



Office of the Chief Executive

735 Randolph Street, Suite 1900

Detroit, Michigan 48226

March 28, 2018

The Honorable
Board of Directors
Great Lakes Water Authority

Dear Chairman Hendrix and Directors:

Regarding: CEO's Report – March, 2018

GLWA's *2017 Year in Review*, the Authority's recap of its successful second year of operations, is being officially released in conjunction with the Board of Directors' second community meeting in Sterling Heights on Wednesday, March 28, 2017. The report highlights how GLWA moved from a stand-up organization to one focused on establishing steady and sustainable operations. The 2017 Report is presented around three key themes: 1) ***One Water***: Our system and operations; 2) ***One Team***: Collaboration between our team members, member partners and other stakeholders; 3) ***One Mission***: Water of unquestionable quality and effective and efficient services. These three themes represent the pillars around which our organization operates, and throughout the report readers will find a list of our accomplishments in 2017, a deeper dive into who we are as a regional authority, as well as comments from our member partners, team members and other key stakeholders.

I want to offer my personal thanks to our GLWA team members for your continued dedication and hard work that allowed our second year of operation to be so successful. Additional thanks to all of our Member Partners and others for your continued participation in the Member Outreach efforts. Your suggestions and feedback are invaluable in our ongoing improvements.

The *2017 Year in Review* is being made available via both print and online editions, and will be posted on the GLWA website. We will once again be taking the report to GLWA's team members by hosting our second round of Town Hall Meetings at each of our facilities. These meetings begin on April 2 and will run through mid-May.

On Friday, March 23, 2018, representatives of GLWA, DWSD, and the MDEQ met for a conceptual discussion of issues pertaining to combined sewer overflow control facilities (CSOs), Green Infrastructure, and the requirements for the renewal of the proposed National Pollutant Discharge Elimination System (NPDES) Permit for GLWA and DWSD. The discussion centered on the balance between the need for adaptive management flexibility, to continue to optimize the system throughout the Permit life and the protection of our water resources. The dialogue was helpful to all parties and, in particular, to the State as they approach drafting efforts for this permit.

PLANNING SERVICES

Asset Management and CIP Group

It is anticipated that the three-year, Asset Management Planning (CS-198) project will be kicked off in April. 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 programs. These programs will provide streamlined and consistent processes to manage and analyze asset data to support asset management initiatives at GLWA. The programs to be developed are: Condition Assessment Program – Vertical and Building Assets, Condition Assessment Program – Linear Assets, Risk and Criticality Assessment Program, Asset Audits Program, Asset Salvage Program, Asset Replacement and Retirement Program, Scheduled Replacement Program, and Strategic Maintenance and Reliability Program. These programs will be standardized for use across all asset types to ensure consistency of how assets are managed throughout GLWA and to allow for comparison of assets across business units to improve level of service while reducing capital, maintenance and operations costs. Overall this project will establish a solid foundation and the systematic advancement of asset management at GLWA. This project will result in meaningful and actionable deliverables which will drive how GLWA manages its assets for the next 10 years and beyond.

On March 27, 2018, the Asset Management/CIP Member Outreach Work Group met to develop the goals for 2018 and to reshape the work group to optimize the effectiveness for our member partners. Information received from this meeting and the results from a brief survey taken at the One Water Partnership Meeting will be processed over the next month and a recommendation will be made at the following Asset Management/CIP meeting scheduled for April 27, 2018.

Systems Planning Group

The quarterly One Water Partnership Meeting was hosted in Canton Township on Thursday, March 15, 2018 and had a great number of participants. This meeting also acted as the official handoff between Project Innovations and Bridgeport Consulting. The Bridgeport team began taking a lead role in Outreach facilitation during the March meetings. Project Innovations will continue to be involved and support the Outreach through the end of May 2018.

One Water Partnership Meeting Agenda Topics

- ◆ Joint Infrastructure Planning and Execution
- ◆ Charges Update
- ◆ Regional Training Academy (One Water Institute)
- ◆ Regulatory Update



Representatives from the State of Michigan and SEMCOG presented on joint infrastructure planning and execution.

The next One Water Partnership meeting will be held on June 21, 2018.

