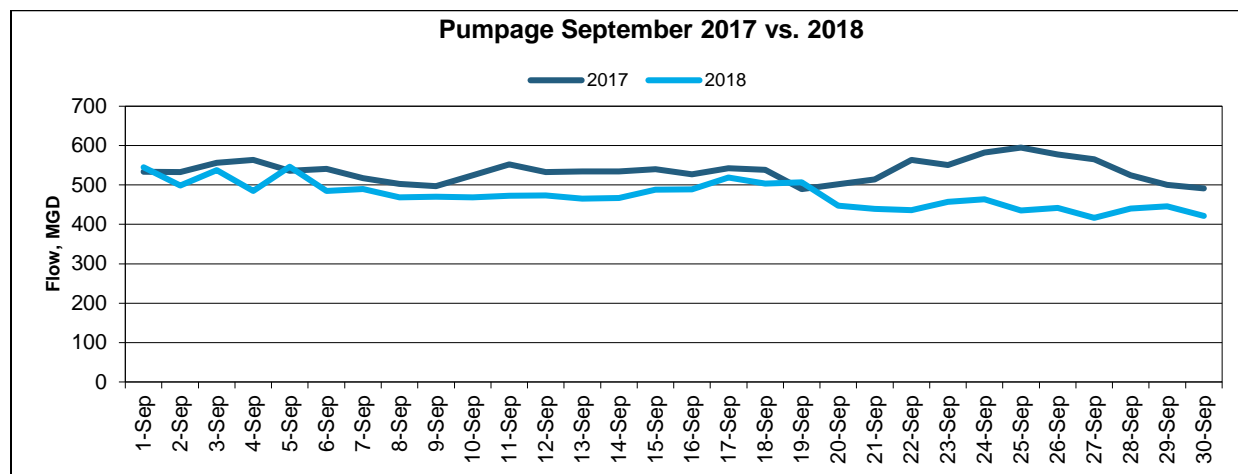
### **National Science Foundation Support for Research**

In February 2018, GLWA supported a grant led by Wayne State University (WSU) researchers to investigate “Water and Health Infrastructure Resilience and Learning.” The National Science Foundation has decided to support this effort for a four-year period with \$1.57 million. The research will explore how drinking water and public health systems learn and adapt, especially in crisis, and how the public engages with these systems. The multidisciplinary team includes engineers, political scientists, epidemiologists, sociologists, and disaster researchers from WSU, the University of North Carolina, and the University of Michigan.

### **Systems Control**

#### *September System Pumpage*

September 2017 pumpage was 12.9% lower than September 2018. The average pumpage was 474 MGD.



## **WATER OPERATIONS** (continued)

### **Fleet and Facilities**

#### *Springwells Water Treatment Plant*

Painting the above ground diesel (emergency generator) fuel tanks at Springwells Water Treatment Plant has been completed. Painting the fuel tanks and associated pipes is an important aspect of compliance with State of Michigan regulations, as paint peeling and signs of corrosion violate fuel storage standards. (*Before and after photos below*).

*Before*



*After*



## **INFORMATION TECHNOLOGY**

The Information Technology Group has completed a reorganization of the two Application Delivery teams. The new teams are:

- **Enterprise Asset Management Systems** which includes Oracle Work & Asset Management (WAM), Geographic Information System (GIS), Business Intelligence (BI) and other related systems to support the operational needs of GLWA.
- **Business Productivity Systems** which includes Enterprise Content Management, Ceridian, BS&A, Cornerstone Performance and Learning Management Systems to support the business and administrative functions of the organization.

It is expected that this restructuring will enable IT to improve our services and collaboration with all Areas, Groups, and Teams.

As part of this reorganization, Bryon Wood has been promoted to IT Manager – Enterprise Asset Management Systems. Bryon’s previous role at GLWA was with Planning Services in the Enterprise Asset Management Group. In addition to his technical acumen, he brings a business perspective to his new role including many years of water sector experience in applying technology for improving day-to-day maintenance and operation functions and efficiencies role.



## **INFORMATION TECHNOLOGY** (continued)

The IT Group has teamed up with Organizational Development to roll out a new set of IT Security training classes from Security Mentor. These classes build upon the previous set of classes that GLWA team members completed this past year and are now fully integrated into our Cornerstone Learning Management System (LMS). This training gives GLWA Team Members the tools to recognize phishing emails, malicious web links, and other potential threats to maintain a safe and secure network at work and home.

IT Business Productivity Systems team partnered with General Counsel to implement Matter Management. Matter Management is a software that leverages GLWA's SharePoint platform to better organize and automate their work functions. Using Matter Management, General Counsel will be more efficient, and able to collaborate both internally and externally while providing a single repository for all legal matters.

