



Office of the Chief Executive

735 Randolph Street, Suite 1900
Detroit, Michigan 48226

December 22, 2022

The Honorable
Board of Directors
Great Lakes Water Authority

RE: CEO Report – December 22, 2022

Dear Chairperson Quadrozzi and Directors:

The end of the year is always a time when we reflect on the events of the last 12 months and take the opportunity to show gratitude for the blessings in our lives.

My GLWA family is certainly one of the blessings that I am most grateful for this year. The men and women of GLWA are incredibly talented water professionals doing great things in and for our community and each other. I am so proud of how our team comes together in support of each other through the good times and the challenging – which we most certainly have seen our fair share of these last couple of years. As I have said a lot lately, there is absolutely no other group of people I'd rather work alongside.

I wanted to use my December report to this honorable body to point out several of the most recent achievements that are evidence of the good work the GLWA team continues to do.

First, I am incredibly proud of the fact that, once again, we have received what is known as a “clean audit” opinion from Baker Tilly, the independent auditors, for the financial audit of GLWA's Annual Comprehensive Financial Report (ACFR), as well as the audit of our federal awards program. We have a strong commitment to quality in our financial reporting on a monthly basis, which means timely, relevant, and reliable information is available for decision makers and anyone who is interested.

A huge thank you goes out to Chief Financial Officer & Treasurer Nicolette Bateson and the entire Financial Services Area (FSA) team who spent countless hours working with our auditors to ensure they have everything that they need, all while doing their day jobs. I also need to acknowledge the fact that this outcome would not be possible if all GLWA team members were not committed to following the comprehensive financial controls that FSA has developed and put into place over our first seven years of operations. This is truly a job well done by all of our team members.

I am also pleased to share the good news that our recruiting and retention efforts appear to be paying off with our number of team members growing each month since the beginning of this fiscal year in July 2022, with our headcount being 974 as of the end of November. This is real progress, and I am committed to working to ensure that our team members feel valued and have the resources necessary to grow and develop in their roles.

We also recently learned that Water and Waste Digest has named our Grand Connection Project, the connecting tunnel between the Detroit River Interceptor and the North Interceptor East Arm one of their Top 10 Projects of the year. This is a wonderful acknowledgment of the many team members who worked to make this project a reality and improve resiliency in our regional system.

As I do in each report, it is important for me to call out significant accomplishments of our team members.

For the second year, the state of Michigan has declared the second week of December as Water and Wastewater Professionals Week. In conjunction with this week, our own Director of Wastewater Operations Majid Khan was spotlighted by EGLE as one of the water and wastewater professionals in Michigan working to keep our waterways safe and protect the environment. You can see his write up by clicking [here](#). In honor of this week, we are also showing our appreciation for our team members by giving them a new 28 oz., touchless water bottle, so that they can stay safely hydrated while on the job.

At their annual conference, the Michigan Education and Apprenticeship Training Association (MEATA) honored Maintenance Technician Apprentice Terrell Dockery as the recipient of the organization's first-ever Apprentice of the Year Award. What a wonderful acknowledgement of Terrell and his hard work!

I want to end by highlighting the incredible generosity of our GLWA family. Because of their overwhelming support, our annual giving back holiday program was a major success raising more than \$10,000 -- \$10,108 to be exact -- in under one month! The money was used to put together 150 care packages for the homeless veterans at Piquette Square in Detroit that included winter hats, gloves, hand warmers, socks, fleece blankets, neck and face gaiters, hand sanitizer and snacks. Thank you to all of our team members who donated money or gave their time to volunteer to assemble the care packages, write thank you letters or staff a very special holiday dinner for the veterans on December 15th.

On behalf of our *One Water, One Team*, I wish you a happy and healthy 2023!

PLANNING SERVICES

Asset Management Group (AMG)

GLWA's Linear System Integrity Program (LSIP) is continuing to progress with assistance from our consultant, HDR of Michigan. This program is focused on improving the reliability of our water transmission and wastewater collection systems. The goal of the program is to proactively assess GLWA's water transmission mains and wastewater interceptor system and renew as necessary, to reduce the impacts of failures and increase reliability of our linear assets.

The LSIP framework and Water Management Plan (WMP) are nearing completion and will serve as a standardized repeatable process for condition assessment in the LSIP. The WMP includes business processes and guidelines to promote a systematic approach for proactive pipeline management supported by return on investment principles.



Simultaneously, with the development of the LSIP framework, GLWA and HDR have continued with planning and design of additional renewals along the 14 Mile Road pipeline, following the failure that occurred in October 2021. The results of the 2019 condition assessment along the 14 Mile Road transmission main indicated other areas of distress within the prestressed concrete cylinder pipe (PCCP) and, given the recent failure and reinspection of a portion of this main, confirmed these results. As such, GLWA has determined it is prudent to plan renewals before the installation of the 14 Mile Road loop project slated for completion in early 2024.

Two separate shutdowns are coordinated this fall/winter. The first is a portion of the 42-inch watermain that was taken out of service as part of 14 Mile Road loop project between Haggerty Pump Station and Decker Road. When this pipe was taken out of service in October, carbon fiber reinforced polymer lining was installed for 10 segments of pipe needing repairs. The second is planned to occur in early 2023 and consists of a larger shutdown area from Franklin Pump Station to just west of Farmington Road, consisting of four 48-inch pipe segments and approximately 700 feet of 54-inch PCCP.



PLANNING SERVICES (continued)

In August 2022, GLWA experienced a significant water main failure on the 120-inch transmission main located near the Lake Huron Water Treatment Plant. In response to this event, GLWA and HDR capitalized on the existing service outage to perform a condition assessment on five miles of the pipeline and modifications to facilitate future inspection. Repair of the failed section and surrounding area was performed and planning for inspection of the full pipeline (approximately 26 miles) in spring 2023 is underway. The information gathered from this failure and the 14 Mile Road inspections will be used to further prioritize GLWA's water transmission system and reduce the risk of future disruptions.

Capital Improvement Planning Group (CIP)

The CIP Delivery team devoted the month of November to working on the second draft of the FY 24-28 CIP report and addressing comments received internally and from Member Partners. The period to share comments closed on November 18, 2022. The FY 24-28 CIP Discussion Draft 2 report is scheduled to be published the week of January 16 and will be presented to the Capital Planning Committee on January 18, 2023.

The CIP team is excited to announce the hosting of its first lunch-and-learn event for the Water and Wastewater teams. The event was well attended and responders to a survey indicated that they would recommend this training to other team members. Many thanks to the AECOM team for presenting on project controls basics and to Joan Tobin, GLWA's Change Leadership Consultant, for facilitating.



Project Controls Basics L&L at Water Works Park

Also, last month the CIP group launched the second annual CIP Plan Cover Project Photo contest. All members of the CIP Delivery team got an opportunity to vote on the best Water and Wastewater photos for the cover of the FY 24-28 Capital Improvement Plan. Congratulations to both Khoder Daher and Jacob Magnum for submitting the photos that received the highest votes. Thank you to everyone who participated by submitting photos or voting. Stay tuned for the cover design to be presented in Discussion Draft 2.

PLANNING SERVICES (continued)



CIP#115001
Water Works Park Water Treatment Plant – Yard Piping #3
Photo submitted by: Jacob Magnum of Water and Field Services



CIP#211008
Pump Station #2 Ferric Chloride Storage Tank
Photo submitted by: Khoder Daher of Wastewater Operating Services

Lastly, the CIP group, with support from AECOM, continued to work on the Program Management Plan (PMP) Chapter 15 - CIP Planning. The team continues to establish the framework for PMP Chapters training, resources, and roll-out. The team also continued to screen resumes and conduct interviews to fill current vacancies within the group.

Systems Planning Group

Communications & Education Work Group

Members gathered at the Water Works Park Water Treatment facility on November 3 for the final Communications & Education Work Group meeting of 2022. At the meeting, GLWA's Public Affairs team premiered [a video](#) on the importance of protecting source water. Water Quality Manager, Mary Lynn Semegen, demonstrated several EnviroScape educational models purchased with Surface Water Intake Protection Program grant funds. Following a roundtable discussion, members participated in a tour of Water Works Park, led by Terry Daniel, Deputy Chief Operating Officer for Water and Field Services, and Victor Vecsernyes, an operations leader at the facility.

Capital Improvement Plan (CIP) Work Group

A team from Public Sector Consultants (PSC) kicked off the November 15 meeting, sharing the findings of the Economic Outlook Task Force (EOTF). The EOTF is an effort led by PSC and PMA consultants, together with GLWA team members, to conduct an economic analysis, identify impacts on the annual capital improvement and operating plans, and provide cost pressure mitigation strategies addressing forecasting, budgeting, and vendor/contract terms. Next, CIP Director, Dima El-Gamal, presented an overview of Discussion Draft #1 of the FY 2024 – FY 2028 CIP.



PLANNING SERVICES (continued)

Director of Water Engineering, Tim Kuhns, and Director of Wastewater Engineering, Chris Nastally, each shared the framework their teams used to prioritize CIP projects for alignment with GLWA's financial plan.

Watershed Hub Work Group

On November 16, the Watershed Hub Work Group met for a second time with representatives of the U.S. Geological Survey to provide feedback on Phase 2 water quality sampling locations for the Regional Water Quality Monitoring Program, which is designed to measure the effectiveness of regional water quality actions and to guide future investments. The work group also debriefed key conversations with stakeholders to firm up plans for implementation of the Investigational Grab Sampling Program, which is designed to identify and resolve the most significant dry weather water quality impairments in the Rouge and Clinton watersheds.

Water Management Best Practices

The Water Management Best Practices Work Group gathered in person and virtually on November 16th to discuss current projects underway in their organizations, identify potential topics to build best practices around, and welcomed John Norton, Director of GLWA's Energy, Research & Innovation and Carol Miller, Director of Wayne State University's Healthy Urban Waters program, who presented a collaborative project to create a workforce and laboratory center of the future.

