



**Office of the Chief Executive**

735 Randolph Street, Suite 1900  
Detroit, Michigan 48226

November 29, 2017

The Honorable  
Board of Directors  
Great Lakes Water Authority

Dear Chairman Daddow and Directors:

**Regarding: CEO's Report – November, 2017**

Having recently returned from the Thanksgiving Holiday, I have been reflecting on much that I have to be thankful for. My list includes many things related to GLWA. At the top of my list are the wonderful people I have the privilege of working with throughout the GLWA organization and throughout the region that GLWA serves. The commitment to service excellence and collaboration is apparent and provides significant benefit to the public in the GLWA member communities.

There were two GLWA firsts that occurred earlier this month:

- The Association of Metropolitan Water Agencies presented GLWA with AMWA's 2017 Gold Award for Exceptional Utility Performance. This Award was earned through the efforts of nearly 900 men and women who are focused on delivering the nation's best water and sewer services in partnership with our customers every day.
- The Bond Buyer announced GLWA as winner of the Mid-West Large Deal of the Year for its \$1.3 Billion dollar bond transaction that generated over \$309 Million dollars in savings over the remaining life of the bonds.

On October 23<sup>th</sup>, three (3) days after the writing of the October CEO report, GLWA experienced its most significant service interruption since the launch of the Authority on January 1, 2016. Impacting a population of over 300,000 people, health care facilities, schools and commercial businesses, the impacts of such events are significant to many, and GLWA sincerely regrets this interruption in service and the impacts on our customers.

So what has GLWA done to date? Consistent with an Asset Management approach, GLWA had previously launched an effort to assure the operation of valves in the transmission system. Proposals have been received for this effort and those are in evaluation pending award. A planning effort launched, aimed at the reliability of GLWA's transmission mains (significant detail follows in the report). Phase 1 of 3 is complete and in March of 2018, we will have a program plan outlined for prioritizing repair and replacement of GLWA's transmission main assets. Acknowledged in the Water Masterplan finalized in 2015, it was recognized that the transmission system does not provide service redundancy everywhere in the service territory.

The reliance on interconnections between the distribution systems of communities provides a form of reliability, but response time and pressures are not comparable to transmission system redundancy. GLWA studied this issue and earlier this year has been in conversation regarding solution alternatives. Based on these discussions, business case evaluations have been developed for redundancy projects to be considered in the 2019-2023 Capital Improvement Plan.

On October 30<sup>th</sup>, the last community impacted was restored to normal service. I want to thank all of member communities for their patience, their collaboration and their commitment to public health throughout the event. Through the assistance of many, the impacts were minimized to the extent possible and through thorough and consistent communication in the area impacted, our customers were kept advised of our activities and precautions they should take. A special thanks to Oakland County who opened their Emergency Operations Center (EOC). GLWA staffed the EOC with critical personnel and the EOC provided a single point for coordination with the Oakland County Communities, impacted facilities and operations personnel in a variety of agencies. Thank you to the GLWA staff and our contractors who worked around the clock to assure that service restoration occurred as quickly as possible and coordinated with others in the region for the benefit of all.

Lastly, thank you to the 300,000 plus people who this event touched for your patience and understanding. We are committed to providing you with water of unquestionable quality everyday – there were a few days we could not deliver that to you – so thank you for taking the precautions we believed warranted, so we were confident we were protecting public health.

After event analyses continue.

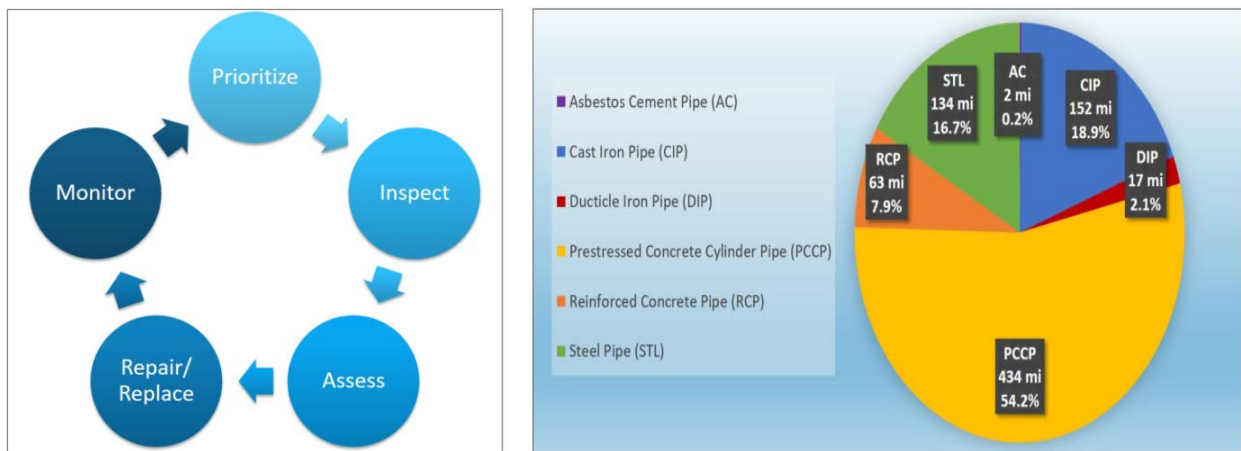
## **PLANNING SERVICES**

### ***Asset Management and CIP Group***

Since June, GLWA Enterprise Asset Management, Field Services, and Systems Control Center have been partnering with Pure Technologies to develop a prioritized transmission system condition assessment program. This effort was initiated as a component of GLWA Asset Management approach to address the aging transmission system infrastructure in a proactive and methodic fashion. GLWA's transmission system includes 802 miles of pipe ranging from 24 to 120 inches with an average age of approximately 68 years. The focus of this initiative is to develop a risk-based prioritization and methodology for systematic water main inspection and renewal. Both probability and consequence of failure for all transmission mains are considered.