PLANNING SERVICES (continued)

The Water Management Best Practices Work Group is planning a Water Storages Best Practices Seminar on May 7, 2018. If you are interested in participating, please email outreach@glwater.org.

A Wastewater Charges Symposium is planned for May 1, 2018 through May 2, 2018 and will be held in Canton. Day one of this two-day event will host panelists from around the Country to describe their wastewater charge methodologies. Day two will provide time for members to discuss what they heard and begin to coalesce around potential concepts for future wastewater charge methodology considerations for GLWA.

February Outreach Meeting Attendance	
Meeting	# Attended
Public Education Work Group (2/1)	20
Wastewater Analytics Task Force (2/2)	24
Water Management Best Practices (2/7)	10
Asset Management/CIP Work Group (2/8)	39
Communication Work Group (2/8)	22
Wastewater Master Plan Steering Team (2/9)	36
Water Quality Work Group (2/27)	39

The Wastewater Master Plan Steering Team heard case studies from around the country regarding best practices in regional regulatory compliance and operating strategies. The Regional Collaboration Group, a subgroup of the Steering Team, participated in a two-day retreat to discuss regional strategies, develop plans to implement the strategies, and develop plans to continue regional collaboration with agencies such as MDOT and SEMCOG.

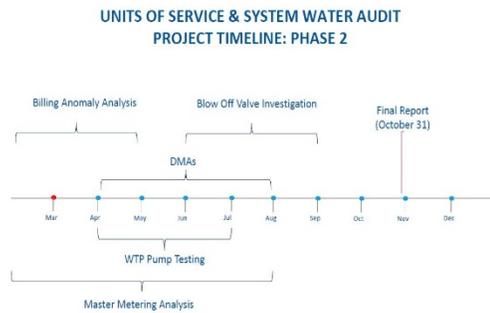
System Analytics and Meter Operations Group

The Wastewater Analytics Task Force (WATF) met on March 2, 2018 and the customers endorsed a plan to improve metering within the City of Detroit in what is known as the D+ area.

A subgroup was established to evaluate how the results of the metering will be used for developing estimations of flow for the unmetered portions of the City. The next WATF meeting is scheduled on April 20, 2018 with a meeting of the subgroup on D+ flows following.

PLANNING SERVICES (continued)

On March 20, 2018 at an Analytical Work Group meeting, the “Units of Service for Non-Master Metered Customers and System Water Audit” project team reported an overview of action items that are planned and being considered to be completed in Phase 2 of the project. A project timeline was also presented. The meeting allowed Members an opportunity to consider the Phase 2 work and comment on its content.



The West Side Sewer Modeling and Monitoring Program is ongoing. The project team reported out to the WATF on March 2, 2018 and a progress meeting with MDEQ was held on March 9, 2018. Both meetings included presentations regarding recent data analyses. The next progress meeting is scheduled for April 13, 2018. The information and analyses generated by this effort will be used to validate and update the combined sewer overflow outfall frequency and volume calculations.

The Group is continuing to make progress on upgrading the legacy head-end communication system for Wholesale Automated Meter Reading (WAMR) system. The switch to the new system was completed on January 12, 2018, and the old Windows Intellution Server was shut down on January 17, 2018. The team is currently developing and testing a user interface to integrate the new head-end system into the WAMR Portal. These enhancements will make the WAMR system data collection more secure, reliable, and robust.



SA&MO and IT are testing the Paperless Work Order process for maintaining and repairing the Greater Detroit Regional Sewerage System (GDRSS) meters with the Meter Operations group and the sewer meter maintenance contractor. Training is being scheduled to roll out the process to field personnel. This will be a significant improvement of the collection of field information while sewer meters are inspected and calibrated.

WASTEWATER OPERATING SERVICES

Wastewater Operations Group

The Water Resource Recovery Facility (WRRF) was in compliance with all National Pollutant Discharge Elimination System (NPDES) and Michigan Department of Environmental Quality (MDEQ) water quality permits in February 2018.