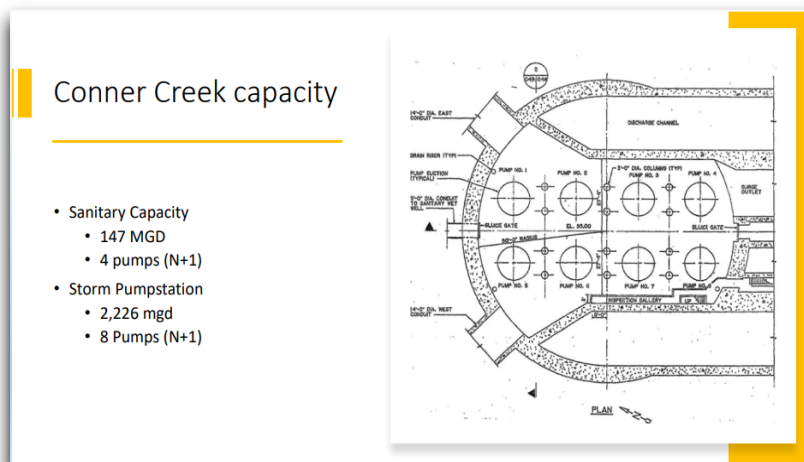
FY 2024 Charges Rollout #2 Units of Service

Members met via Zoom on November 16, for the second meeting of the Fiscal Year 2024 Charges Rollout series, which focused on the Units of Service. Chief Financial Officer and Treasurer, Nicolette Bateson, along with Bart Foster of The Foster Group, previewed the preliminary Water SHARES (Units of Service), which incorporated the results of the 2022 water contract negotiations but did not reflect the updated Cost of Service analysis that is to be presented at the January 12, 2023, Charges Rollout #3 meeting. Preliminary wastewater Units of Service, known as SHARES, were also presented, although the SHARES are fixed through FY 2024.

PLANNING SERVICES (continued)

Wastewater Analytics Task Force (WATF)

On November 18, the Wastewater Analytics Task Force met to learn about the improvements being made at the Conner Creek pump station, as well as analyses underway to consider future investments. They also reviewed the findings of the draft fiscal year 2022 flow balance report.



One Water Partnership Co-Chairs

On November 29, the One Water Partnership met in person in Livonia, to learn about organizational changes at GLWA in recent years, the Watershed Hub Work Group's Investigational Grab Sampling Program, the Michigan Tri-County Summit that took place on November 18, and the 2022 GLWA Scorecard results. One Water Co-Chairs were elected for 2023. The 2023 One Water Partnership Co-Chairs are as follows: Carrie Cox, Jeff McKeen (Oakland County), Kevin Johnson (Macomb County), Laurie Koester (GLWA), Tom Murray, Don Rohraff (Wayne County), Scott Dungee (Genesee County), Sam Smalley (Detroit), and Luke Blackburn (Washtenaw County).

System Analytics & Meter Operations (SAMO)

The SAMO Group continues to progress on the wholesale water meter pit rehabilitation and meter replacement program. The first project of this program started in November 2018. The scope of work includes rehabilitation work at 60-meter pits that have metering and/or meter pit condition concerns. Last month, coordination meetings were held with the City of Flint and Madison Heights. The planned work has been completed at 54 of the meter pit locations and is underway at another four locations.

The group is working with the procurement group to solicit bids for the second contract of the program. This contract will provide metering and instrumentation upgrades and complete meter pit rehabilitation at 60 additional meter pit facilities. This contract will also provide as-needed corrective and emergency maintenance for the remaining metering facilities.

WASTEWATER OPERATING SERVICES

Wastewater Operations

Water Resource Recovery Facility (WRRF) operations complied with the Water Quality Standards for the month of November 2022 with the following two exceptions: Unauthorized primary effluent discharge on November 19, 2022, resulted from unusual hydraulic conditions in the WRRF. The Wastewater Operations team intends to host a hydraulic refresher with the leadership team to eliminate re-occurrence of discharge. The primary effluent sample from November 28, 2022, was mislabeled. The error was not identified and corrected until after the hold time for carbonaceous biochemical oxygen demand (CBOD) testing, so there is a non-report violation. The Operations team is reviewing the procedures to identify any other communication gaps that should be corrected or improved to eliminate re-occurrence. Additionally, the Laboratory team in collaboration with Process Automation & Control Systems (PACS) team has developed a dashboard and alarming system for the wet weather start and end events.

Maintenance

The Maintenance and Operations, and Logistics and Materials (L&M) teams have been working with the Transformation team to develop a new color-coding standard to be implemented throughout the WRRF. The goal is to assign each maintenance team/process area a unique color identifier to refine housekeeping processes, increase team ownership of the storage of their areas, and improve accountability for items not properly stored. A pilot is currently being run in the Dewatering area on oil barrels. The color stickers will help any team member discover an improperly stored oil barrel to quickly identify which team the barrel belongs to and have the barrel moved to proper storage. In the future, the color-coding system will be expanded to include other items such as ladders, portable equipment, and other items that may be left out around the plant. The photo shows the color-coding system used during the pilot where two different stickers were tested for durability to determine the best option.



WASTEWATER OPERATING SERVICES (continued)

With consistent low flows at the WRRF, the phosphorus levels have been higher than normal; the Operations and Maintenance teams have been working together to come up with innovative ways to introduce ferric to the system to improve the mixing to help combat the higher concentrations. The Primary team aided in this effort by rerouting the Pump Station 2 ferric discharge line further upstream in the effluent channel. This reroute should provide better mixing of the ferric in the effluent by injecting it at the immediate discharge of the grit channels. This project was well-coordinated and only required a four-hour shutdown to the ferric system, minimizing the impact this modification had on operations. The photos show that initially the ferric line at Pump Station 2 discharged to a calm portion of the effluent negatively impacting mixing, and the line has been rerouted to a more turbulent portion of the effluent channel.



Due to the age of the induced draft (ID) fan variable frequency drives (VFD) for the Complex II incinerators, the Incineration team started a contract with Siemens to perform an analysis of the power cells for the VFDs and propose a replacement plan. Each of the eight ID fan VFDs includes nine power cells, all of which are approximately the same age. Since these power cells are nearing their estimated end of life, this contract is designed to proactively replace or refurbish them prior to failure. This service contract will help maximize the reliability of incineration and provide for greater operational flexibility in solids handling and disposal. The photo shows a view inside an ID fan VFD during the initial power cell assessment done by Siemens.



Process Control Center (PCC)

Boiler Drum Level Feed Water Controller

The Team members responsible for the operations of our boilers requested that the Process Automation and Control System (PACS) team assist them in improving the operation of the boilers at WRRF. Water feed control has been difficult. Operators have struggled to maintain a constant drum level in the boiler by manually setting the valve and then monitoring the boiler level to see if it matches the water consumption. This manual task makes it difficult to maintain a steady level. The PACS team designed and installed a single loop controller to provide automated level control. This solution has resulted in a stable level being maintained. The trend (see Boiler Drum level trend photo) shows instability before the fix and the improved stability after the modification.



WASTEWATER OPERATING SERVICES (continued)

Network Hardening

The PACS team has been reviewing the cybersecurity posture of the Operational Technology Network that it administers and maintains. One of the results of this review is the development of updated network hardening standards. Hardening increases the resilience of devices and reduces the risk of compromise. The team has been updating devices in a phased approach to ensure better security and maintaining system uptime.

Laboratory

The WRRF Laboratory (Lab) is expanding training for Chemists on different methods such as Phosphorus and PCB analysis. In addition, all chemists will be trained on fecal analysis. An IDEXX representative provided on-site hands-on training this month.

WRRF Lab participated in the NSI Laboratory Proficiency Testing Program and passed the Clean Water Act – Performance Evaluation.

The Industrial Waste Control group has a need for analysis of pharmaceuticals. Therefore, another chemist is being trained on its GC-MS instrument, and the Lab is preparing to add the requested analysis.

Engineering and Construction

Design Projects

CIP 211005.2, Contract No. 2103338 – Pump Station 2 VFD Replacement.

This project will replace all variable frequency drives (VFD) for Pump Station 2 main lift pumps. The design is underway with bidding documents and expected to be completed in the first quarter of 2023 and sent to Procurement for competitive bidding.

CIP 211005.3, Contract No. 2104082 – Pump Station 2 Mag Meter Replacement.

The existing flow meters have exceeded their design life and are extremely difficult to maintain as many parts for them are not manufactured anymore. This project will replace the flow meters of six of the eight main lift pumps to match the two main lift pump flow meters that have already been replaced. The design is underway with bidding documents and expected to be completed in the first quarter of 2023 and sent to Procurement for competitive bidding.

CIP 211007, Contract No. 1904337 – Pump Station 2 (PS-2) Bar Rack & Grit System Improvements.

This project considers improvements to PS-2 Bar rack and grit handling systems. Currently we are beyond the basis of the design phase and have just received the 50% design submittal drawings and specifications. A large meeting was held to review the design with operations and maintenance, and comments are being sought from all GLWA stakeholders through mid-December 2022.

WASTEWATER OPERATING SERVICES (continued)

CIP 212008, Contract No. 2201139 – Aeration Deck 1 and 2 Modifications (WRRF).

This project includes structural and process modifications to the Aeration Decks 1 and 2 at the WRRF. GLWA is currently conducting meetings with the design builders and Procurement to discuss the project and ensure the intent of the project is understood, a design-build best practice. The due date for questions has been extended to allow time for the design-build teams to ensure they have a clear understanding of the project and can proceed with bridging documents and an RFP response.

CIP 270004, Contract No. 2011475 - Oakwood and Leib CSO Facilities Improvements (CSO).

The consultant has been performing operational ride-along with CSO operations and the maintenance team to gain operational and maintenance insights into our CSO facilities. These will facilitate an informed design that will meet the needs of the Operations and Maintenance team. Sample collection has also been occurring during rain events to inform the disinfection system designs.

Construction Projects

CIP 211008, Contract 2002190 – Rehabilitation of Ferric Chloride Feed System at Pump Station-1(PS-1) and Complex B Sludge Lines (WRRF).