The planning effort consists of three phases: 1) Data Gap Analysis and Closure, 2) Risk-based Prioritization, and 3) Transmission System Integrity Plan. With Phase 1 completed, Phase 2 is now underway and Phase 3 will begin in January and conclude March. Completion of Phase 3 of this planning effort will launch implementation of the program which begins with inspection of the transmission mains which will include necessary isolation valve, equipment access and operations planning efforts to complete the inspections. After inspection, the condition assessment results and renewal decision process will prioritize and package water main repairs and replacements for inclusion into the Capital Improvement Program.

Transmission system monitoring solutions will be evaluated, and where needed, implemented to establish re-inspection intervals and preemptive pipe integrity intervention



The Program is an ongoing process to assess and renew pipe and valves in a strategic fashion using risk for prioritization. The Program will provide an assessment and renewal plan for all types of pipe materials; prestressed concrete cylinder pipe comprising the majority of GLWA pipe, followed by cast iron and steel.

A preliminary first draft of the fiscal year 2019-2023 Capital Improvement Plan is nearing completion.

## **PLANNING SERVICES** (continued)

It is anticipated that this draft will be presented to the GLWA Capital Improvement Planning Committee and the Asset Management and Capital Improvement Plan Customer Outreach Work Group in December.

This year's CIP has many new features and a significant amount of new and valuable information. The project Business Case Evaluations (BCE) have been collected and maintained electronically within a database that allows for quick and easy access to data for reporting and evaluation.

2019 CIP BCE Input Form - Access

GLWA FY 2019-2023 CIP

LH WTP Low Lift Pumping Improvements

New CIP# 111001

Old CIP# 1227

Project Summary | Project Information | Ref. Docs | 2018 CIP Expenses | Phase Overview | Project Expenses | Phase Tasks and Dates | Project Prioritization | 2018-2019 CIP Changes

**PROJECT SUMMARY**

☐ Innovation

☒ MP Right Sizing

☒ System Reliability

**Project Status**

Future Planned

**Project Status Guide:**

Active: One or more phases have started, including procurement

New: First appearance in CIP

Future Planned: No Phases have Started

Cancelled-Closed: All Phases Have Officially Closed or Project Cancelled

Pending Closeout: Project at Substantial Completion but not closed out

Archived: Project closed or completed for more than one year

Reclassified: Projects that have been merged with other projects

**Project Title**

LH WTP Low Lift Pumping Improvements

**Project Significance**

INCORPORATE 111008 & 111003 INTO THIS PROJECT. Improvements needed to align the existing low lift pumping rate with the Lake Huron WTP production rate per the 2015 WMPU. Currently constant speed pumping forces the WTP to operate in a batch mode. FROM 111008: Existing electrical gear for low and high lift pumping units and filter backwash pumps are original to plant, beyond useful service life and need to be replaced to improve reliability, serviceability.

**Year Added**

2010

**Date Original BCE Prepared:**

3/3/2010

**Date BCE Last Updated:**

9/15/2017

**Project Engineer/Manager:**

Jorge Nicolas

**Title:**

Engineer

**Phone:**

(313) 926-8130

**Email:**

Jorge.Nicolas@glwater.org

**Manager:**

Grant Gartrell

**Managing Dept:**

Water Eng

**CIP Type:**

Project

**Budget:**

Water

**Project Classification Level 1:**

Water

**Project Classification Level 2:**

Treatment Plants & Facilities

**Project Classification Level 3:**

Lake Huron

**Fund:**

5519

**Cost Center:**

882111

**Accounting Useful Life:**

>20

**Save and Refresh Form Data**

Current User: caldwell Date Modified: 11/8/2017 Modification Explanation:

Record: 1 of 147

From View

NUM LOCK

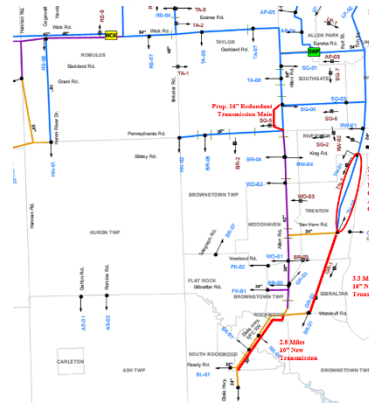
In addition, functionality has been built to allow for the comparison of project actual and projected expenses from year-to-year to quickly identify changes within the project scope and schedule. Another feature within the new BCE is the inclusion of the project schedule by phase of the project. Typically, each phase within a project will now have a schedule that identifies the project managers anticipated timing for scope development, procurement, project execution and project closeout. Similar to last year, the CIP development is a process that is being improved continually based upon comments and needs from Board members, internal team members and external stakeholders.

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

Three communities were found to have exceeded their contractual values either on the system maximum day or system peak hour this past summer. Each community was given a chance to explain the circumstances of their exceedance and answer questions at the November 1, 2017 Water Analytical Work Group meeting.

## **PLANNING SERVICES** (continued)

GLWA is addressing concerns over water redundancy for members in the downriver area. Alternatives have been discussed over the past seven months at Member Outreach meetings. On November 1, 2017, GLWA team members reviewed the feasibility of alternatives with the impacted members. Consensus was reached to move forward with exploring the option to provide redundant transmission in two areas and extending the transmission main through Gibraltar.



We are also addressing redundancy options along the 14 Mile Road transmission main. The next meeting is planned for December 4, 2017 with impacted customer members to continue discussions on redundancy options. The objective of the meeting is to discuss the two options that are currently being favored with the goal of coalescing around the best alternative.