Engineering & Maintenance Groups

Construction Engineering

The construction of Rouge River Outfall Disinfection Project is progressing on schedule with a targeted construction completion date of April 1, 2019, as required by the NPDES permit. Current work efforts include the construction of the new hypo building and the installation of the chlorine piping for the secondary diffusers. WRRF Engineering is evaluating “green” parking lot improvements that if selected will be incorporated into the rebuilding of the parking lot in front of the New Administration Building.



Hypo Building Construction

Design Engineering

The WRRF Design Engineering Team continues to work on making the relocation of our Industrial Waste Control Group (IWC) and Analytical Lab to the WRRF a reality. A big step toward the relocation effort, 100% design documents, was completed this month.

WASTEWATER OPERATING SERVICES (continued)

This project consolidates the existing plant Operations Lab with the Analytical Lab and IWC making efficient use of space and synergy between the groups.

To accommodate the additional IWC staff the Design Engineering Group will relocate to the 4th floor of the administration building next to the Construction Engineering Group.

Maintenance

The WRRF Maintenance Team partnership with the GLWA Transformation Team continues to execute a 5-S Lean Program for Pump Station #1. The current effort focuses on many items: the control room heating and ventilation systems, pump motor and influent valve painting, and removal of temporary structures from the area.

Another area incorporating a 5-S Lean Program is an area called “the old machine shop” which located near the incineration complex. The plan for this area is to provide a work space for the Incineration Process Team’s Electrical Instrumentation and Controls Technicians. This will allow for more effective and efficient operations and maintenance. The rooms are now being cleaned and painted.

The Maintenance Team along with our contractors have had several underground water and sewer leaks to deal with this last month on the WRRF grounds. All leaks have been repaired with minimal amount of down time and loss of water.

The Maintenance Staff continues to install seagull deterrent equipment. Installation has begun on the roof of Pump Station #1 and the grounds of the former Detroit Marine Terminal property.

Industrial Waste Control (IWC)

Phase II of the Pretreatment Information Management System (PIMS) software implementation project was initiated on February 27, 2018 in combination with the final phase of the Laboratory Information Management System (LIMS) program. This phase will allow sample scheduling from PIMS through LIMS (and back again) as well as field Chain of Custody and recordkeeping for sample collection staff. Phase II completion and full implementation is scheduled for March 31, 2018. Training for the new LIMS system was held February 13, 2018 through February 15, 2018. Training was successfully performed at both the Analytical Laboratory and WRRF Operations Laboratory to accommodate staff and work requirements. The LIMS program was initiated on February 27, 2018 at both the Analytical and Operations Labs. Sample, analytical, and other data are being entered and program issues addressed as they are found. A thirty-day period is needed to fully verify and implement the features of the new LIMS system.

WASTEWATER OPERATING SERVICES (continued)

CSO Control Program

The GLWA CSO Control Program Team continues to meet regularly with the CSO Operations Team to identify, prioritize, and address facility maintenance, equipment, and logistics issues. As such, various CSO projects are underway. A kickoff meeting was held to start a partial structural condition assessment for the development of a solicitation document aimed at making structural repairs to CSO Facilities. The Baby Creek influent chamber improvements project is underway in a submittal phase. The Conner Creek discharge gate project bids were received and is currently in the award phase, with anticipated construction starting in May/June of this year. The Oakwood drain vault improvements project is out for bids. A CSO Facility roof inspection project will kick off in April. Lastly, various other projects, aimed at improving equipment reliability and facility operations, are in various stages of scope development at this time. Many of these projects are relatively short term in nature, with a very specific focus on a piece of equipment or part of a facility.

WATER OPERATIONS

Systems Control

CSO Notification Rule Change

GLWA staff met with MDEQ officials on March 6th to discuss new rule changes regarding CSO notification process. The new rule requires initial CSO discharge notification within four (4) hours (originally 24 hours) and final notification within seven (7) days (from 30 days). In addition, this rule requires a sign at each discharge point. The rule goes in effect November 2018. Systems Control Center (SCC) will take the lead on installation of the signs at CSO Outfall sites. SCC has aligned operations to meet regulatory changes.