The new ferric chloride storage tank needed for Pump Station (PS) -1 has been installed along with most of the piping required to feed the chemical to PS-1. Both new ferric chloride pump skids have now been installed in the chemical building, and preliminary testing has been successfully performed to confirm that shipping damage repairs were acceptable. (See photo for ferric chloride pump skids installed at PS-2 Chemical Building at the WRRF.)



The contractor is installing piping and wiring in the chemical building for the ferric chloride system. Roofing has been installed on the Ovation room and the interior of the room has been painted. Asphalt paving was installed near the chemical building. The contractor has begun to flush and clean existing ferric tanks 2, 3 and 4 in preparation for their demolition.

Conrail continues to review the contractor's most recent resubmittal of the construction plan for the jack and bore underneath the railroad on 4th St. near Complex B. A Conrail permit is required to proceed with this work. When it has been completed, the contractor will be able to install the temporary thickened waste activated sludge (TWAS) bypass from Complex B to Complex A to allow chemical cleaning of the existing TWAS (SCB-30) line.

WASTEWATER OPERATING SERVICES (continued)

CIP 213007, Contract CON-197 – WRRF Modification to Incineration Sludge Feed Systems at Complex II (WRRF).

The work under this contract is more than 98% complete. All belt conveyors, screw conveyors, strainers, and electrical components have been installed with limited trial operation performed. The contractor is working to complete adjustments to sludge chutes to prevent plugging and to correct interferences with conveyor plow handles. In addition, the contractor is adjusting belt conveyor idlers to provide proper tracking to prevent belt damage. These adjustments are needed to support satisfactory operation so that the north conveyor system can be placed into sustained service in preparation for the 30-day performance test. The contractor has also completed reconnection of an air-line at one of the new P-belt access platforms. In addition, the contractor also worked on closing holes in the checkered plate flooring (see photo) where electrical conduits had been rerouted.



CIP 216004, Contract 1802410 – Rehabilitation of various Sampling Sites and PS-2 Ferric Chloride System (WRRF).

Package A for all the Sampling Sites, and Package B for PS-2 Ferric Chloride system. Work is pending on the roof and steel platform installation. The steel has been galvanized and delivered on site and is being prepared for installation. Roofers are currently working on the roof. The steel will be installed right after the roof is done. Some of the remaining stations are complete. Some are 95% complete. Package B pump skid installation is almost complete. The contractor has corrected the majority of the deficiency items from the notice of defective work that was issued on September 16, 2022. The contractor recently completed pressure testing the system and it passed. The contractor is currently working on local and remote controls, which are the last items before the site acceptance test, start-up, and commissioning. Both Package A and Package B work are about 90% complete. The left photo shows flow meters moved per the corrective action plan. The right photo shows control valves and disconnect switches moved per the corrective action plan.



CIP 216008 – Contract No. 1802887 – SFE Building Replacement.

The design of a new system which leverages plant secondary final effluent (SFE) water in lieu of potable water is under way. GLWA recently received and provided comments on a 30% design deliverable. The design for this design-build contract continues to progress forward.

WASTEWATER OPERATING SERVICES (continued)

CIP 216011, Contract No. 2100239 – WRRF Facilities Structural Improvements.

The notice to proceed was issued with a start date of October 17, 2022 with a contract duration of 1,735 days to perform assessment, design, and repairs on various WRRF facilities: Primary Clarifiers numbers 17 and 18; Aeration Facility Tanks 1 through 4; Complex A Thickener Tanks 1 through 6; Complex A Sludge Storage Tanks 1 through 6; Complex B Gravity Thickener Tanks 9 through 14; Secondary Clarifier B-houses numbers 4, 9, 17, 23 and 30; Administration Building (Old and New); and the Chlorination and De-chlorination Buildings. A kick-off meeting and workshop were scheduled with the contractor and the WRRF team lead to discuss project activities and planned shutdown for assessment. The contractor visited the site on October 26, 2022 to review all facilities under this project, and on November 15, 2022 to perform an assessment of the New Administration Building 4th floor water leakage issue. A draft report was submitted to GLWA on December 2, 2022. The contractor submitted a revised statement of values and is in the process of revising the schedule. The contractor submitted FAR-001 (Facility Access Request form) to assess old and New Administration Buildings and Complex SST 1 through 6 starting December 7, 2022.

CIP 260614, Contract No. 1902224 – CSO Facilities Structural Improvements (CSO).

Sixty-six percent of work has been completed to date. The contractor has been working at CSO facilities. At the Hubbell-Southfield CSO facility, new insulation arrived on site on December 1, 2022, and installation started. At the Oakwood facility, cleaning, inspection, and repair work of the wet wells is still paused due to an HVAC issue. Per the CSO Operation, the HVAC issue will be resolved, and the contractor will be able to resume work in wet wells by the third week of December 2022. At the Baby Creek CSO facility, the contractor completed repairs in the effluent area. Four sites were substantially completed by the end of November 2022: BC, 7M, BLI and STA. A final walk through will be scheduled soon at these sites for punch-list items, if any. All Priority 1 items are completed, and around 46% of Priority 2 items are completed. Photo 1 shows Baby Creek Effluent Channel repairs. Photo 2 shows temporary insulation on flushing pipe at the Hubbell-Southfield facility. Photo 3 shows completed sky-light repairs at the Belle Isle facility.



Photo 1



Photo 2

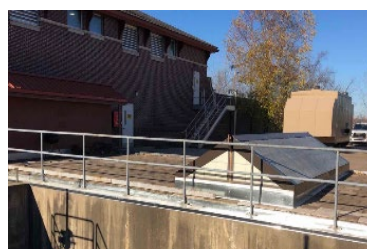


Photo 3

WASTEWATER OPERATING SERVICES (continued)

JOC2-01, Contract No. 2202079 - Pump Station 1 Gate Room Stairs Rehabilitation (WRRF).

Pump Station 1 (PS-1) was built in the 1930s. The stairwell leading down to the Gate Room (see photo) has considerable damage and poses a safety threat. This issue arose in August 2022. The design was completed, and it was bid out with notice to proceed issued to the contractor for this task on November 28, 2022. The team performed excellent work to resolve this issue quickly.



The Required Substantial Completion date is March 28, 2023, and the required Final Completion Date is April 27, 2023. A kickoff meeting was held on November 28, 2022 to ensure that the contractor is aware of all parameters of the contract.

Combined Sewer Overflow (CSO) Control Program

CSO Operations

The CSO facilities became active during the November 27, 2022 wet weather event. The area experienced approximately one inch of rainfall. Seven out of nine facilities captured storm water, and only one facility, Hubbell-Southfield, discharged into the Rouge River. The facilities operated as designed.

CSO Maintenance

The CSO worked alongside the PACS team to replace the proximity switches for the outfall discharge gates at the Leib Screening and Disinfection Facility (SDF). The switches display an open/closed position of the gates and send a signal to the operator workstation computer at the main facility on Mt. Elliot. The original proximity switches began to fail and became unreliable, which prompted the replacement.



WATER OPERATIONS

Water Quality

APWA Michigan Roads Scholar Program

Yvette Hayes-Johnson, water quality team leader, attended her first year of the American Public Works Association (APWA) Michigan Roads Scholar Program in October. The program is a 3-year training for frontline public works employees. The APWA Michigan Roads Committee hosted the 5-day program in Mt. Pleasant, Michigan. The participants consist of public workers with various years of experience looking to build their skills in the public works industry. The program was an opportunity to network with individuals who work in the industry and build team collaboration skills.

Pump Disinfection

Team Leader Nathan Taylor chlorinated High Lift Pump 23 at Northeast Water Treatment Plant. When a pump that is used for finish water needs maintenance done, the pump casing is opened. This is where Water Quality comes into the process of disinfecting after all repairs are completed. When disinfecting a high lift pump, the first step will be to verify all valves are closed before starting the chlorination process. The next step will be to determine the length and diameter of the pipe for calculating the amount of calcium hypochlorite needed to disinfect the pump and piping. The next process is finding out where a good potable water source is to fill the pump casing. Once all these steps are taken, it is time to perform the disinfection process. After the calcium hypochlorite is introduced, the water potable source is connected to the pump and filled. The highly chlorinated water sits in the pump for 24 hours and then flushed. During the flushing process chlorine residual is checked to make sure the level of chlorine is diluted to at least 1 ppm (parts-per-million). Once the residual is the same as the system water residual, sampling takes place. Two consecutive days of sampling with negative results for total coliform and *E. coli* confirms a successful disinfection.



WATER OPERATIONS (continued)

Administration

Water Quality Technical Conference

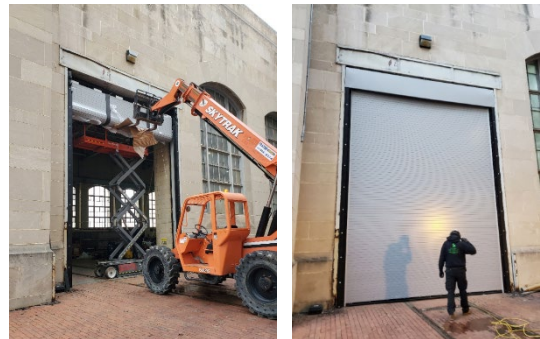
Balvinder Sehgal, Manager-Special Projects for Water Operations, attended the three-day AWWA 2022 Water Quality Technical Conference (WQTC) and presented. She had a 30-minute presentation on Detroit River Phytoplankton from the Water Treatment Plant Data.

There were various sessions on the monitoring and tracking of algae, taste and odor, PFAS, lead corrosion control, CECs, zeta potential, and much more to optimize the water operations and improve the water quality. It was an exciting opportunity for the water community to come together. The conference was very beneficial as it promoted knowledge exchanges, innovation and introduction of new technology and networking.

Facility Operations

Overhead Door Repairs

In November, we received the second of three large overhead doors to be installed at Springwells. The High Lift door was removed and the new one installed. We are also performing Preventative maintenance and assigning a facilities number to each door which can be converted to GLWA asset numbers, as we move through the NexGen process.