The Partner Outreach Scorecard is GLWA's unique approach to receive member feedback in an effort to continually improve our services and to remain the provider of choice. The scorecard was distributed on November 1, 2017 to all customer members. The scorecard asks members to grade GLWA in eight different categories:

Staff Interaction	Field Services Excellence
Customer Outreach Program	Water & Wastewater Charge Management
Routine Communication	Innovation Leader
Emergency Communication	Collaboration

Project Innovations will share the final results at the upcoming One Water Partnership meeting planned for December 20, 2017.

### October Customer Outreach Meeting Attendance

<u>Meeting</u>	<u># Attended</u>
Wastewater Analytics Task Force (10/6)	28
Water Charges Work Group (10/10)	47
Wastewater Master Plan Steering Team (10/13)	27
Wastewater Best Practices (10/18)	21
QBS Customer Workshop (10/23)	17
Asset Management/CIP Work Group (10/24)	30
Water Charges Work Group (10/26)	58

## **PLANNING SERVICES** (continued)

Members were introduced to the many control structures in the wastewater collection system at an Interim Wet Weather Operations Plan (IWOP) workshop held after the October 6, 2017 Wastewater Analytics Task Force Work Group meeting. The workshop was well attended and many members expressed appreciation for the level of detail contained in the presentation. This is intended to be the first workshop of several in a series where system operations are a focus.

The Wastewater Master Plan Steering Team invited members of regional watershed groups to attend a meeting to discuss the wastewater master plan project. This is the first in a series of meetings to begin an ongoing dialog with the watershed groups regarding desired outcomes, performance measures, and coordination of projects and data and analysis. Participants included representatives from SEMCOG, Alliance of Rouge Communities, Friends of the Rouge, and the Clinton Watershed Council.

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

The “Units of Service for Non-Master Metered Customers and System Water Audit” project team reported progress to the Water Charges Work Group on October 26, 2017. The meeting provided the revenue requirement impact presented by The Foster Group. The project team also met with the Non-Master Metered Customers individually to gather feedback to determine if additional data is available that could be beneficial to the analysis. The next steps are for Black & Veatch to provide their report and for their recommendations to be presented at a Water Charges Work Group on December 12, 2017.

The Group is continuing to make progress on upgrading the legacy head-end communication system for Wholesale Automated Meter Reading (WAMR) meters. The team is developing and testing software to replace and enhance current system functionality to communicate with field devices over the radio network infrastructure. The switch to the new system is planned for mid-December. At the conclusion of the project, the WAMR system data collection should be more reliable and robust.

The team kicked off a Paperless Work Order process for maintaining and repairing the Greater Detroit Regional Sewerage System (GDRSS) meters. This project will implement a system which utilizes WAM and ServiceLink to dispatch work, complete work flows in the field and report results of field work back to WAM. The project is scheduled to be completed by April 2018.

The SA&MO Group has been making progress with Information Technology’s GIS Group to geocode the information from the Detroit Regional I/I Partners (DRIP) study conducted in 2005. The DRIP districts and sub-districts have been geocoded and now the GIS team is working on the DRIP metering locations. Additional information about the sub-district characteristics will be part of the GIS schema. The information gathered in the DRIP study can help the Wastewater Analytics Task Force’s D+ Metering subgroup determine areas of Detroit that may be metered to improve the metering in D+ service area.

## **PLANNING SERVICES** (continued)

### ***Energy Management Group***

The Energy Management Group continues its active involvement in a project for Utility Billing Managed Services for payment of GLWA bills for water and energy. The software under current consideration provides both integrated payment activities with advanced dashboards and exception based reporting. The project team has asked about additional functionality and expects to select a vendor in the near future.

The most active of projects currently managed by the Energy Management Group continues to be the two Aquasight Real-Time Intelligence projects, Adams Pump Station (Atlas Application) and Water Resource Recovery Facility (Apollo Application).

The Adams Atlas Application securely collects process data and energy usage from the pump station, performs analysis on this data and advises on operational modes that may be more efficient. This information is then made available to GLWA team members using a web based interface. Flow, pressure, energy use and pump statuses are displayed in graphic displays, trends and key performance indicators. Weekly reports are automatically generated and sent via e-mail on a weekly basis. Condition based triggered reports can be configured to generate emails or text messages.

The Water Resource Recovery Apollo Application is planned to collect process data and energy usage from the WRRF, perform analysis on this data and advise operators on operational modes that may be more efficient. Historical data from the GLWA Ovation System has been analyzed for potential savings. Process improvements that have been investigated include: reduction in chemical use for phosphorus removal, enhanced dissolved oxygen control, influent flow volume forecasting based on weather forecasts, and analytics related to pumping at Pump Station 1. Apollo is scheduled to be incrementally rolled out beginning in December.

### ***Research and Innovation***

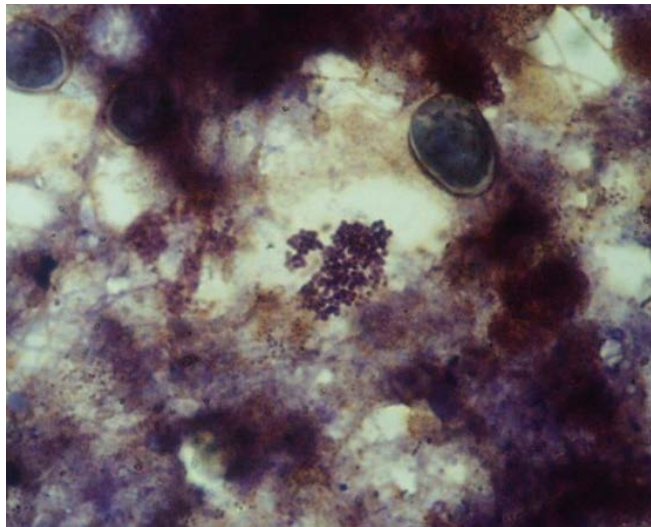
The Manager of our Research & Innovation (R&I) Group, Ms. Wendy Barrott, was invited to speak at the October Water@Wayne seminar. Water@Wayne is a monthly seminar for faculty, students, water leaders, scientists and engineers covering all aspects of water. Ms. Barrott spoke about the challenges facing water utilities, the benefits of instilling innovation within an organization, the goals of GLWA's R&I group and the projects that Research & Innovation has underway.

