

July 25, 2018

The Honorable
Board of Directors
Great Lakes Water Authority

Dear Chairman Hendrix and Directors:

Regarding: CEO's Report – July, 2018

On May 21st, Shaker Manns, Energy Program Manager accepted an award on behalf of the GLWA team at the Lake Huron Water Plant for Best Pilot Demonstration as a participant of the Water Utility Energy Challenge (WUEC). The WUEC is a joint effort with American Water Works Association (AWWA) and Wayne State University (WSU), funded by the Great Lakes Protection Fund to reduce energy related pollution emissions in the Great Lakes Basin. Team members included were as follows: (left to right) Benoy Elias, Deborah McDonald, Steven Lingenfelter, Jessica Vachon and Christopher Steary, and pictured separately is Ashifali Saiyad.



Congratulations for a successful pilot and bringing home the honor!

GLWA won GovTech's Special District's 2018 award for Technology Innovation - Operations for our Wet Weather Map. The Wet Weather Map is a geographic information system (GIS) map that displays real-time data along with its interceptors and at its rain gauges. GLWA Team members that worked on the development of the Wet Weather Map are as follows:

Project requestor: Biren Saparia, Systems Control Center

Project manager: Jenny Casler, IT PMO

IT owner: Jennifer Payne, IT Enterprise Applications

Project team:

Betty Thomas

Ahmad ("Ali") Abdallah

Tanmay Karande

Craig Frost (contractor team member)

Chris Donais

Other significant contributors

David McCord

Eric Griffin

Mini Panicker

Anthony Troy

Congratulations to the Team!!

At the SEMCOG General Assembly Meeting in June, I was honored to receive SEMCOG's Regional Ambassador Award for 'Dedicated Leadership and Service to the Southeast Michigan Region'.

I am especially pleased to announce that GLWA has been deemed a Utility of the Future Today by the Water Resources Utility of the Future Today Joint Recognition Program sponsored by the Water Environment Federation, the Water Research Foundation, NACWA, Water Reuse, and the US EPA. The Authority was selected for this recognition based on two elements: 1) an organizational culture that supports utility of the future implementation through the use of Effective Utility Management, and 2) a commitment to the principles of a Utility of the Future via the operation of our Biosolids Dryer Facility (beneficial biosolids reuse). The selection committee consisted of six peer utility general managers/executives. GLWA will be publicly recognized with this honor during a Utility of the Future Today Recognition Ceremony at the 91st annual WEFTEC Conference and Exhibition taking place in New Orleans in October 2018.

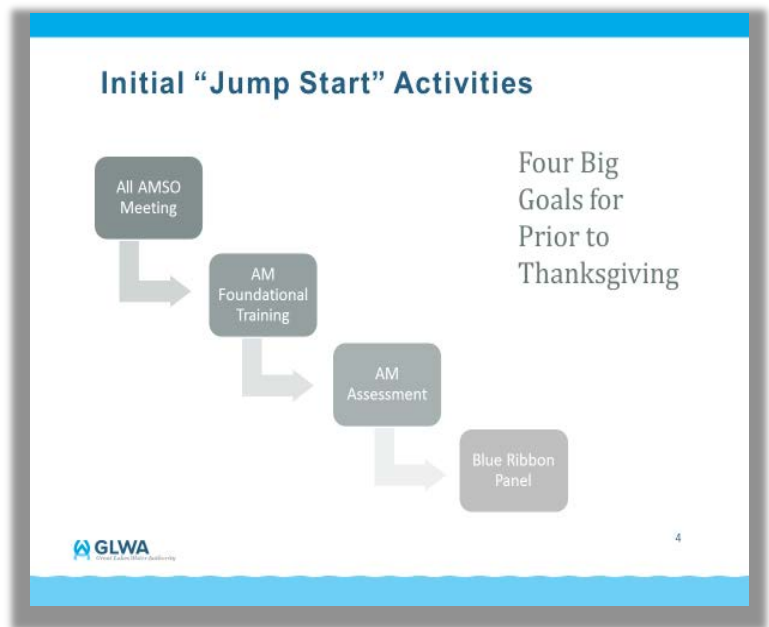
GLWA's efforts to improve reliability, redundancy and resiliency (3R's) continue. With the inspection of the GLWA collection system largely completed, development of a condition assessment program for the transmission system is nearing completion. An update on the progress of these efforts is scheduled for presentation to the Board in August.