Springwells High Lift overdoor replaced

Energy, Research & Innovation

Energy

Power Quality

As a part of the plan to monitor the disturbances that are caused as result of power quality (PQ) events at Water Treatment Plants (WTP), a Power BI-Report was developed to present the PQ events for Northeast (NE), Water Works Park (WWP) and Southwest (SW) plants. The report presents the PQ events for four sets of meters: Main Meters, High Lift Pump Meters, Low Lift Pump Meters, and Wash Water Pump Meters. The power meter installations contract was recently completed at the three facilities.

WATER OPERATIONS (continued)

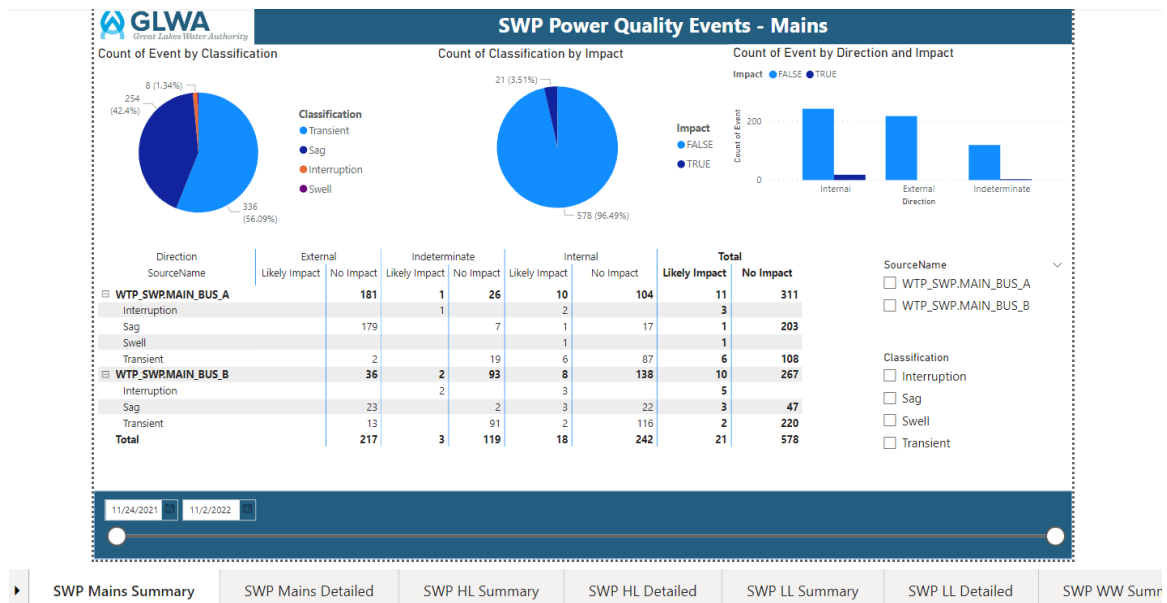


Fig 1. SWP Mains – PQ Events Summary

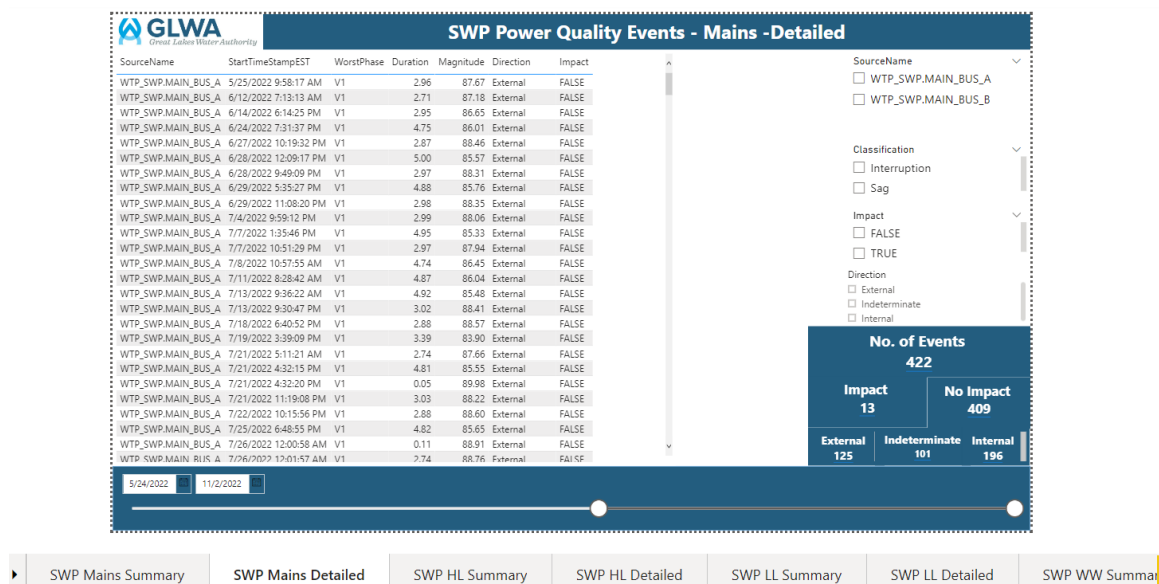


Fig 2. SWP Mains – PQ Detailed Summary

Research

WEFTEC presentations

The Energy, Research & Innovation team was very involved in WEFTEC programs and presentations.

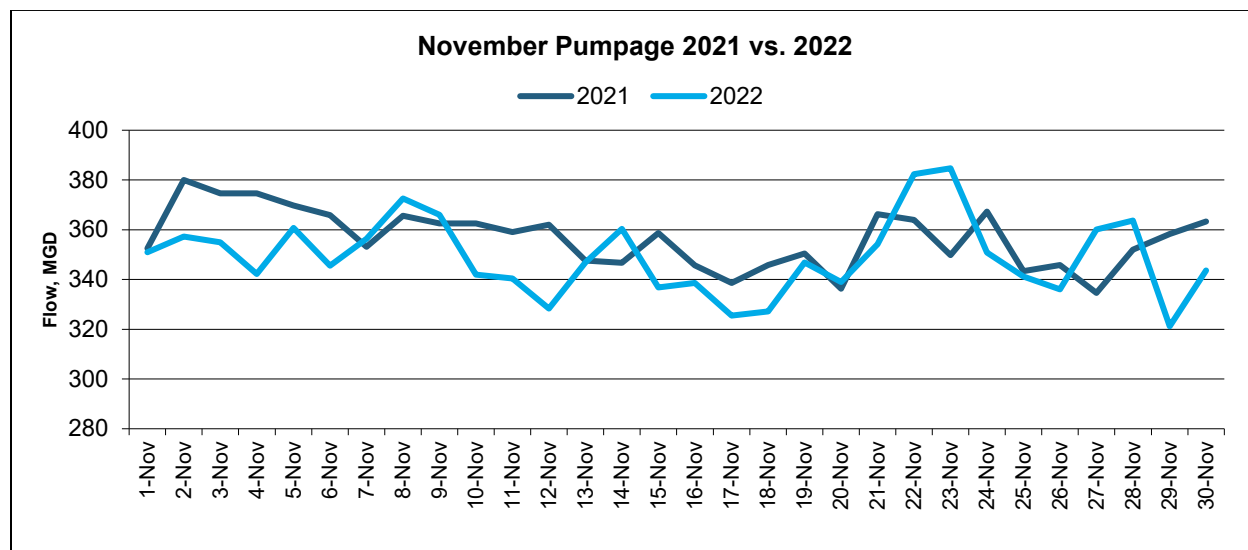
WATER OPERATIONS (continued)

Two different focuses were energy reliability and biosolids treatment and reuse. Eric Griffin and John Norton were involved in the Energy Reliability Session, with John as moderator and Eric as presenter.

The session, which focused on power and energy reliability at water and wastewater utilities, also featured presentations from Jane Gajwani, New York City Department of Environment Protection, and Tracy Hodel, St. Cloud, MN. Eric's presentation addressed energy data and the challenges of assessing power quality.

Systems Control Center (SCC)

November 2022 pumpage was 2% lower than November 2021



Engineering

Contract No. 2002193 – Southwest WTP Chlorine Scrubber and Raw Water Screens Replacement

The contractor recently achieved the successful removal and replacement of the raw water screens at the Southwest Water Treatment Plant. The three screens, which were original to the plant construction, were beyond their service life and two were completely inoperable. The removal and replacement of these screens was completed one at a time to ensure no debris bypassed the screening process. Work is on-going to make the electrical and instrumentation connections. Additionally, the new booster pumps that will allow for sufficient pressure to clean the screens is still in the process of being installed.

WATER OPERATIONS (continued)

Other work being performed includes the assembly of structural steel in the basement beneath the new chlorine scrubber location. This steel is needed to reinforce the building's structural system to accommodate the additional load from the chlorine scrubber which will be filled with dry media to react with chlorine in the event of a leak.



Pictured left to right:

- 1. Removal of existing raw water screen #3*
- 2. Installation of new raw water screen #1*
- 3. Structural steel to support the new chlorine scrubber*

Contract No. – DB-150 Design-Build/Repair for Portions of the Pennsylvania, Springwells and Northeast Raw Water Tunnels

Recent work that is taking place is to repair the crack at the Pennsylvania Raw Water Tunnel located at Water Works Park.

The repairs at the Springwells and Northeast Tunnels include a combined 1,400 linear feet of stainless-steel liner plate installation and grouting of annular space to reinforce the sections of tunnels outlined in the contract. Gaining access to the required distressed areas of the tunnels required the drilling of two 8-foot diameter access shafts connecting to the tunnel, providing increased diver safety and additional access points for GLWA in the future for maintenance.

Currently, the contractor is working on the Northeast Raw Water tunnel installing liner plates during overnight hours in reduced flow conditions of 60 MGD. The contractor is roughly 40% complete with the work at Northeast and anticipates completing the Northeast tunnel in May 2023. The contractor will then move to Springwells to start the required repairs in fall of 2023 during low demand.