Research & Innovation will be participating and speaking in an invitation only workshop sponsored by the Water Research Foundation. The workshop will provide a deep dive into how utilities with limited budgets and employee capacities can fund innovative projects and programs. The workshop is titled, "Funding Innovation: Turning an Idea into a Line Item."

## **PLANNING SERVICES** (continued)

To support the Master Planning process in its evaluation of the use of a real-time collection system “learning” algorithm, Planning Services team members along with representatives from the Master Plan consultant staff visited South Bend, Indiana to view the real-time control network that has been implemented on their combined collection system. South Bend’s use of this technology resulted in a reduction from \$713M to less than \$200M. This savings was directly related to the implementation of their Phase II stormwater controls, decreasing the cost per household by \$608 per year through the use of a real-time control system and application of cloud-based modeling.

Representatives from CDM (Master Plan consultant), University of MI, Aquasight, Research & Innovation and the WRRF met to review the results of the University’s project, Bioreactor Characterization, to date. The project has confirmed the presence of microorganisms responsible for biological “luxury” phosphorus uptake and verified anoxic conditions in the first three stages of the reactors (necessary for luxury uptake). It also illustrated that phosphorus mass loadings are independent of influent flow and postulated that mixing of the ferric chloride at flows less than 550 MGD may be causing less than optimal results. The next tasks of the UM project will be updating the process model to provide additional information on potential ferric chloride dosing modifications. The phosphorus accumulating organisms appear in photo below as the grape like cluster.



## **WASTEWATER OPERATING SERVICES**

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

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

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

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

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

Current WRRF construction efforts include foundation work for the new hypo building (pictured below) and secondary disinfection diffusers for the Rouge River Outfall Disinfection Project. The project is on schedule with planned completion as required in April of 2019.



Other current work efforts include rehabilitation of primary clarifiers and aeration deck improvements. The WRRF Construction Engineering Team also assist the Operational Process Teams with process improvements.

#### ***Design Engineering***

The WRRF Design Engineering Team continues to support the operations process teams. In addition, two projects are currently in the design phase. The Central Offload Facility Project design is intended to create increased reliability and improved capacity to convey and off-load sludge for the nearly 20-year old equipment in this facility. The second project, relocation of the Industrial Waste Control (IWC) Division and Analytical Labs to the WRRF, will provide efficiencies for members of the IWC, Analytical Lab and Operational Lab Teams by consolidating the staff at one location.

#### ***Maintenance***

The WRRF Maintenance Team continues work on the seagull habitat deterrent project. All the maintenance teams assigned to process areas continue to complete regularly scheduled preventative and corrective maintenance work orders as well.

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

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

In addition to the typical duties of regulating industrial dischargers, the IWC Group has responsibility for administration of GLWA's underground storage tanks. The State of Michigan recently approved the tank closure plan for the Ford Road Pump Station's underground storage tanks. The tanks were removed in 2013, but additional testing was required before the State would approve our request for closure of the storage tank area. Following an extensive period of dialogue the MDEQ accepted closure of the area without any additional environmental restrictions or requirements. The site is now a potable water pump station and reservoir.

The Pretreatment Information Management System (PIMS) software implementation continues to progress with data migration now at the 95% project completion stage and report form development and testing still at the 90% completion stage. Training is scheduled during November with the start-up of phase one scheduled for November 30, 2017.

The implementation of the new Laboratory Information Management System (LIMS) is also progressing on schedule. The development of ACODES, the core element of the software, is 100% complete for the Analytical Lab and now up to 35% complete for the Operations Lab. ACODES are the analysis rules, constraints, and formula necessary to use the LIMS software.

A consensus has been reached on the new eventual location for the IWC administrative staff and the Analytical Lab staff who currently reside at the Livernois and New Center locations respectively. They will be relocated to the 2<sup>nd</sup> floor of the New Administration Building at the WRRF. Although discussions are still ongoing, the current target date for relocation of these facilities to WRRF is January 1, 2019.

## **WATER OPERATIONS**

### ***GLWA Water Quality has completed the 2017 Triennial Lead and Copper Testing***

The Water Quality team has completed another successful Lead and Copper Rule (LCR) triennial sampling period. GLWA provides lead and copper analysis services to our wholesale customer communities. Most GLWA communities are required to sample every three (3) years. Homes that meet specific criteria are sampled.

There are three levels or sample tiers, ranging from highest risk to lowest risk. Tier 1 homes are those that are at a higher risk for the presence of lead in their water due to contact with fixtures or plumbing materials that contain lead. Six hundred and twenty seven (627) LCR samples from eighty-five (85) communities were analyzed by the Water Quality laboratory from June 1st through September 30, 2017. Coordination and well-organized planning is required to effectively manage the Water Quality work teams to efficiently distribute bottles to each community with the required regulatory paperwork, inclusive of analyzing the samples and completing all the reporting requirements by the regulatory due date of October 10, 2017.

Great Job Water Quality Team!

## **WATER OPERATIONS** (continued)

The Lake Huron maintenance team pulled together to accomplish a long needed repair to one of its buildings. Working with Fleet and Facilities Manager Paula Anderson and under the guidance of Michael Hayden (Team Leader) and Daniel Aman (Maintenance Technician), the Lake Huron team was able to procure plywood, siding, shingles and other materials to complete the repairs. While this work is outside of the normal duties Lake Huron's Maintenance team performs, it is evident that the team brings many useful skills and abilities to GLWA. This is an example of the utilization of broader flexible classifications.