IT Business Productivity Systems team continues to work closely with the Public Affairs Group to provide enhancements to our One Water Connect Intranet portal. The most recent enhancement provides an improved photo slider with the ability to link pictures to supporting content (articles, videos, or other links).

IT Enterprise Asset Management System and the Enterprise Asset Management team implemented a Water Main Break Workflow and Data Collection Application. A mobile application was created using our ESRI software to collect field data from water main breaks and input into our GIS system. Field crews are now able to gather reliable field data from inspections to update GIS with a process to verify the data quality. This data will be leveraged to update GIS attributes and for reliability assessments of our transmission system.

## **PUBLIC AFFAIRS GROUP**

Issue 9 of WaterWorks Magazine was published by GLWA's all-volunteer magazine team. The cover story of this issue is a profile of Constance Williams-Spann titled, "A Mother's Courage." The article shares Connie's recent honor of being awarded the Mothers of Murdered Children Mother of Courage Award. Also included in this edition are articles on creating a positive team environment, solar power and its benefits, and the reoccurring feature, "Ask Abul," where WWP Chemist Abul Ahmed answers questions about lawn and garden care.

## **SECURITY AND INTEGRITY**

During the months of September and October, the Security and Integrity Group continues training GLWA team members in "Active Shooter Training". The next training will continue at Central Services Facility in November. To date, 679 team members have completed the training.

The Hazmat Unit has coordinated and completed a total of 251 hours pf training during the months of September and October.

## **ORGANIZATIONAL DEVELOPMENT**

### ***Benefits***

Open Enrollment (OE) will take place at GLWA from November 5th – 16th. The OE Fairs will provide GLWA Team Members the opportunity to talk with representatives from our health and wellness partners, become better informed about our health and wellness benefits and obtain on-the-spot assistance in their Open Enrollment selections.

### ***Apprenticeship Program and Talent Pipeline Programs***

National Apprenticeship week is November 12 – 16, 2018.

- The EICT-I Apprentices from GLWA will be presented with an incentive from Focus: HOPE to mark the completion of their first year on Thursday, November 15<sup>th</sup>.
- Our training partner, Henry Ford College (HFC), is hosting an Employer Apprenticeship Breakfast on Thursday, November 15<sup>th</sup>. HFC wants to spotlight some of their Employer Partner Apprenticeship Programs, and has invited Stephanie Stevenson to speak on a panel. The audience will be employers and other organizations who want to learn more about apprenticeship.
- Detroit Employment Solutions Corporation (DESC) has offered to highlight GLWA's apprenticeship efforts by hosting a recruiting fair at one of their 3 locations. Candidates registered with Michigan Works will be able to attend an information session with GLWA scheduled November 13<sup>th</sup>, 14<sup>th</sup> and 16<sup>th</sup>.
- DESC made an announcement of planned events for the week during Brenda Jones' Skilled Trades Task Force Meeting held on Tuesday, October 23<sup>rd</sup>.

GLWA participated in Wayne County Manufacturing Day (MFG DAY 2018) for the second year as a Precision Sponsor. MFG Day is a national celebration of modern manufacturing and the great careers it offers. GLWA used the day as an opportunity to introduce high school students to careers in water and wastewater operation.

Organizational Development has applied for The Going PRO Talent Fund (Talent Fund), formerly known as the Skilled Trades Training Fund. This fund makes awards to employers to assist in training, developing and retaining current and newly hired employees. Training funded by the Talent Fund must be short-term and fill a demonstrated talent need experienced by the employer. Training must lead to a credential for a skill (including Apprenticeship) that is transferable and recognized by industry. The Talent Fund application period for Fiscal Year 2019 opened on Wednesday, September 12, 2018 and closed Wednesday, October 3, 2018. The state has until October 31, 2018 to conduct their reviews.

## **ORGANIZATIONAL DEVELOPMENT** (continued)

Program Statistics 2014-2018:

- Number of companies receiving awards: 2,234
- Average amount of award: \$32,068
- Average training cost per person: \$962

GLWA OD is a Consortium Member for Focus: HOPE's submission of a Marshall Plan for a Talent Concept called the Michigan Mobile Advanced Manufacturing Tech Training Consortium (MiTech). Marshall Plan funds will be awarded based on the level of innovation, the strength of the partnerships and how well the application embraces the philosophies of competency-based learning for high-demand, high-wage careers.

MiTech aims to bring together a strong and diverse group of industry, academic and nonprofit partners to create an innovative set of Mobile Learning Centers, creating world class curricula utilizing FANUC equipment and curriculum. These Mobile Learning Centers will provide competency-based learning leading to high-demand, high-wage careers for both 6<sup>th</sup> - 12th grade students and structurally unemployed adults.