Both the 14 Mile Road communities and the Downriver Area communities are served from single transmission mains with emergency interconnections between, served communities providing near term reliability. While capital projects to provide GLWA redundant transmission service are planned in the Capital Improvement Plan, more current efforts led by Water Engineering include emergency operations planning with the Downriver system communities, and transmission main condition assessment pilot for eight (8) miles of the 14 Mile Road main from Franklin Station to Novi Rd. More details follow in the body of this report.

PLANNING SERVICES

Asset Management and CIP Group

Recently, GLWA had an internal kick-off meeting for the Asset Management Planning (CS-198) project with the core group of team members and CH2M (Jacobs). This project includes the development of a Strategic Asset Management Plan, significant updates to the Water and Wastewater Asset Management Plans (including tactical asset management plans by business unit) and the development of overall enterprise-wide asset management related programs. Our team is very excited to move this three-year project forward and have identified a significant list of activities in the planning stages for the first four months of the project. It is anticipated that the Strategic Asset Management Plan task will be completed by the summer of 2019.



The Asset Management and Capital Improvement Planning (AM/CIP) Member Outreach Work Group met on July 24, 2018 where Finance and Procurement topics were discussed related to the process improvement in place today, review of the Construction Work In Progress (CWIP) 2018 third quarter report, a discussion regarding transparency, and collaboration and the review of the work groups proposed mission statement. The next work group meeting will be held on September 25, 2018 where asset management related topics will be discussed by Jody Caldwell.

Systems Planning Group

The One Water Partnership held its quarterly meeting on June 21, 2018 in Macomb County. The group heard from Nicolette Bateson regarding a finance and charges update and Craig Hupp provided context by sharing some of DWSD's financial history.

PLANNING SERVICES (continued)

An update on the Water Residential Assistance Program (WRAP) was provided, and the group had a chance to hear from two members that are taking advantage of the program: Gary Brown from the City of Detroit, and Tim Prince from Oakland County. Cheryl Porter introduced the new Power Quality Manager, Michael Graham, who will begin analyzing GLWA’s power usage and power outage experiences to find any issues within the Authority’s control. Members were also introduced to GLWA’s Small Business Initiative, one that is headed up by Susan Kopinski and Ian Thompson. The initiative is designed to boost awareness of GLWA opportunities among the small business community.

Todd King, Director of Field Services shared the progress his team has been making since he started at GLWA in 2017, and Suzanne Coffey provided a status report of the CIP Program Management RFP that will be coming out soon. Kevin Johnson, the One Water Co-chair from Macomb County, closed the meeting by thanking participants and encouraging members to contact the One Water Co-chairs with any issues or topics for future One Water Partnership meetings.

Member Outreach has teamed up with the Public Affairs and IT Teams to roll-out a new communication tool called GovDelivery. GLWA had been using this tool for internal communications, and Member Outreach launched the tool by sharing the Member Outreach Program Manual at the end of June 2018. Be on the lookout for emails from: glwaterOutreach@public.govdelivery.com.



- CONTACT GLWA STAFF
- EMERGENCY: 313-267-6000
- WAMR PORTAL
- GDRSS PORTAL

An updated contact list has been developed and shared by the Member Outreach team. The list is posted on the Member Outreach Portal and can be accessed by clicking on the “Contact GLWA Staff” button. The list includes a description of reasons why you might contact each person or group. The contact list will be updated regularly. Please contact outreach@glwater.org if there is something you would like to see added to the list.