### ***Lake Huron Water Treatment Plant***

Lake Huron Water Treatment Plant recently had the honor of having Jacob Gorinac, Boy Scout from Cub Scouts Pack 154 (Indian Woods Elementary School), and his mothers Becky Gorinac and Karen Roberts visit the plant for a tour. Jacob will earn the "Arrow of Light Achievement" for meeting with a government or community leader to learn his/her role and responsibilities. Lake Huron was more than happy to support Jacob with achieving this honor.



### ***Field Services***

#### **Hydrant Winterization**

Hydrant winterization began at the Water Resources Recovery Facility the week of November 13<sup>th</sup> and has been completed. This task is ongoing, moving to the water treatment plants and booster pump stations. On November 16<sup>th</sup>, the Field Services crew winterized fire hydrants at the Water Works Park WTP and at the Lake Huron WTP on November 17<sup>th</sup>.

#### **Elmwood near Canfield – Valve Removal**

On November 16, 2017, the Field Services crew assisted a GLWA contractor with dewatering of a 30" main in Elmwood near Canfield as a defective 16" valve was to be replaced. The main was shut, whereas, Systems Control Center (SCC) and DWSD were notified.

## **WATER OPERATIONS** (continued)

The next day, November 17<sup>th</sup>, the Field Services crew continued to assist Lakeshore with dewatering of the 30" main and a defective 24" valve was removed and replaced with a straight piece of 30" pipe and two repair couplings. The contractor and GLWA staff worked through the weekend to restore service prior to the Thanksgiving Holiday.



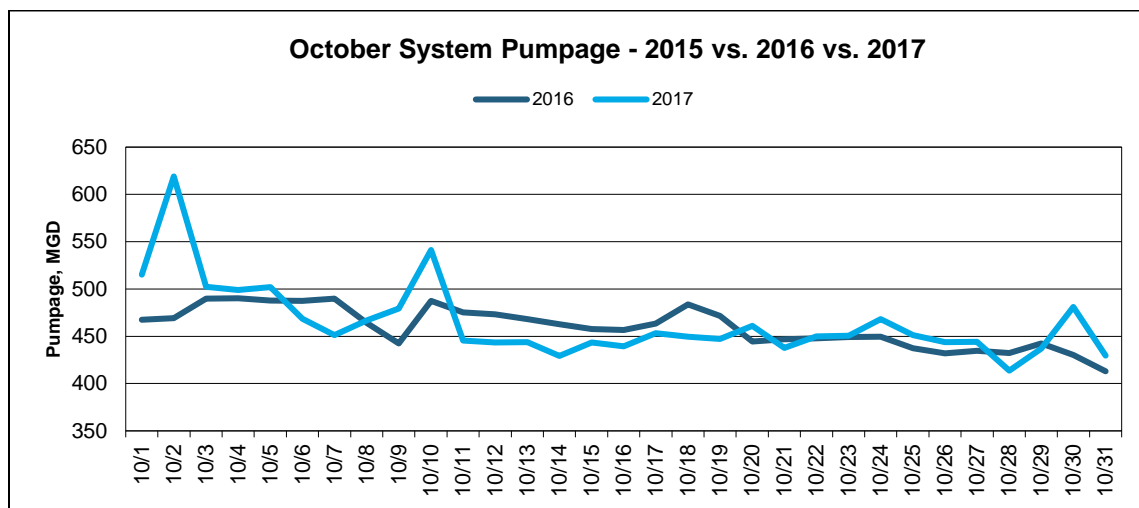
*Valve to be replaced with section of ductile iron pipe.*

*Note: gas main at top of photo and 6" distribution main to right of 30-inch valve replacement.*

## ***Systems Control***

### **October Pumpage**

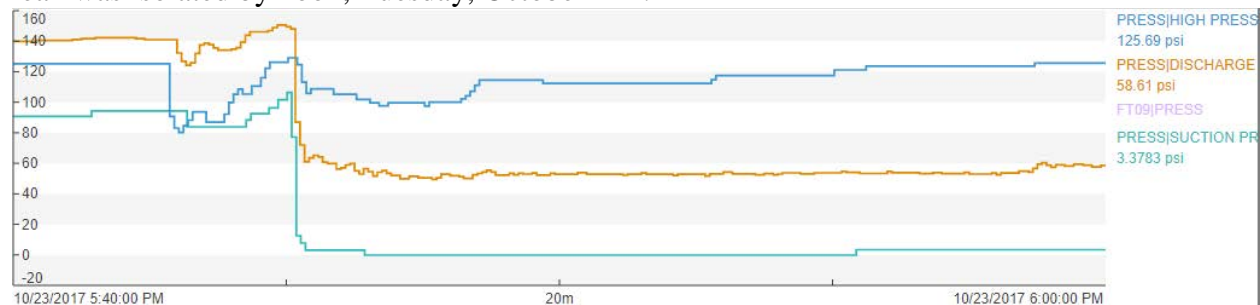
October pumpage was 1.1% higher than 2016



## **WATER OPERATIONS** (continued)

### ***14 Mile Oakland County Main Break***

On Monday, October 23, 2017, at approximately 5:45 p.m., a sudden drop in pressure was noted along the master water meters served by the 48-inch diameter pre-stressed concrete cylinder pipe (PCCP) transmission main that serves communities in western Oakland County. GLWA staff mobilized to the site and confirmed that a catastrophic failure of the transmission main had occurred. Efforts to isolate the main began, GLWA mobilized crews and its water main repair contractor (Lakeshore Global Corporation, CON-181) to the site and began efforts to isolate the main and repair the leak. Crews worked through the night to locate valves, open blow off connections and isolate the main. The two nearest isolation valves, upstream and downstream of the leak had sustained damage and were inoperable. Valves at the Franklin Pump Station were closed and the downstream valve was closed via confined space entry and manual operation. The leak was isolated by noon, Tuesday, October 24<sup>th</sup>.