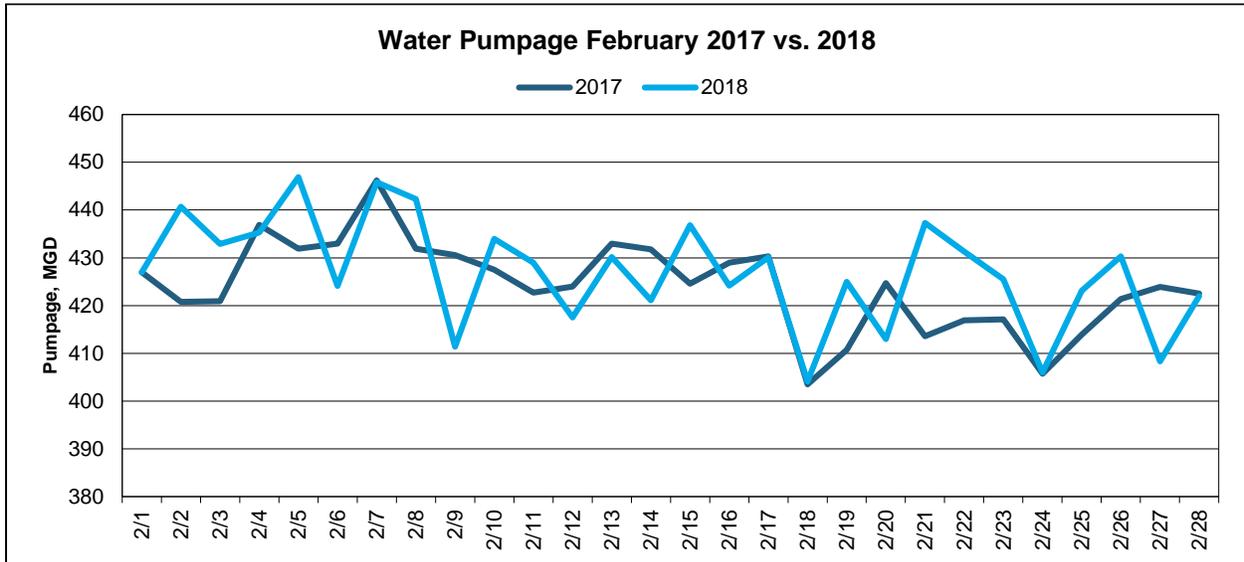
On March 5, 2018, the Michigan Oral Health Program presented Water Operations with its 2016 State Water Fluoridation Award. This award is jointly given by the American Dental Association (ADA), Association of State and Territorial Dental Directors (ASTDD), and Centers for Disease Control and Prevention (CDC) to recognize states that uphold the quality of fluoridation and maintain recommended fluoride levels.



WATER OPERATIONS (continued)

February 2018 Pumpage

February 2018 pumpage was 0.6% higher than February 2017. The daily average pumpage was 426 MGD.



Lead and Copper Rule Proposed Revisions

GLWA is part of a coalition of agencies that prepared public comments in response to the Environmental Protection Agency (EPA) and Michigan Department of Environmental Quality (MDEQ) Supplying Water regarding Lead and Copper Rules. This collaborative partnership also includes the Southeastern Michigan Council of Governments (SEMCOG), Detroit Water and Sewerage Department (DWSD), Oakland County Water Resources Commissioner, Michigan Section of American Water Works Association (MI-AWWA), Michigan Municipal League and Michigan Townships Association. The purpose of the coalition is to develop responses to proposed changes and key messages, as well as provide key information to our member partners, whereas, the following activities have taken place:

- Webinar held on February 27, 2018
- Comment letter template for EPA distributed on March 7, 2018
- Completed SEMCOG survey on lead service line replacement costs on March 8, 2018
- Comments made by GLWA Chief Executive Officer to EPA on March 8, 2018
- LCR Comment Packet in response to the MDEQ's Supplying Water to the Public Draft Rules (Lead and Copper Rules) discussed with member partners at One Water Partnering Meeting held on March 15, 2018 and was distributed to them via email on March 16, whereas, members were encouraged to draft their own letters to the MDEQ and may use information from the packet in part or in whole in their effort to do so

WATER OPERATIONS (continued)

GLWA Total Coliform Rule (TCR) Consecutive Sampling Changes

GLWA's timeline for total coliform consecutive sampling implementation has been moved up. Staff is diligently working to implement the regulatory changes in collaboration with other member partners.