June Member Outreach Meeting Attendance	
Meeting	# Attended
Water Management Best Practices Work Group	11
Public Education Work Group	12
Wastewater Master Plan Steering Team	34
Wastewater Charges Symposium Day 1	76
One Water Partnership	88
Wastewater Charges Symposium Day 2	55

PLANNING SERVICES (continued)

The Wastewater Charges Symposium was held on June 19, 2018 and June 28, 2018 in Canton. The purpose of the June 19th meeting was to understand a variety of wastewater charge methodologies developed by national utility leaders. National representatives included:



Kevin Shafer, Milwaukee, WI – Milwaukee Metropolitan Sewerage District

Kyle Colvin, St. Paul, MN – Metropolitan Council Environmental Services

Aleah Menefee, Denver, CO – Metro Wastewater Reclamation District

Tom Lienesch, Seattle, WA – King County Wastewater Treatment Division

Jan Beecher, Lansing, MI - Michigan State University

The second meeting on June 28, 2018 tried to focus on potential changes to explore regarding the GLWA wastewater charges for FY2021 and beyond. Sue McCormick reminded members of the shared benefits we hope to accomplish through collaboration, including the five outcomes of the Wastewater Master Plan:

- ◆ Protect public health and safety
- ◆ Preserve natural resources and a healthy environment
- ◆ Maintain reliable, high-quality service
- ◆ Assure value of investment
- ◆ Contribute to economic prosperity

Topics of discussion continue to focus around peak flow, strength of flow, and the 1979 Proposed Sewerage System Rates and Charges study. The members decided to continue these discussions with a series of special Wastewater Charges meetings. The first meeting took place on July 18, 2018 and laid out GLWA's structure for advancing this important initiative. Two working groups are proposed to meet regularly. One will focus on data and data analysis while the other will focus sharply on the charges methodology.

The Wastewater Master Plan Steering Team will take a break in July 2018 while the Regional Collaboration Group reviews one-month storm data and the impact on the regional wastewater system. Regular steering team meetings will resume on August 10, 2018.

PLANNING SERVICES (continued)

System Analytics and Meter Operations Group (SA&MO)

SA&MO and the Public Finance Group is collaborating to streamline the monthly wholesale water flow data review. We have developed and adopted a business process where every meter is approved by both the SA&MO reviewer and the Finance reviewer through SmartSheet. SmartSheet allows for the reviewers to comment on meters or customers in a chat format and attach files.

This provides transparency into the progress of the data review. As part of the process improvement, the team also migrated our shared documents into a WAMR Billing SharePoint Group on the One Water Connect site. This allows the team to simultaneously work on documents by leveraging the Office 365 suite.

The team has been supporting the University of Michigan Dynamic Collection System Control project. Close to real-time data is being provided to the UofM team through a custom application program interface that we worked together to create. This process was optimized to reduce the load on the GDRSS database, so it would not negatively impact GDRSS users.

SA&MO group is participating in “The Water Research Foundation’s AMI Meter Data Analytics” project. Detailed information and flow data was supplied to the project team as part of GLWA’s support of the project. SA&MO provided a summary report for 76 compound turbine water meters for analysis.

The “Units of Service for Non-Master Metered Customers and System Water Audit” project team continues to meet with the non-master metered customers to plan for Phase 2 of the study. Black & Veatch presented an update on tasks being completed during Phase 2 of the project at the Analytic Work Group meeting held on July 17, 2018.

System Analytics & Meter Operations has started hydraulic model calibration with 2016 production and demand data. The model will be calibrated for Maximum Day, Average Day, Minimum Day, and Peak Hour Demand Scenarios.

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 July 2018.