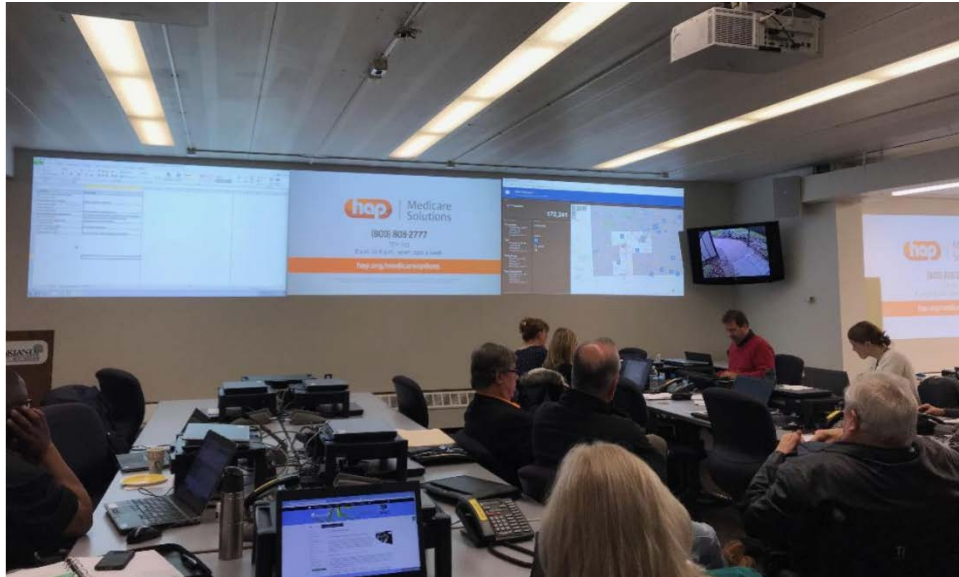


*Pressure Chart*

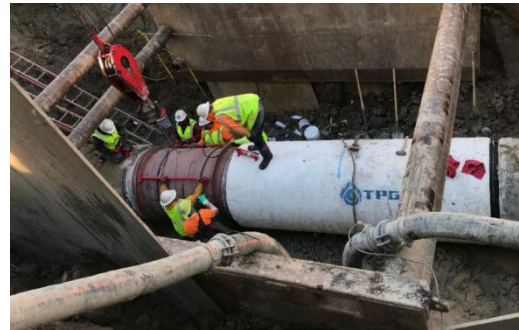
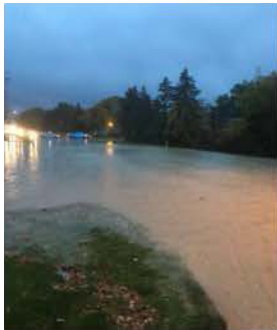
Water pumping and excavation at the leak site (14 Mile Road and Verona Street), continued on a 24-hour basis and the top of the pipe was exposed by 5:00 p.m. Pumping and excavation continued through the night to prepare for installation of the pipe. The repair section and three additional lengths of transmission main arrived onsite by 8:00 a.m. on Wednesday, October 25<sup>th</sup>.

The nearest 2-3 pipe segments were inspected and found to be in good condition upstream and downstream of the failed pipe segment. The components of the repair piping were disinfected and the repair commenced. The closure piece was installed by 6:00 p.m., October 25<sup>th</sup>. A leak was found during pressure testing, and the closure piece was found to have a rolled gasket. The repair was completed and the line was allowed to fill from Wednesday night to Thursday morning. At 8:30 a.m., the line was pressurized and gradually brought back online. The repair was encased in concrete and brought back to full service by 10:00 p.m. Thursday night, October 26<sup>th</sup>. The Boil Water Advisories were lifted in stages between October 27<sup>th</sup> and October 30<sup>th</sup>. The damaged roadway was repaired under the oversight of the City of Farmington Hills and was opened to traffic on November 14, 2017.

## **WATER OPERATIONS** (continued)



*Oakland County EOC*



*Photos of main break site*

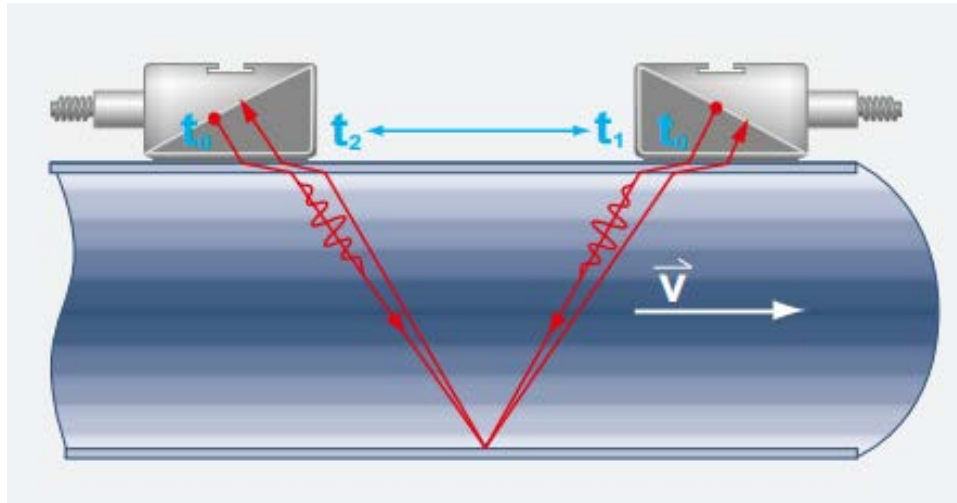
### **Flow Metering Pilot at Adams Road**

Accurate flow metering is extremely important for reduction of non-revenue water and establishing key performance indicators for the pump performance. GLWA has tried a variety of flow metering technologies at various locations in the transmission system without much success due to operational and space constraints at the water stations. In order to install a conventional magnetic flowmeter, civil engineering work must first be carried out to expose the pipeline. Further, the pipe must be shutoff for the installation which means an interruption of supply and higher costs.