GLWA Water Quality Sampling and Monitoring Survey

During the February 27, 2018 GLWA Water Quality Work Group Meeting, several options were presented for sampling and analytical services for lead and copper, water quality parameter, and the Total Coliform Rule.

On March 26, 2018, GLWA distributed a survey to its member partners requesting the completion of a brief survey that has been designed to gather member feedback on these options where the responses will be used to help shape possible changes to GLWA services. We asked our member partners to complete the survey by March 30th. Once the survey has been completed, GLWA will hold an in-person session to discuss the findings and options for moving forward.

INFORMATION TECHNOLOGY

In January, the IT Group conducted an IT Performance Survey with GLWA's leadership team. The results were shared with the IT Steering Committee at its March 1st meeting. The survey results reveal that GLWA's IT Group has a 73% satisfaction and is seen as a "trusted operator", which is an average result across industries. The IT Group is now meeting with areas and groups to discuss in-depth results and to collaboratively plan improvements. The IT Group's goal is to achieve the status of "business partner" in 2019, which requires a satisfaction score of 80% or higher.

The IT Group has successfully completed five projects since the last report and the IT PMO is currently managing 26 active projects and is analyzing 15 project requests.

The IT Security and Service Delivery teams have successfully completed a project to encrypt end-user computers across the Great Lakes Water Authority. Encryption offers strong protection of GLWA's information and is a significant enhancement of our cybersecurity efforts.

The IT Group has collaborated with Risk Management to roll-out a cloud based and location specific electronic safety data sheet system. This initiative enables users to access the most recent version of all safety data information online and brings GLWA into full compliance with OSHA regulations.

The IT Line of Business Applications Team and Project Management Office (PMO), working with Industrial Waste Control (IWC), have completed the implementation of the Laboratory Information Management System (LIMS) and the Pre-Treatment Information Management System (PIMS).

INFORMATION TECHNOLOGY (continued)

The successful implementation of these two systems will enable GLWA to decommission the current outdated and unsupported versions of these applications. The enhanced functionality of the new LIMS and PIMS provides a more effective and efficient laboratory system, eliminating the risk of falling out of compliance for federal and state reporting.

The IT Service Delivery Team has completed implementation of Office 2016 to all GLWA users. The updated applications enhance collaboration capabilities and provide a more seamless interface to the Office 365 online suite.

The IT Infrastructure Team has improved the responsiveness of both our external website (glwater.org) and Intranet portal by analyzing the results from recently implemented monitoring tools.

PUBLIC AFFAIRS GROUP

In response to input from team members last year, rollout of the *2017 Year in Review* will include a walk through at each facility to engage team members in their work areas before CEO McCormick's presentation and Q&A session.



An accompanying video has been created that will be shared at the beginning of each town hall meeting. The theme of the video is "Thank You," because we could not have had such a successful year without the hard work and dedication of the entire GLWA team. One Water One Team!

Public Affairs has released the third video in its ongoing public education collaboration series. The new video is titled, "The Value of Water Towers," and uses the city of Farmington's water tower as the example for why these storage tanks are important to GLWA member partners and their residents. The video is on GLWA's YouTube site, and can be viewed by clicking on: <https://www.youtube.com/watch?v=5zhGrrugHcU>.

Finally, GLWA Chief Public Affairs Officer Michelle Zrodowski has been appointed to the Public Affairs Council of the American Water Works Association, an international, nonprofit, scientific and educational society dedicated to providing total water solutions assuring the effective management of water. Founded in 1881, the Association is the largest organization of water supply professionals in the world.

The Public Affairs Council works to publicly position AWWA as an effective advocate for the drinking water profession. She is one of only 15 people chosen from across the U.S. for membership on this council, and will serve a three-year term.

SECURITY AND INTEGRITY

During the month of February and March, the Security and Integrity Group began FEMA 100, 200, 700 and 800 Incident Command System (ICS) training for Water Plant managers. The Group continues HazMat team training for HazMat officers.

Security and Integrity is currently updating the Main Office Building's Evacuation Plan.