WATER OPERATIONS (continued)



Diver being lowered into Northeast shaft to complete connection to tunnel



Bolting of Northeast liner plate Sections Nos. 22 and 23



Removal of the Springwells 8-foot diameter core



Rigging of vehicle used to move liner plate in the tunnel

INFORMATION TECHNOLOGY

In the past month, the IT Security team has proactively blocked or thwarted 38,616 spam messages, 10,193 spoofed messages and seven viruses. Additionally, 3,015 phishing attempts have been caught and 3,328 malware attempts have been blocked.

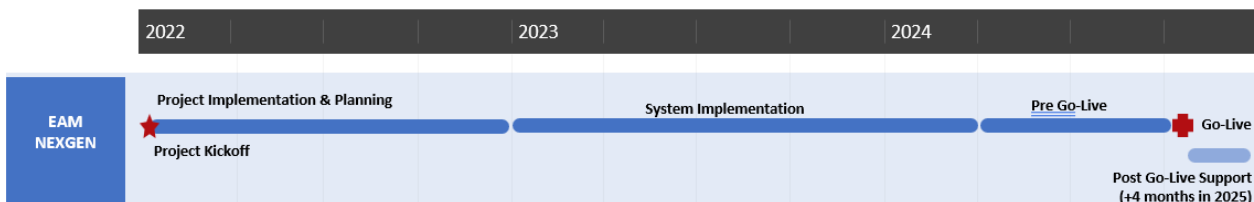
The IT Infrastructure team, along with Customer Service Delivery and Business Productivity Systems, are continuing to transition GLWA to Microsoft Teams calling. Implementation has begun with an estimated completion in January 2023.

The IT Enterprise Asset Management Systems Team along with our consultant partner, NEXGEN, have finalized user requirement memos representing 19 GLWA operating groups and teams for the configuration of the Enterprise Asset Management (EAM) software.

INFORMATION TECHNOLOGY (continued)

Thirty-five (35) business processes have been finalized for how team members and contractors will use the NEXGEN software efficiently and consistently across GLWA. The System Implementation Plan will be finalized by the end of the year at which time the Implementation Planning phase will be considered substantially complete. The EAM Cross-Functional Team at GLWA continues to diligently work on the Implementation Configuration phase which started in early October with a focus on the migration of GLWA's asset inventory and development of Service Request Types and Work Order Main Tasks.

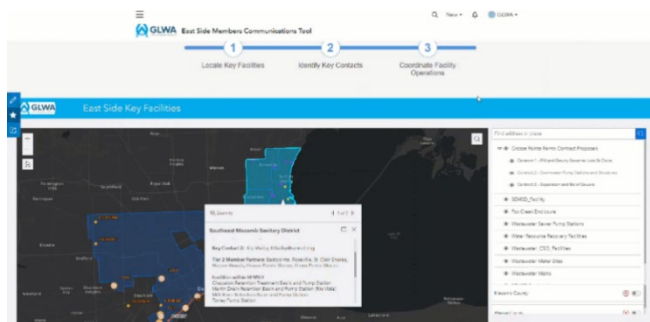
The overall schedule for the NEXGEN implementation is shown below. The NEXGEN go-live has been delayed by approximately seven months to October 2024 due to the effort and complexity to configure, integrate, test and train on the new system as identified in the System Implementation Plan. This new NEXGEN go-live date will also coordinate better with the timing of the Workday Financial go-live in early July as to fully integrate with it day-one.



The IT Enterprise Asset Management Systems Team along with our consultant team, Magnolia River/Arcadis, have finalized the first annual update to the Strategic GIS Plan. The update captures significant accomplishments from the previous year while laying out the initiatives to be focused on over the next couple of years. Over the past year, GLWA's GIS team along with the consultant team have upgraded the underlying GIS technology to the latest stable version available (10.9.1) from the vendor Esri, completed numerous data improvements and additions, and built over 10 applications or dashboards supporting operation, maintenance, and outreach needs.

A few specific accomplishments to note are:

- 1) significant support was provided to the 120-inch main break effort via GIS mobile applications and dashboards,
- 2) development of an Emergency Response Planning GIS-driven app showing the critical assets and features that may need to be quickly located during an emergency;
- and 3) an East Side Members Communication Hub site allowing GLWA Member Partners on the east side of the wastewater system to look-up critical information during flooding events such as utility contacts.



INFORMATION TECHNOLOGY (continued)

Future initiatives that the GIS team will be implemented of Esri's Utility Network, providing new operational support functionality as well as GIS and data management support for the Linear System Integrity Program and the NEXGEN and NavVis implementations.

Currently, the IT PMO is managing 18 active projects and is processing four project request.

PUBLIC AFFAIRS

Piquette Square Project Supporting Local Homeless Veterans

On Veteran's Day, Public Affairs kicked off its Annual Giving Back Holiday Program. For the second year, GLWA raised funds to purchase winter care packages for the 150 local homeless veterans who live at Piquette Square for Veterans. Team members generously donated more than \$10,000, surpassing the initial goal of \$7,500. The funds raised allowed the purchase of 150 care packages for the veteran's that included winter hats, gloves, hand warmers, socks, fleece blankets, neck and face gaiters, hand sanitizer and snacks. Additionally, team member volunteers assembled the care packages, wrote thank you letters, and delivered these items along with serving a special holiday dinner. Our Organizational Development Recruiting Team also hosted a job fair at Piquette Square on the afternoon of the dinner to share information with the veterans on available jobs at GLWA.



One Water Partnership Streaming

Public Affairs once again executed a high-quality live stream of the One Water Partnership Meeting at the Schoolcraft College VistaTech Center in Livonia on November 29. The livestream included a three-camera setup with the capability to display presentation slides during the live presentations. The Public Affairs team also created special graphics to be used before and after the meeting, and during the lunch break. This is the second time Public Affairs has provided a live stream for the OWP meeting. The livestream allowed nearly 50 additional member partners and stakeholders to participate in the program.

PUBLIC AFFAIRS (continued)

New One Water News Drop

The Public Affairs team produced a new One Water News Drop video focusing on two new Hazmat response vehicles with specialized capabilities. The vehicles, housed at the Water Resource Recovery Facility, enhance the team's capabilities in hazmat and confined space incidents. The video features interviews with multiple team members who explain how the vehicles help them respond to potentially dangerous chemical leaks and specific life-threatening rescue situations.



You can watch the video by clicking [HERE](#).

Quarterly Men's Health Meetup

Public Affairs Team Member Curtis Burris-White planned and hosted the latest GLWA quarterly Men's Health meet-up with assistance from Organizational Development. These meet-ups were created to help the men of GLWA be more conscious of their mental and physical health and provide a forum for men to discuss their health wins and challenges with their peers. This second Men's Health initiative meet-up focused on knowing your numbers, physical fitness, diet, and had a presentation from the Wayne County Community College District (WCCCD) on the new workout facility at their downtown campus.

MI-AWWA Communications Workshop

Public Affairs team members Curtis Burris-White and Debbie Frazier attended the December 7 MI-AWWA communications workshop, titled "Making your message matter: Communicating with the Decision Makers." Key takeaways from the workshop were: Know your audience and understand the goals and motivations of individual board members; Create relationships and connections before you present information or ask for funding and support; Don't take 'no' personally and seek to understand why a no was given and use that information to get to a yes. The Public Affairs Team also recorded the workshop for the MI-AWWA Communications Council.

SECURITY AND INTEGRITY

The Hazmat Unit coordinated and completed a total of 309 hours of training during the month.

The Security and Integrity Group purchased two custom-made “No Wake” signs from the state of Michigan for the Belle Isle Intake area.

Mass Notification policy moved to the final review phase and training implementation of the Fusion Center staff.

Lastly, the group continued planning for the Southwest Plant tabletop training exercise.

ORGANIZATIONAL DEVELOPMENT

Apprenticeships

National Apprenticeship Week

GLWA celebrated National Apprenticeship Week (NAW) with an appreciation event, “Celebrating Apprenticeships: 85 Years Strong” on Monday, November 14, 2022, at Water Works Park. The event began with remarks from CEO Suzanne Coffey and Chief Organizational Development Officer, Jordie Kramer.

Joining in the celebration and recognition of GLWA apprentices included 25 apprentice honorees, US Department of Labor Director Russ Davis, GLWA leadership team members, community-based organization Focus: HOPE, related training instruction providers from Henry Ford College (HFC), Macomb Community College (MCC), Detroit Electrical Industrial Training Center (DEITC), union affiliates Building and Trades Council (BTC), American Federation of State County Municipal Employees (AFSCME), and a host of GLWA team members.

The event highlights included the acknowledgment of apprentices’ contributions to producing water of unquestionable quality, raffles of GLWA swag, a panel with our educational partner representatives from Henry Ford College, Macomb Community College, and Detroit Electrical Industry Training Center, and light refreshments. Bill Wolfson, CACO, closed the program with remarks on the importance of apprenticeships. Bill presented our current apprentices with GLWA swag including GLWA large cooler lunch bags.

This NAW event and GLWA’s Board of Directors NAW proclamation are listed on the [USDOL’s NAW website \(https://www.apprenticeship.gov/national-apprenticeship-week\)](https://www.apprenticeship.gov/national-apprenticeship-week).

ORGANIZATIONAL DEVELOPMENT (continued)

MEATA Conference and Apprentice of the Year Award

GLWA team members, Adino “Dee” May, Management Professional, and Patricia Butler, OD Manager, attended the Michigan Education and Apprenticeship Training Association (MEATA) conference in Frankenmuth, Michigan on Wednesday, November 9, 2022.

The conference speakers and panelists shared valuable information on stackable apprenticeships, apprenticeship expansion through diversity, equity, and inclusion, and the engagement and support of the youth populations through pre-apprenticeship training. GLWA’s Maintenance Technician Apprentice, Terrell Dockery, was presented with the Apprentice of the Year Award by the MEATA board. GLWA’s Public Affairs Specialist, Stefanie Burns, was on site to capture photos of the award presentation.