GLWA performed a pilot of an ultrasonic flow meter at the Adams Road Booster Station. Ultrasonic flow meters are non-intrusive and require no shutdown of supply. Systems Control Center (SCC) staff worked with vendor engineers to select a site and location to prove out the technology. A pilot meter was installed on a 54" discharge main at Adams Road on November 16, 2017, and flows were verified with calculated discharge flows and Wholesale Automated Meters.

## **WATER OPERATIONS** (continued)

Overall, the initial data compared well with the pilot meter and the vendor has agreed to provide the flow meter for a week of testing.



*Mechanism of Ultrasonic Flow Meters*

If the flow meter data is repeatable and agrees with current methodology (Wholesale Automated Meter Read - (WAMR)) system, then GLWA will vet the technology with a larger operational staff, including Engineering, and potentially move forward with another pilot.

### **Genesee County Drain Commissioner Flows**

Genesee County Drain Commissioner's (GCDC) Division of Water & Waste Services is planning on changing the supply to their own treatment plant starting November 26, 2017. GCDC and GLWA Operating staff have been in communication on coordinating the switch.

## **INFORMATION TECHNOLOGY**

The IT Infrastructure team has completed the installation of Network Video Recorders (NVR) at 37 of 38 planned sites. Belle Isle Intake is the only outstanding site. It needs infrastructure work (cabinets and networking) completed to install NVR devices.

The IT Infrastructure team has completed installation of new Wireless Access Points (WAP) at 42 sites. This new infrastructure enables all team members with wireless devices to automatically connect to the GLWA or DWSD network with their laptop, tablet, or other mobile device.

The IT Infrastructure team has completed the process of moving all files, folders, applications that were on the unsupported SAN that had an outage in July to newer supported primary storage with backup of all data to a new storage device physically located at another site.

## **INFORMATION TECHNOLOGY** (continued)

The IT Security and Risk team is working on implementing additional security measures for our email infrastructure, to limit the amount of malicious emails being received by our users. These measures include Department of Homeland Security (DHS) recommended security settings, along with the addition of an email proxy service, which would scan email messages for malicious attachments and malicious links, before they get delivered to users' inboxes.

The Line of Business Applications Delivery team has implemented enhancements to the WAM system this month focused on improving the user experience. Three noteworthy undertakings occurred this month including:

Single Sign On was deployed for GLWA and DWSD. When users log into WAM from a network PC, their ID is now authenticated via Windows Native Authentication, and they will be taken directly into the application. Users will no longer need to remember or maintain a separate password for WAM.

Department and Area were defined in their master tables and added to the GL Accounts and Work Management transactions. The implementation of Department and Area allows the costs to be rolled up to the various department / area levels, which will allow leaders to better maintain their costs within budgets. This change will also allow users to limit their GL Account selection lists on some work management transactions.

Four new reports were added to WAM as part of the BI Publisher project. These reports provide graphical results and flexible filters and allow the users better visibility into the application.

BI00002 – Asset Failure and Repair Report

BI00003 – Work Hours Actual vs Estimated

BI00004 – Last Logon Report

BI00008 – Requisition by Area and Amount

Organizational Development conducted online Benefits Open Enrollment utilizing Ceridian Dayforce without any major issues which is a significant improvement from last year.

The Enterprise Applications Team has implemented a new [Directory / People Search Intranet](#) for GLWA. It is available from our [Intranet homepage](#) under the GLWA logo in the top center of the page. The new GLWA Directory/People Search enables GLWA team members to filter or perform a quick search by most fields (i.e. Manager, location) and/or perform a quick search based on part of a phone number (i.e. 8358).

The IT Enterprise Applications team also implemented a new GLWA Line of Reporting. A team member can view all Areas/Groups/Teams throughout the organization. Both newly implemented features were constructed by using GLWA Active Directory with help from GLWA Security & Integrity team to import team members badge pictures which will help team members put face to names of people they have not yet met.

## **INFORMATION TECHNOLOGY** (continued)

The IT Enterprise Applications team has been working on numerous Geographic Information Systems (GIS) projects for GLWA/DWSD related to Hydrant Inspection Flow test and winterization. The City of Detroit and the Detroit Fire Department have been working with the GIS Team to develop a method and tools to streamline the inspection of more than 30,000 fire hydrants in the City of Detroit. With the new tools, inspectors in the field can now use smartphones to locate hydrants then collect and record detailed inspection information about each hydrant. If the inspection reveals that the hydrant needs repairs, a work order is automatically created that night. Inspectors can see which hydrants have been inspected in real time as the color of a hydrant changes once it has been inspected. The data from this collection application is then used in a Hydrant Dashboard application that shows live data for how many hydrants have been inspected, how many have not yet been inspected and how many were deemed inoperable. The dashboard can be filtered to show inspections from specific time ranges or inspections made by specific fire houses.

The IT Service Delivery team deployed security patches to 1400 devices during the month of November, patching 97% of the Authority owned computing devices.

A Java computer policy was deployed to all desktops allowing for an improved work experience to web applications using Java, including WAM. The new policy will allow employees to navigate various screens in WAM without receiving a Java notification.