Meter ID	Meter Name	Meter Type	Meter Status	Meter Reading	Meter Date	Meter Time	Meter Location	Meter Description	Meter Comments	Meter Approved	Meter Rejected	Meter Cancelled
Abroad (T)												
000018	AF01	MAG	82	0.2158	0.2177	-0.81%						
Abroad (R)												
000018	AF02	MAG	82	3.2887	3.401	-3.36%						
000018	AF03	MAG	82									
000018	AF04	MAG	82									
000018	AF05	MAG	82									
000018	AF06	MAG	82									
000018	AF07	MAG	82									
000018	AF08	MAG	82									
000018	AF09	MAG	82									
000018	AF10	MAG	82									
000018	AF11	MAG	82									
000018	AF12	MAG	82									
Abroad (D)												
000018	AF13	MAG	82	1.81	1.86	-4.86%						
Abroad (S)												
000018	AF14	MAG	82	0.2708	0.2728	-17.47%						
000018	AF15	MAG	82	0.8233	0.7418	13.75%						
Abroad (I)												
000018	AF16	MAG	82	3.8842	4.0376	-12.21%						
000018	AF17	MAG	82									
000018	AF18	MAG	82									
000018	AF19	MAG	82									
000018	AF20	MAG	82									
Abroad (L)												
000018	AF21	MAG	82	0.8899	0.1109	22.93%						
Abroad (H)												
000018	AF22	MAG	82	0.238	0.2375	4.25%						
Abroad (C)												
000018	AF23	MAG	82	0.743	15.649	24.91%						
Abroad (E)												
000018	AF24	MAG	82	4.578	4.8787	6.84%						
Abroad (F)												
000018	AF25	MAG	82	0.8677	0.7987	6.95%						

WASTEWATER OPERATING SERVICES (continued)

Key technical and legal team members are working together to review a draft NPDES permit that was received this month from the MDEQ. The permit provides the framework in which the GLWA is allowed to discharge from the WRRF, all nine CSO facilities, and many untreated outfalls. Also in the permit are specific requirements for compliance submittals. Because GLWA and DWSD are co-permittees on this important permit, the internal review team is made up of members from both organizations. The receipt of the draft permit marks a milestone in the permit renewal process that comes after many months of meeting with MDEQ staff to discuss the various elements of the permit. Our team will continue its detailed review of the draft document this month and through early August. It is expected that during the month of August the team will meet again with MDEQ to begin the finalization of the permit in draft form.

Engineering & Maintenance Groups

Design Engineering

Members of the WRRF Design Engineering Team attended the MWEA 93rd Annual Conference in June 2018. During the conference, members from our team presented on biosolids management at the WRRF. The presentation included background on the formation and facilities of the GLWA, as well a summary of the biosolids challenges faced during: The Rouge River Outfall construction, testing at the Biosolids Dryer Facility, and the March 2016 fire at WRRF's Complex II incineration.



Ravi Yelamanchi, Beena Chackunkal and Dan Alford from the WRRF

WASTEWATER OPERATING SERVICES (continued)

In addition, the WRRF Design Engineering Group continues to support the operations and maintenance teams as needs develop. Recently staff has been working to design in-house improvements to the primary scum houses. These include: improved lighting, new isolation and pressure regulating valves, modified flight drives, a new hot water system, and other needed improvements.

Maintenance

In addition to the ongoing maintenance activities, the Maintenance Team has been focusing on four special maintenance projects in the last month.

- Pulling the motor on main lift pump #4 in Pump Station #1 (pictured below)
- Consolidation and rehabilitation work in locker rooms to make room for relocation of the Industrial Waste Control team
- Installation of additional seagull deterrent equipment
- HVAC system improvements in the control room of pump station #1 and the variable frequency drive room of pump station #2



Rotating assembly for pump #4 motor ready for pick up at WRRF pump station #1

WASTEWATER OPERATING SERVICES (continued)

Additionally, the WRRF Maintenance Team has focused on meeting redefined KPIs for preventative and corrective work orders, and has improved internal processes to record previously undocumented work efforts.

CSO Control Program

The GLWA CSO Control Program Team in partnership with the CSO Operations Team continues to identify, prioritize, and address facility maintenance, equipment, and logistics issues.