### ***Staffing***

Since the last CEO report, September 2018, one (1) contractor has become a GLWA team member. The table below provides a breakdown of GLWA Team Members to date:

Total Staffing - Regular FTEs	977
Number of Hires - 2018 YTD	182
Total Number of Contractors (FTEs)	122

### ***Training***

Between January 1, 2018, and September 30, 2018, GLWA:

- Provided over 22,717 hours of training and development.
- Provided training and development to 3,703 GLWA team members (more than two courses per team member).
- Facilitated 124 courses, in Safety, Water Operations, Wastewater Operations, and Technology.

## **STAFF KUDOS**

### **Energy, Research & Innovation (R&I)**

#### ***LIFT Intelligent Water Challenge***

Earlier this year, the University of Michigan and GLWA Open Storm Detroit Dynamics team applied to participate in the first annual Leaders Innovation Forum for Technology (LIFT) Intelligent Water Challenge. In late September, the team was notified that the final project submission was selected by the evaluation committee as one of the top three, and that they were to make a presentation at WEFTEC 2018 on October 1. At that time, the ranking of the top three was announced, recognized, and awarded cash prizes in the amounts of \$25,000, \$15,000 or \$5,000 were made. The presentations were 10 minutes with a 5-minute question and answer segment.

Greg Ewing, the prime mover of the project, presented, and Research & Innovation staff was present to answer GLWA specific questions.

On October 1, 2018, the University of Michigan and GLWA Open Storm Detroit Dynamics team was awarded first place! (Photo below)



*The winning team*

*Second from the left: Wendy Barrott, Branko Kerkez, Sara Troutman, Greg Ewing, and Abhiram Mullapudi.*

The team successfully demonstrated the applicability of using real time control with forecasting to decrease combined sewer overflows and equalized flow to the Water Resource Recovery Facility (WRRF) during wet weather events in a portion of the collection system. The team, led by Greg Ewing, is using real time dynamic modelling together with market-based control algorithms to accomplish these objectives.



## **STAFF KUDOS** (continued)

This is achieved largely by employing in-line storage and targeted use of Inflatable Storage Dams. The modelled scenarios reduced CSO overflows by as much as 77% and in one storm this was equivalent to 100 MG. The next phase of this project will integrate this control approach into an advisory dashboard that will help operators make decisions by suggesting optimal pumping rates and status of storage dams. The entire team included Wendy Barrott and Christopher Nastally from GLWA; and Branko Kerkez, Greg Ewing, Sara Troutman, and Abhiram Mullapudi from the University of Michigan. The list of supporting team members from GLWA is extensive and includes, but is not limited to: Biren Saparia, Mini Panicker, Anthony Troy, Jenny Casler, David McCord, Matt Starrman, Eric Griffin, Betty Thomas, Andrea Busch, and Joe Burchi. Congratulations Team!

## **LEGAL**

General Counsel's October 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 – October, 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 provided comments to the MDEQ.
- ***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 and attend webinars on the subject.
- ***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 roughly 8 regional groups and randomly assigned a negotiation month between March and October. In September, the team met with GW Kuhn Drainage District, Keego Harbor, Madison Heights, Northern Oakland County Water Authority, Royal Oak Township and Sylvan Lake and the amended contracts targeted for approval by early December. In October, the team met with Almont, Bruce Township, Flint, Imlay City, Lapeer, Mayfield Township, and Riverview and the amended contracts are targeted for approval by January 11, 2019.
- ***Water Contract Negotiations:*** The Office has begun discussions with the Cities of Dearborn, Trenton and Grosse Ile Township 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. The Office is also assisting on GLWA's property remediation efforts.

- **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 (“IWC”) Group and external stakeholders on finalizing and implementing an updated IPP and overseeing the current program. The Office is also coordinating the transfer of a portion of GLWA’s IPP to the Oakland County Water Resource Commissioner (“OCWRC”).
- **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. GLWA has orders granting possession of all easements necessary for the project.
- **Real Estate:** The Office assisted in the closing of two real estate transactions. The sale proceeds, less closing costs, were deposited in the water construction bond fund.
- **Civil Litigation:** The Office continues to vigorously defend actions against GLWA. GLWA, DWSD and OCWRC filed a motion to file an amici brief in *Boler, et al v City of Flint, et al*, which was granted by the Michigan Supreme Court. Last, 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.
- **Health Care:** The Office provided legal advice on PA 152 regarding GLWA’s health care benefits for the upcoming plan year.
- **Arbitration:** The Office filed a notice for arbitration pursuant to the Leases.
- **Northeast Pump Station:** GLWA will work with OMIDDD 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 and updating GLWA's template contracts.
- ***Past Month's Statistics:***

Contracts reviewed as to form:	21
Contracts drafted or revised:	25
Subpoenas/Information requests received:	4
Subpoenas/Information responded to:	3