## **PUBLIC AFFAIRS GROUP**

In conjunction with on-going internal communications efforts, GLWA held its first-ever Halloween Costume Contest. Selected as the first place winner was Lisa Tuggle-Ingram, Plant Technician at WRRF, for her zombie costume (see photo in the collage below). The first place, second place (Lisa Mancini - FSA) and third place (Tiffany Alexander - Water Operations) winners were featured in a special Halloween edition of the One Water News. The newsletter included a photo collage of team members in costume and a video to a special Thriller dance performance by Financial Services team members.

# One Water NEWS

SPECIAL HALLOWEEN EDITION

3 November 2017



**GLWA's Halloween Costume Contest**  
**WINNER!!!**  
Lisa Tuggle-Ingram, Plant Technician, Wastewater Operations at WRRF

**Second Place**  
Lisa Mancini, Interim Financial Planning & Analysis Manager, Financial Services

**Third Place**  
Tiffany Alexander, Professional Administrative Analyst, Water Operations & Field Services

GLWA participated in the Children's Center's Trunk or Treat event on Friday, October 27, 2017. Team members dressed in costume and passed out candy and GLWA water bottles to over 500 local children at the Children's Center in Detroit from two decorated GLWA vehicles. This event was an opportunity to meet with local Southeast Michigan residents and share our brand and mission.

GLWA is also partnering with the Children's Center for the upcoming holiday season. Now through December 1st, GLWA is collecting toys and winter necessity items for the Children's Center Holiday Shop. The Holiday Shop offers children and their families from all over Southeast Michigan, the opportunity to receive a toy, basic need items and a gift card for a family holiday meal. The gifts are collected and set up into a winter wonderland at the Children's Center.

## **PUBLIC AFFAIRS GROUP** (continued)

More than 500 eligible families (including 1,500 children) are then invited to “shop” for the perfect gifts for their children. GLWA volunteers will also staff the Holiday Shop on December 14th from 1-6 p.m.

Public Affairs has begun preparations for the second annual internal communications survey. The year's survey will be the first measurement against the baseline created from last year's survey. It is anticipated that the survey, done both online and in print, will be conducted in March 2018.

## **SECURITY AND INTEGRITY**

During the month of October, the Security and Integrity Group has completed the 2017 Tabletop Exercise. The event was widely attended by Emergency Response personnel throughout the region and the state.

GLWA Security and Integrity has completed the Michigan Commission on Law Enforcement Standards (M.C.O.L.E.S.) firearms qualification training, and is continuing Hazmat Training for several officers. In addition, the group is coordinating with the Hazmat Coordinator to formulate operational rules for its future Hazmat Team. Training is also ongoing with FEMA Courses on Critical Infrastructure Protection.

## **ORGANIZATIONAL DEVELOPMENT**

### ***Training***

Efforts are continuing on conversion of historical training data to be imported in the LMS system. Validation of the historical data by Cornerstone has been completed. The next steps is to load the data into the “Pilot” instance for further testing.

### ***Talent Management***

GLWA has 47 job postings for positions across the organization. The open positions are posted on our external website. Organizational Development has added a new source to our list of recruiting sites to increase visibility of our open positions. As of November 21<sup>st</sup>, our staff count is 927. New employee orientation continues on the third Friday of each month.

### ***Apprenticeship Program***

GLWA has been approved for another Department of Labor-funded grant done in partnership between Automation Alley and the State of Michigan, for achieving established benchmarks in the ApprenticeshipUSA grant. The grant award is in the amount of \$2,000.

Team Members from Organizational Development participated in National Apprenticeship Week by attending the 3<sup>rd</sup> Annual Transatlantic Apprenticeship Exchange Forum (TAEF), hosted by the Urban Institute in Washington, D.C.

## **ORGANIZATIONAL DEVELOPMENT** (continued)

There were speakers from the Urban Institute (a 50 year old Washington DC-based think tank that conducts economic and social policy research to shape decisions, and offer solutions) and the TAEF which is a group of international apprenticeship experts, companies, and delivery partners joining to bring world-class apprenticeships to the US.

### ***HRIS/LMS Upgrade***

Testing continues on changes in the Dayforce HCM system in anticipation of the upcoming upgrade to a newer version scheduled for December 8, 2017.

### ***Labor/Management Meeting***

GLWA is partnering with AFSCME and the City of Detroit in another MERC Training in December that includes representatives from the Michigan Employment Relations Commission, and GLWA partners will be invited to attend (for those who missed our October session). GLWA senior leadership will also be invited to attend. This session will discuss key points and services that MERC provides to employers and labor organizations.

### ***One Water Wellness Program***

GLWA participated in the Detroit Medical Center (DMC) 61-Day Challenge Kick-off event on October 27, 2017 at DMC Harper-Hutzel Hospital. Seventy-seven (77) GLWA team members are participating in the Challenge that ends on December 31, 2017.

## **KUDOS AND STAFF ACCOLADES**

On October 25, 2017, fifteen (15) employees passed the Microbiology Methods for Drinking Water Operators course. This class is held twice per year as review of basic bacteriology, bacteriological methods for drinking water, quality assurance and quality control required for laboratory certification and the revised total coliform rule requirements. This class is intended to prepare participants for questions that may be asked on the operator license exam related to the total coliform rule regulations and laboratory certification requirements. The class is a continuing education credit (CEC) certified course taught by GLWA staff (Mary Lynn Semegen, Water Quality Manager).

## **LEGAL**

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

## **FINANCIAL SERVICES AREA**

The Financial Services Area Report will be provided separately to the Chief Executive Officer's Report.

Respectfully submitted,



Sue F. McCormick  
Chief Executive Officer

SFM/dlr