A variety of projects to increase reliability and functionality are underway. The most noteworthy projects are as follows:

- ◆ CSO Facility roof inspection project;
- ◆ Improvements to electrical and controls systems at Leib;
- ◆ Improvements to the influent chamber at the Baby Creek;
- ◆ Improvements to discharge gates at Conner Creek;
- ◆ Improvements to the drain vault at Oakwood;
- ◆ Improvements to fire alarm systems for all nine CSO facilities;
- ◆ Improvements to electrical and controls systems at Puritan Fenkell and Seven Mile;
- ◆ A UPS Maintenance contract has been evaluated and award is forthcoming;
- ◆ Switchgear maintenance beginning for all nine CSO Facilities; and
- ◆ Sprinkler system inspections, testing and repairs to meet code requirements.

Projects that are in the planning phase with start dates in the near term as follows:

- ◆ Solicitation for structural repairs based on completed structural inspections;
- ◆ Solicitation for CSO facilities needs/condition assessment for all nine CSO facilities;
- ◆ Solicitation for long-term switchgear, and level sensor/meter maintenance;
- ◆ Improvements to the Conner Freud Influent Flow Meters;
- ◆ Improvements to Effluent Chamber at Baby Creek;
- ◆ Improvements to the HVAC System at Leib;
- ◆ Solicitation for Job Order Contract for as-needed heavy maintenance; and
- ◆ Solicitation for installation of sprinkler systems at select CSO Facilities.

WATER OPERATIONS

MDEQ Consecutive Sampling Workshops

Michigan Department of Environmental Quality (MDEQ) Consecutive Sampling Workshops were held June 5 and 8, 2018 were successful and well attended. The purpose of the workshops was for MDEQ staffers to provide information about the EPA's decision to rescind the consecutive monitoring approach for the Revised Total Coliform Rule (RTCR) and the Lead and Copper Rule (LCR) under which GLWA and its member partners have been operating. Information included an explanation of the changes, an overview of the implementation plan, and information on how to identify new sampling sites and update sampling plans.

WATER OPERATIONS (continued)



For more information or to review the materials from the workshop, please visit the Water Quality Matters page on our website at www.glwater.org/water-system/water-quality-matters/.

Table talks on each research project and its anticipated impact were done for the following projects:

- Emerging Contaminants
- Environmental Stressors and Aquatic Organisms
- Use of Zebrafish as Ecological Indicator
- Biodiversity
- Green Storm Water Infrastructure
- New Analytical Tools for Drinking Water
- Huron to Erie Drinking Water Monitoring Network

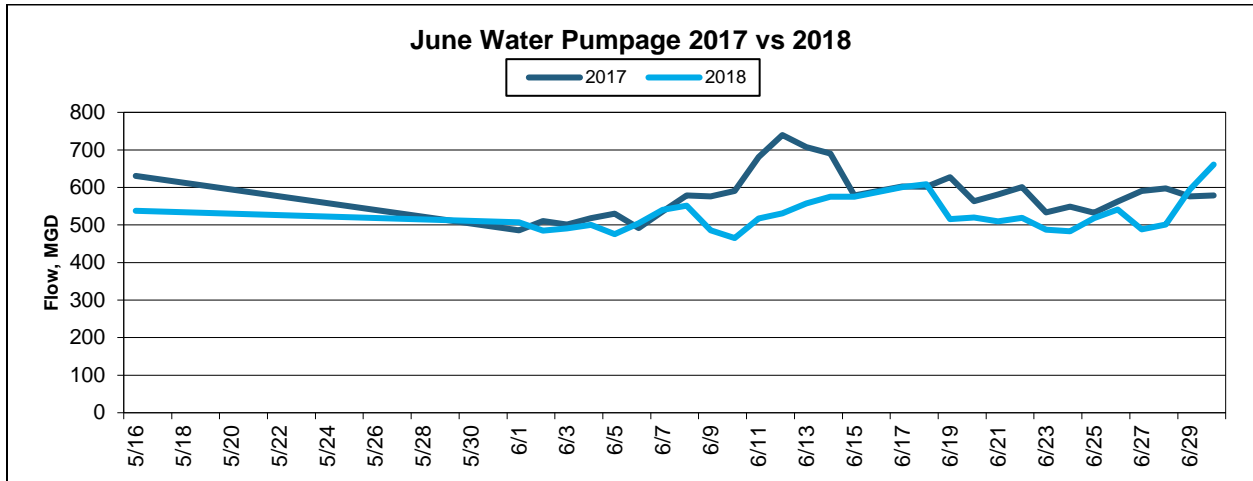
Discussions on how GLWA team members can be more involved in the research work and having future symposiums more frequently were proposed.