Professional Development Certification Program

One hundred and fifty (150) team members received a certification stipend for submitting their Michigan Department of Environment, Great Lakes, and Energy (EGLE) certifications in October. The certification stipend was paid on November 18, 2022.

Community Outreach

GLWA’s Performance Team participated in the following community outreach and career events:

- Randolph Technical Career Center, Detroit, MI
- Canton High School, Canton, MI
- Garden City High School, Garden City, MI
- Henry Ford College National Apprenticeship Week Business Network, Dearborn, MI,
- Wayne Memorial High School, Wayne, MI
- Wayne Memorial High School Counselors’ Meeting, Wayne, Michigan

GLWA team members shared information and answered questions regarding careers at GLWA, provided literature on the benefits of participating in an apprenticeship at GLWA, and discussed partnership opportunities with education providers.

Progression

The 2022 Progression Cycle was launched on November 17, 2022, and is scheduled to conclude on January 11, 2023. Progression is GLWA’s process for Team Member advancement within designated job classifications based on established skill levels. Team Members are eligible to progress to a new level when they have been in their current job classification for one year as of December 31, 2022, have a “meets expectations” or higher rating on the 2021-2022 performance evaluation, and have completed all the required competencies for their current and new level.

ORGANIZATIONAL DEVELOPMENT (continued)

Benefits and Wellness



Wellness Wednesdays Meditations continued for GLWA Team Members with a focus on emotional and mental well-being. Powered by Blue Cross Blue Shield of Michigan, topics included:

- Crystal Singing Bowls Sound Bath
- Mindful Breathing

Drop 5 Virtual Weight-loss Community

The Drop 5 Community facilitated by Blue Cross Blue Shield of Michigan (BCBSM) provides health-related resources to team members and celebrates scale and non-scale victories.

December topics included:

- Conquering Family Stress During the Holidays
- Developing Healthy Money Habits for Financial Freedom
- Hunt for the Positive Things in Your Life



MissionSquare Retirement Plan Specialists On-site! MissionSquare held two education sessions on-site and virtually at the Central Services Facility (CSF) and Water Works Park (WWP) in December. Retirement Plan Specialists also held one-on-one consultations with team members to review their individual goals and portfolio performance.

Staffing

The table below provides a breakdown of GLWA Team Members since the last CEO report:

Number of New Hires	7
Number of Separations	3
Total Staffing - Regular FTEs (YTD)	974

ORGANIZATIONAL DEVELOPMENT (continued)

Training

During the month of **November**, **96 GLWA** team members completed **27** safety courses and **12** non-safety courses for a total of **235** instructor-led training hours. Also, eight GLWA team members completed **16** online 360Water courses.

FINANCIAL SERVICES AREA

November 2022 Regular Audit Committee Recap

The most recent regular monthly Audit Committee meeting was held on Friday, November 18, 2022. The GLWA Audit Committee binders are publicly available at www.glwater.org/financials/. The meeting included the following topics.

- ✓ An update on the annual financial audit for fiscal year ending June 30, 2022
- ✓ A request to recommend for Board approval a timing extension on the current Financial Advisor Services contract for bond consulting from December 31, 2022 to June 30, 2023.
- ✓ A proposal to establish Calendar Year 2023 Audit Committee meeting dates.
- ✓ Review of the July 2022 and August 2022 Monthly Financial Reports (Executive Summaries attached).
- ✓ Monthly updates on the Business Inclusion and Diversity (B.I.D.) program, Charges Outreach and Modeling team efforts, and Affordability & Assistance team initiatives.
- ✓ Review of the Quarterly Investment report through September 30, 2022, and the Semi-Annual Debt Report through June 30, 2022.
- ✓ Circulation of the latest Procurement Pipeline editions for both October 2022 and November 2022.

December 2022 Special Audit Committee

A Special Audit Committee meeting was held on Friday, December 9, 2022 to share final draft results from the year ending June 30, 2022 annual financial audit. Based on these draft final results, Chief Financial Officer & Treasurer Nicolette Bateson received approval from the Committee to request Board acceptance of the final, annual financial audit at the December 14, 2022 Board of Directors meeting which will allow GLWA to formally file the completed, audited financial statements for FY 2022 with the State of Michigan Department of Treasury. Also, Public Hearing notices for FY 2024-25 Biennial Budget and FY 2024 Charges were also approved for review by the GLWA Board of Directors.

FINANCIAL SERVICES AREA (continued)

Business Inclusion & Diversity Update: National Vendor Outreach Event



On Wednesday, November 16, 2022, GLWA Procurement Team Members attended the virtual 35th Annual National Black Supplier Conference. This year's 2022 event, hosted by the National Business League (NBL) was the first virtual experience of the

association and featured more than 1,000 black suppliers. Procurement Team Members listened to national black supplier and diversity community leaders from various industries, including both public and private, discuss the importance of developing black suppliers for the future. Procurement Team Members also had the opportunity to connect with black suppliers in virtual one-on-one matchmaking sessions.

The National Business League has been serving the national black supplier and diversity community for over 35 years. The NBL's black supplier pipeline now encompasses 1,200 members in 50 states, introduces an annual revenue of \$6 billion into the national economy, and employs more than 30,000 workers.

Charges Outreach & Modeling Update



Members of the GLWA Charges Outreach and Modeling Team (Matt Lane) and the Financial Planning & Analysis Team (Guy Belew) attended the American Water Works Association Rate Setting Seminar, November 13 – 16, 2022 in Cincinnati, Ohio. The event was co-located with the 2022 Water Quality Technology Conference. Team members were able to build on their level of understanding of rate design through the processes of identifying Units of Service and conducting a Cost-of-Service Study.

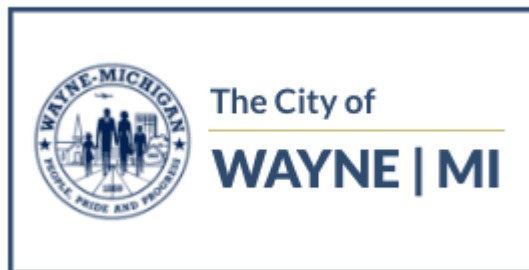
Members of the Charges Outreach and Modeling Team have also been meeting one-on-one with member partners to discuss Charges Rollout.

At the November 16, 2022 Charges Rollout Meeting #2, GLWA released units of service data for all member partners. Charges Rollout Meetings #3 and #4 will be held in January 2023. Contact GLWA Member Outreach for meeting details outreach@glwater.org.

FINANCIAL SERVICES AREA (continued)

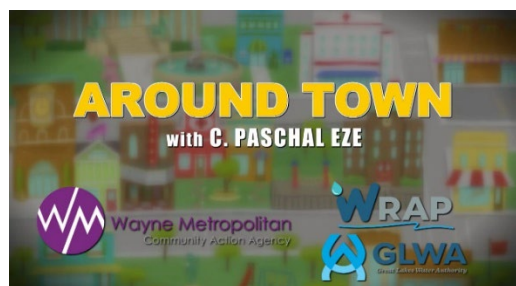
Affordability & Assistance Update

Wayne Metropolitan Community Action Agency (Wayne Metro) and GLWA team members were invited by City of Wayne staff to provide an overview of the Water Residential Assistance Program (WRAP) to the Wayne City Council on December 6, 2022. The WRAP Income Based Plan (IBP) was highlighted, and Wayne Metro shared examples of how all three entities can partner together to reach City of Wayne households that may need WRAP services. Both the City Council and City staff were appreciative of the presentation. Efforts to continue to notify and engage Member Partners of the IBP program.



On December 8, 2022, the WRAP Member Partner Advisory Panel heard updates regarding WRAP IBP rollouts, efforts underway to coordinate with BS&A to reduce the administrative burden on Member Partners, and a status update on the process of bringing United Way for Southeastern Michigan (United Way) on board as program administrator for Oakland County communities.

The group had a robust discussion regarding Member Partner perspective of WRAP in their communities. Participants shared ideas to tailor WRAP outreach efforts and other ways to expand the program to offer more immediate assistance to those households in need. Participants shared the barriers that may prevent households from asking for help and how Member Partner communities and expanding WRAP partnerships can help reduce the stigma.



Chief Diversity Officer at the City of Westland, C. Paschal Eze, shared a link to a [video](#) he created for the City of Westland Municipal Access Channel that highlights WRAP in the City of Westland and features Wayne Metro's Executive Director of Empowerment and Integration Services, Shama Mounzer. GLWA applauds the City of Westland's efforts to expand outreach for WRAP! Work is underway for GLWA to develop additional WRAP content, such as flyers, videos and a social media toolkit that Member Partners can easily access to promote WRAP within their community.

FINANCIAL SERVICES AREA (continued)

Economic Outlook Task Force (EOTF)

The GLWA EOTF recently shared the [Phase I](#) findings with the National Water/ Wastewater Utility Leader Forum on December 7, 2022. Early feedback from this webinar was very positive with participants responding "strongly agree" that the webinar was a good use of their time. One participant commented: "This is the most useful webinar I have been on this year. Kudos to the organizers and the GLWA for initiating the Task Force."

Economic Outlook Task Force

- **Project Team:**

- GLWA
- Public Sector Consultants
- PMA Consultants
- PFM Financial Advisors LLC
- The Foster Group
- Bridgeport Consulting



pfm

TFG

THE FOSTER GROUP



BRIDGEPORT

On December 12, 2022, the same topic was shared with a southeast Michigan audience including member partners. At both events participants were able to share their experiences in navigating these challenging times.

All FSA Virtual Meeting

On November 9, 2022, the Financial Services Area (FSA) held an area-wide meeting where team members had an opportunity to receive GLWA updates first-hand from CEO Sue Coffey and were provided a FY 2023 benefits enrollment update from GLWA Benefits & Wellness Manager Sherrian Greenwood.