ORGANIZATIONAL DEVELOPMENT

Talent Management

On February 23rd, Governor Rick Snyder announced his **Marshall Plan for Talent**. The program will incentivize school districts and universities to offer more work-based learning programs, through both state grants and bringing on private sector businesses as partners.

We are expanding 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 the governor's plan once it is approved in the 2019 budget.

The first expansion of our model is with the **Detroit Public Schools Community District (DPSCD)** Student Work-Based Learning (WBL) Program. In partnership with **Detroit Employment Solutions Corp (DESC)**, the school district has obtained a grant to pay students \$9.50 /hr. to combine classroom instruction with paid work-based learning experiences. The Work-Based Learning Internship Program is designed to provide high school students with exposure to professional careers and an opportunity to develop and refine their 21st Century skills. The goals of the 6-week program are to provide students the opportunity to apply skills learned in academic and technical courses, develop workplace skills, connect students to professional contacts and explore career choices.

GLWA is participating by taking on five (5) high school Juniors and Seniors from Cass Technical High School and Randolph Career Technical Center to expose the students to careers within GLWA. The Randolph students will work between March 12 and April 27, 2018 and Cass Tech students will participate March 19 – May 4, 2018. Students will work 15-20 hours weekly at the Water Board Building and Central Services Facility. The program will culminate with student presentations highlighting their internship experience.

Two (2) Cass Tech HS students and one (1) Business student from Randolph Career Technical Center will be assigned to OD this round to ensure that we evaluate the program and make recommendations for success if we expand it. Additionally, two (2) Randolph Career Technical Center students will be assigned to GLWA Water and Field Services.

EICT-I Apprenticeship Program

GLWA received a check for \$18,000 in incentive funds during week of February 26th from Automation Alley /Apprenticeship USA, bringing our total received to date to \$34,000.

ORGANIZATIONAL DEVELOPMENT (continued)

Benefits

- OD benefits will launch discount goods and services for team members from the provider Beneplace on March 29.
- The Broker/Consultant RFP has been issued. The face-to-face Q & A with a group of respondents has been completed, and Benefits has responded to written questions submitted by respondents. Formal responses are due the week of March 26th.

Recruiting

We have launched a nationwide search for a new Chief Operating Officer for Water Resource and Recovery Operations. The position has been posted on the GLWA Careers Opportunities page, a sponsored job on LinkedIn, MWEA, and WaterDistrictJobs.com. The position will be posted on other industry related sites (American Water Works Association, Careers in Government, American Water Resources Association, Water Environment Federation) including resume search and social media.

Headcount March 2017 was **814** and as of March 26, 2018 is **970 resulting in a 19% increase.**

January 1, 2018 to date we have already hired 69 new team members.

During the same period last year, GLWA had only hired 31 new team members.

Training

Over 8,875 hours of Training and Development have been logged and monitored since January 1, 2018. We are continuing to add additional enhancements to our LMS structure that will allow the Training area to deliver e-learning by adding progression training for Leadership Team Members, building curriculum for each Job Classification and adding Certification to users' transcripts for automatic recertification notifications. Tool talks have been added for our Technical Team Members and MS Office Suite 2016 Online Courses were added to support the GLWA upgrade.

ENTERPRISE RISK MANAGEMENT

GLWA is participating in the mediation/evaluation process permitted under its insurance policy to resolve remaining claim issues regarding the March, 2016 fire at the WRRF.

The mediator representing our insurance carrier is scheduled for an on-site tour of Complex II at the Water Resource Recovery Facility (WRRF) on March 27; this tour marks the next step toward finalizing negotiations regarding recoverable insurance proceeds.

ENTERPRISE RISK MANAGEMENT (continued)

A MIOSHA matter involving an allegation of a failure to provide clean drinking water at the WRRF was successfully challenged by GLWA. As a result of GLWA staff's efforts, the initial proposed fine was reduced to \$0.

Safety Management Professional, Mr. Keiano Vanzant, successfully completed MIOSHA Training Institutes 6-day, Level 2, Safety & Health Management Systems Boot Camp.

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FINANCIAL SERVICES GROUP

The Financial Services Group Report is an attachment to the Chief Executive Officer's Report.

LEGAL

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

Respectfully submitted,



Sue F. McCormick
Chief Executive Officer

SFM/dlr