WATER OPERATIONS (continued)

Systems Control

June System Pumpage

Water pumpage for June 2018 was 9.16% less than June 2017



INFORMATION TECHNOLOGY

The GLWA IT Security and Risk Team, in coordination with the American Water Works Association (AWWA) hosted a Cybersecurity Workshop for Michigan water professionals at the Livonia office of OHM Advisors, on June 6th. A subsequent presentation is being planned for the Grand Rapids area.

The IT Enterprise Applications team has launched a Wiki page which occurred the week of June 25 through June 29, 2018. The Wiki page will reside within our One Water Connect Intranet site. The benefits of having a Wiki page is that team members can find definitions of GLWA acronyms, words, and definitions in a central location.

The Wiki page will be set up so that anyone within GLWA can submit an acronym or word for consideration. Every submission will go through an approval process and, if approved, will become part of the Wiki page.

The IT Line of Business Applications Team successfully performed an upgrade of the Ceridian Dayforce application to Release Version 54. The new version primarily consists of additional tools for system administration. The upgrade went smoothly, without any major issues. This reflects continuous efforts by Organizational Development and the IT Group to improve GLWA's overall satisfaction with the application.

INFORMATION TECHNOLOGY (continued)

The IT Project Management Office (PMO) is currently managing 22 projects and processing 19 project requests. In June, Bonfire was rolled out across GLWA and to the vendor community. Bonfire is used by Procurement for sourcing and the management of executed contracts.

The system enables vendors to respond to solicitations online, and it provides action triggers for contract managers. Bonfire also allows for the RFX evaluation process to be conducted electronically, including evaluation compilation and scoring.

The IT Infrastructure Team successfully performed failover testing of the WAN connection at the Water Resource Recovery Facility. The testing involved shutting down the primary 10 GIG connection, then allowing the backup connections (3 - 1 GIG connections) to automatically route traffic.

In addition, the Infrastructure Team, along with AT&T, improved the Internet service by migrating from legacy switches to AT&T managed switches. The web filter, firewall and DMZ switches were all migrated to the new network.

Another significant accomplishment by the Infrastructure Team, in conjunction with the Facilities Team, was the upgrade of the audio/visual equipment in the Water Board Building Board Room. All the speakers and wiring were replaced. New microphones and monitors were installed. A new audio/visual control system was also installed. Some of the new features include improved sound with integrated mics/phones/speakers and a mobile cart that projects sound, video, and presentations to the overflow area outside of the Board Room.

PUBLIC AFFAIRS GROUP

Work continues on the redo of GLWA's public website. As a part of this project, new photos are being taken of all GLWA facilities – including aerial photography of several of the Authority's larger properties. These photos will be featured on new Water and Wastewater pages on the site. It is expected that the new website will “go live” by mid-July.

As a part of GLWA's ongoing internal communications efforts, the Authority has launched an online apparel store. Team members are able to purchase a variety of GLWA-branded clothing items, such as polo shirts, button down dress shirts, performance material jackets and baseball and knit caps. All clothing items were modeled by team members who work across the regional system.

Town hall meetings for GLWA team members surrounding the 2017 *Year in Review* have been completed. In total, 10 town hall meetings took place between April and June.

SECURITY AND INTEGRITY

During the month of June and July, the Security and Integrity Group's Hazmat Unit has completed "Confined Space Training" courses. The group has also completed training on Hazmat Technician training and First Line Supervision training. Security and Integrity has begun planning for a Table-Top Exercise scheduled for August 30th at the Lake Huron Water Plant.