Benefits Offered by GLWA (Employer Paid)

- **Life/ADD Benefits – The HARTFORD**

- **Life Insurance**

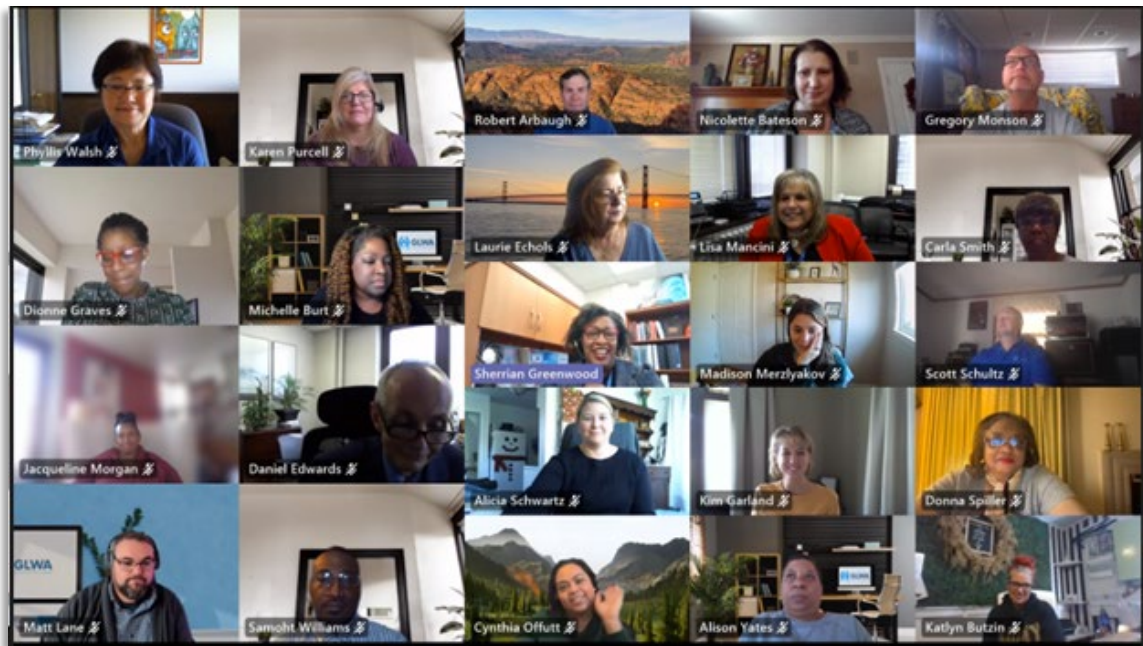
- GLWA pays premium
- 1.5 times your base annual earnings
- Make sure your beneficiaries are current in DayForce and MissionSquare

- **Accidental Death and Dismemberment Insurance**

- GLWA pays premium
- 1.5 times your base annual earnings
- Doubles life benefit if death was caused by an accident



FINANCIAL SERVICES AREA (continued)



Procurement Pipeline

The November Procurement Pipeline edition is attached. This month features background regarding how to set up a free Bonfire vendor profile, why vendors should maintain an active Bonfire profile, a mask update for vendors visiting GLWA facilities, a note on who to contact to schedule a virtual vendor introduction with GLWA, a reminder of the information available in the monthly CEO Report, and a listing of upcoming solicitations.

The General Counsel's December 2022 Report is an attachment to the Chief Executive Officer's Report.

Respectfully submitted,

Suzanne R. Coffey, P.E.
Chief Executive Officer

SRC/dlr
Attachments

- July 2022 Executive Summary
- August 2022 Executive Summary
- November 2022 Procurement Pipeline

Key Financial Metrics

The table below provides key report highlights and flags the financial risk of a budget shortfall by year-end as follows: No Risk (green) - Potential (yellow) - Likely (red)

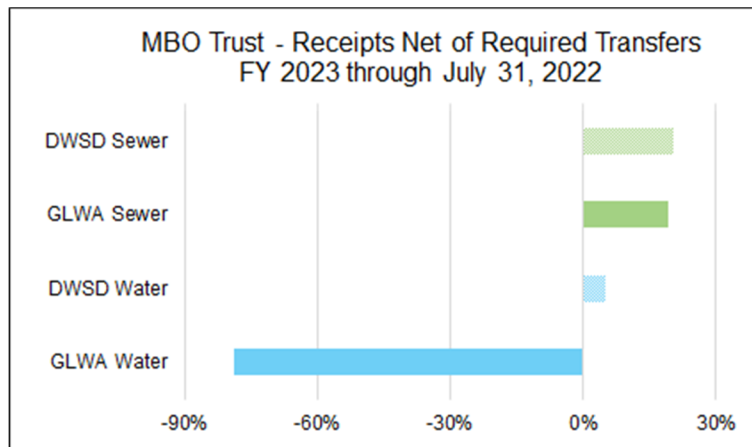
Each variance is monitored by the Great Lakes Water Authority (GLWA) management and, where appropriate, operating and/or budget priorities are re-evaluated. Budget amendments are prepared and presented quarterly based on most current information. This report reflects first quarter FY 2023 budget amendments approved by the GLWA Board of Directors on October 26, 2022.

For the current period, operations and maintenance, investment income, and sewer capital spend all reflect variances to budget outside the normal range. GLWA staff will continue to monitor these areas to see if additional budget amendments will be necessary. Investment income will begin to align with the amended budget as older investments are re-invested at higher interest rates as anticipated.

As of July 31, 2022					
Metric	FY 2023 Budget	FY 2023 Amended Budget	FY 2023 Actual	Variance from Financial Plan	Report Page Reference
Wholesale Water Billed Revenue (\$M)	\$33.1	\$33.1	\$34.4	4%	49
Wholesale Water Billed Usage (mcf)	1,566,000	1,566,000	1,665,000	6%	
Wholesale Sewer Billed Revenue (\$M)	\$22.9	\$22.9	\$22.9	0%	51
Wholesale Water Operations & Maintenance (\$M)	\$12.1	\$12.1	\$10.6	-12%	5
Wholesale Sewer Operations & Maintenance (\$M)	\$15.3	\$16.2	\$12.9	-21%	
Investment Income (\$M)	\$1.5	\$1.5	\$0.3	-79%	38
Water Prorated Capital Spend w/SRA* (\$M)	\$12.8	\$12.8	\$13.2	3%	28
Sewer Prorated Capital Spend w/SRA* (\$M)	\$7.5	\$7.5	\$4.4	-41%	30

*SRA refers to the capital spending ratio assumption which allows capital program delivery realities to align with the financial plan.

Master Bond Ordinance (MBO) Trust Net Receipts (page 54)



Net cash flow receipts remain positive for GLWA Sewer. This means that all legal commitments of the MBO Trust and the lease payment are fully funded – and that positive cash flow is available for additional capital program funding in subsequent year(s). GLWA Water net receipts fell short by \$13.1 million due to the timing of payments made. This

shortfall cleared by August 5. Looking ahead, GLWA Water net receipts for the month of August have recovered in full, reporting positive Water net receipts year to date.

DWSD Water reports a surplus of \$440 thousand and DWSD Sewer reports a surplus of \$6.3 million of net receipts over disbursements through July 2022.

Budget to Actual Analysis (page 3)

- FY 2023 information includes the first quarter budget amendments which were reviewed by the Audit Committee at its meeting on September 23, 2022, with a unanimous recommendation for adoption by the GLWA Board of Directors.
- This report is not final. Adjustments related to the fiscal year end 2022 audit will affect the Budget to Actual Analysis.
- Total Revenue Requirements are on target through July 2022.
- Total overall Operations & Maintenance expenses are at 6.9% of budget through July 2022.

Basic Financial Statements (page 9)

- The Basic Financial Statements are prepared on a full accrual basis and reflect preliminary, unaudited results for both FY 2023 and FY 2022.
- Operating income for July 2022 is \$15.0 million for the Water fund (41.6% of total revenues) and \$13.5 million for the Sewer fund (33.9 % of total revenues).
- Water Net Position increased by \$ 10.9 million, and Sewage Disposal Net Position increased by \$ 8.2 million for the year to date through July 2022.

Capital Improvement Plan Financial Summary (page 27)

- The Water system exceeded the originally approved 80% Capital Spend Rate assumption.
- The Sewer system did not meet the originally approved 75% Capital Spend Rate assumption.

Master Bond Ordinance Transfers (page 31)

- For July, transfers of \$13.7 million and \$17.8 million were completed for the GLWA Water and Sewer funds, respectively.
- Also for July, transfers of \$4.0 million and \$7.8 million were completed for the DWSD Water and Sewer funds, respectively.

Cash Balances & Investment Income (page 38)

- Total cash & investments are \$287 million in the Water fund and \$397 million in the Sewer fund.
- Total, combined, cumulative, FY 2023 investment income through July is \$0.3 million.

DWSD Retail Revenues, Receivables & Collections (page 42)

- Water usage through July 31, 2022 is at 95.23% and revenues at 79.38% of budget.
- Sewer usage through July 31, 2022 is at 105.55% and revenues at 105.17% of budget.
- Combined accounts receivable balances for the water and sewer funds report an increase of \$52.0 million over the prior year.
- Past dues over 180 days make up 69.3% of the total accounts receivable balance. The current bad debt allowance covers 98.7% of past dues over 60 days.

GLWA Wholesale Billing, Receivables & Collections (page 48)

- GLWA accounts receivable past due balance net of Highland Park is 10.11% of the total accounts receivable balance, with the majority of that balance related to one water account dispute currently under discussion.
- The Highland Park past due balance is \$53.8 million. It includes \$41.0 million for wastewater treatment services, \$1.8 million for industrial waste control services, and \$11.0 million for water supply services. Highland Park made a catch-up payment of \$1.7 million on June 3, 2022 and has continued to make small, monthly payments since that time.