ORGANIZATIONAL DEVELOPMENT

On Tuesday, June 5, 2018, Organizational Development (OD) hosted Russ Davis from the Department of Labor (DOL) and Marc DeCoster, our Michigan Apprentice Program Coordinator, for discussion on the Maintenance Technician Apprenticeship Program launching this summer. Executive Leadership Team members from Water Operations, Water Resource Recovery Facility and Central Services Facility as well as Tracy Reynolds, President of AFSCME, were in attendance. The Maintenance Technician work process is being finalized with the help of Water and Wastewater Operating Services; Dan Alford, Terry Daniel and Todd King.

Our EICT-I Apprenticeship Program reached its first anniversary in June 2018! The DOL will conduct a Provisional Quality Review:

- Copy of Apprenticeship Agreement for each Apprentice
- Record of on-the-job learning hours including totals by work category
- List of job assignments for each Apprentice
- Current rates of pay for each Apprentice
- Related instruction hours for each Apprentice
- Apprentice actions (including disciplinary, promotions, layoffs, terminations, etc.) parts 29 and 30.

Benefits

Open Enrollment is tentatively scheduled for November 1 – 19, 2018.

OD Benefits has met with ICMA-RC, HAP, CVS Health (Pharmacy carve out), and Health Management Systems of America (HMSA) to get updates on how our plans are running, understand services and wellness benefits that we are underutilizing, and prep for Open Enrollment. As a result of these meetings, additional benefits have been added to our existing HMSA Agreement without a change in cost. HMSA has agreed to add one critical incident and one face-to-face mediation.

Recruiting

The Chief Operating Officer Recruitment for Wastewater Operations, yielded six (6) candidates. Panel Interviews were held for the six candidates on Monday, July 16, 2018.

ORGANIZATIONAL DEVELOPMENT (continued)

We are continuing our model of partnering with schools for more work-based learning programs at the high school and community college level to be poised to participate heavily in Governor Rick Snyder's Marshall Plan for Talent plan once it is approved in the 2019 budget. The program will incentivize school districts and universities to offer more work-based learning programs through state grants and bringing on private sector businesses as partners.

Last quarter we partnered with Detroit Public Schools Community District (DPSCD) Student Work-Based Learning (WBL) Program and Detroit Employment Solutions Corp (DESC). This summer we will have two interns for six weeks from the University of Michigan's Wolverine Pathways 2018 Summer Internship Program. The University of Michigan Wolverine Pathways program is a free, year-round program that partners with the families, schools, and communities of Detroit, Southfield, and Ypsilanti.

This partnership provides learning experiences that will help students succeed in school, college and future careers. All Wolverine Scholars who successfully complete the program, apply to the University of Michigan, and are admitted, and will receive a full four-year tuition scholarship.

As part of this effort, DESC and MWDB reached out to the customers (job seekers and employers like GLWA) of the workforce development system to get their input about what works and does not work about the current system, and their ideas for how to make it better in the future.

This summer, the OD Recruitment team is adding an innovative augmented writing tool named Textio to our recruitment strategy. Augmented writing puts targeted words and language into job postings, emails and text message to passive candidates letting us draw the most qualified, most diverse talent pool from the cities and communities we are hiring from, and types of roles we are filling.

Recruiting

Staff count July 2017 was **860** and July 2018 is **967** resulting in **12.44** increase in GLWA team members. Beginning January 1, 2018 to date, we have hired 139 new team members. We are on par with the same period last year; between January and June 2017 we hired 144 new team members.

Contractors

Since the May 2018 CEO's Report, seven (7) contractors have become GLWA team members.

Trainings

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

- Provided over 16,763 hours of training and development.

ORGANIZATIONAL DEVELOPMENT (continued)

- Provided training and development to 2,273 GLWA team members (more than one course per team member).
- Facilitated 79 courses, in Safety, Water Operations, Wastewater Operations and Technology.

FINANCIAL SERVICES GROUP

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

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