Questions? Contact the Office of the Chief Financial Officer at CFO@glwater.org



Key Financial Metrics

The table below provides key report highlights and flags the financial risk of a budget shortfall by year-end as follows: No Risk (green) - Potential (yellow) - Likely (red)

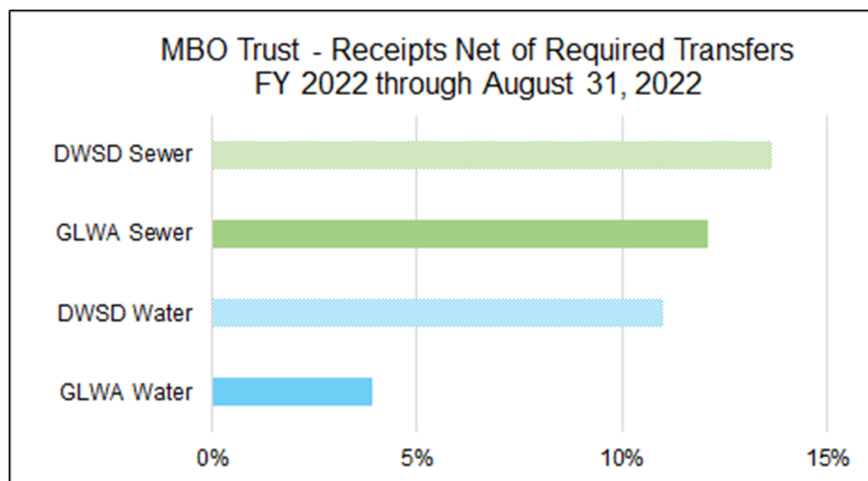
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For the current period, wholesale sewer operations and maintenance, investment income, and capital spend all reflect variances to budget outside the normal range. GLWA staff will continue to monitor these areas to see if additional budget amendments will be necessary. Investment income will begin to align with the amended budget as older investments are re-invested at higher interest rates as anticipated.

As of August 31, 2022					
Metric	FY 2023 Budget	FY 2023 Amended Budget	FY 2023 Actual	Variance from Financial Plan	Report Page Reference
Wholesale Water Billed Revenue (\$M)	\$65.8	\$65.8	\$65.9	0%	49
Wholesale Water Billed Usage (mcf)	3,079,000	3,079,000	3,083,000	0%	
Wholesale Sewer Billed Revenue (\$M)	\$45.8	\$45.8	\$45.8	0%	51
Wholesale Water Operations & Maintenance (\$M)	\$24.1	\$24.1	\$24.1	0%	5
Wholesale Sewer Operations & Maintenance (\$M)	\$30.7	\$32.5	\$29.1	-10%	
Investment Income (\$M)	\$0.4	\$2.9	\$1.1	-62%	38
Water Prorated Capital Spend w/SRA* (\$M)	\$25.6	\$25.6	\$27.6	8%	28
Sewer Prorated Capital Spend w/SRA* (\$M)	\$15.8	\$15.8	\$10.7	-32%	30

*SRA refers to the capital spending ratio assumption which allows capital program delivery realities to align with the financial plan.

Master Bond Ordinance (MBO) Trust Net Receipts (page 54)



Net cash flow receipts remain positive for GLWA Water and Sewer. This means that all legal commitments of the MBO Trust and the lease payment are fully funded – and that positive cash flow is available for additional capital program funding in subsequent year(s). In addition, DWSD Water

reports a surplus of \$1.9 million and DWSD Sewer reports a surplus of \$7.8 million of net receipts over disbursements through August 2022.

Budget to Actual Analysis (page 3)

- FY 2023 information includes the first quarter budget amendments which were approved by the GLWA Board on October 26, 2022.
- This report is not final. Adjustments related to the fiscal year end 2022 audit will affect the Budget to Actual Analysis.
- The total Revenue Requirements are on target through August 2022.
- The total overall Operations & Maintenance expenses are at 15.7% of budget through August 2022.

Basic Financial Statements (page 9)

- The Basic Financial Statements are prepared on a full accrual basis and reflect preliminary, unaudited results.
- Operating income for August 2022 is \$24.4 million for the Water fund (35.0% of total revenues) and \$23.3 million for the Sewer fund (29.2 % of total revenues).
- Water Net Position increased by \$ 13.7 million, and Sewage Disposal Net Position increased by \$ 8.7 million for the year to date through August 2022.

Capital Improvement Plan Financial Summary (page 27)

- Water systems exceed the originally approved 80% Capital Spend Ratio assumption.
- Sewer systems did not meet the originally approved 75% Capital Spend Ratio assumption.

Master Bond Ordinance Transfers (page 32)

- For August, transfers of \$13.7 million and \$17.8 million were completed for the GLWA Water and Sewer funds, respectively.
- Also for August, transfers of \$4.0 million and \$7.8 million were completed for the DWSD Water and Sewer funds, respectively.

Cash Balances & Investment Income (page 38)

- Total cash & investments are \$318 million in the Water fund and \$418 million in the Sewer fund.
- Total, combined, cumulative, FY 2023 investment income through August is \$1.1 million.

DWSD Retail Revenues, Receivables & Collections (page 42)

- Water usage through August 31, 2022 is at 103.19% and revenues at 96.31% of budget.
- Sewer usage through August 31, 2022 is at 113.28% and revenues at 105.46% of budget.
- Combined accounts receivable balances for the water and sewer funds report an increase of \$53.3 million over the prior year.
- Past dues over 180 days make up 70.4% of the total accounts receivable balance. The current bad debt allowance covers 98.7% of past dues over 60 days.

GLWA Wholesale Billing, Receivables & Collections (page 48)

- GLWA accounts receivable past due balance net of Highland Park is 8.59% of the total accounts receivable balance, with the majority of that balance related to one water account dispute currently under discussion.
- The Highland Park past due balance is \$54.3 million. It includes \$41.3 million for wastewater treatment services, \$1.8 million for industrial waste control services, and \$11.2 million for water supply services. Highland Park made a catch-up payment of \$1.7 million on June 3, 2022 and has continued to make small, monthly payments since that time.

Questions? Contact the Office of the Chief Financial Officer at CFO@glwater.org

Welcome to the November edition of *The Procurement Pipeline*, a monthly newsletter designed to provide updates on doing business with the Great Lakes Water Authority (GLWA).

Procurement Tip of the Month: Creating and Maintaining an Active Vendor Profile in Bonfire

Creating and maintaining an active vendor profile in GLWA's Bonfire Procurement Portal is an important step for vendors who are interested in doing business with GLWA. Read below for a step-by-step overview on how to create your free profile in Bonfire and how this benefits vendors.

How to create a free vendor profile in Bonfire:

1. Visit [GLWA's Bonfire Procurement Portal](#);
2. Click Log In/Register as New Vendor;
3. Provide the full and unabbreviated name of your organization;
4. Select [commodity codes](#) that reflect the goods and/or services that you provide; and
5. Indicate the diversity certifications (Minority-Owned Business Enterprise, Woman-owned Business Enterprise, Small Business Enterprise and/or Disadvantaged Business Enterprise) that your organization holds.

How an active Bonfire profile benefits vendors:

- ✓ Enables vendors to submit proposals to provide goods and/or services to GLWA;
- ✓ Ensures that you receive all GLWA vendor communications;
- ✓ Provides customized solicitation alerts directly to your inbox so that you do not miss out on any open GLWA opportunities; and
- ✓ Automatically includes you in GLWA's vendor database where GLWA regularly issues Invitations to Quote (ITQs). ITQs are a type of solicitation used to invite at least three known vendors to an informal process to quote on specified goods and/or services. An active profile in Bonfire is the best way to be notified of ITQs.

If you have any questions about creating or maintaining your Bonfire Vendor Profile, then please contact [Michael Lasley](#) and [Megan Savage](#).

Coronavirus Update #172: GLWA Mask Mandate Lifted at all GLWA Facilities & Project Worksites

On September 30, 2022 GLWA issued [Coronavirus Update #172](#) to the Vendor Community, indicating all the counties where staffed GLWA facilities or project worksites were no longer "RED" on the Centers for Disease Control and Prevention (CDC) [Community Levels](#) list. As stated previously in [Coronavirus Update #159](#), this means that the wearing of facing masks is currently optional for Vendors providing onsite services at GLWA facilities or project worksites regardless of their location until further notice. Any questions regarding this matter should be directed to [Michael Lasley](#) and [Megan Savage](#).

Virtual Vendor Introduction Meetings

If you are interested in learning more about doing business with GLWA, contact us at GLWAVendorOutreach@glwater.org to schedule a virtual vendor introduction meeting. Topics include information on submitting a competitive bid or proposal to a GLWA solicitation, as well as the requirements for GLWA's Business Inclusion and Diversity (B.I.D.) Program.

Keeping up with GLWA

Our Chief Executive Officer (CEO) Monthly Report provides a wealth of information and news about important initiatives within GLWA's service territory that impact GLWA, its member partners, and the public. To read the October 2022 Monthly Report, please [click here](#).

What's Coming Down the Pipe?

Current Solicitations: Register in GLWA's [Bonfire Procurement Portal](#) for new solicitations and contract award information.

Upcoming Procurements: Next Three to Nine Months—See newsletter page 2.

Visit GLWA online!

To see the GLWA Vendor homepage, please visit www.glwater.org or contact us via email at procurement@glwater.org.

Upcoming Solicitations November 2022

Category	CIP #	Description/Project Title	Budget Estimate
Water System (next four to nine months)			
Construction	170802	Reservoir Rehabilitation Construction Services Phase II at Waterworks Park, Northeast, and Booster Stations.	\$35,972,000
Wastewater Systems (next four to nine months)			
Construction	211005.2	WRRF Pump Station 2 VFD Replacements	\$7,000,000
Construction	211005.3	WRRF Pump Station 2 Mag Meter Replacements	\$1,000,000
Construction	260905	WRRF Plumbing Shop Rehabilitation	\$2,000,000
Construction	260802	WRRF Roofing Improvements	\$4,300,000
Construction	232002	Freud Pump Station Improvements	\$75,000,000
Design-Bid-Build	261001	WRRF Rehabilitation of Secondary Clarifiers	\$6,000,000
Water System (next three months)			
None			
Wastewater (next three months)			
Construction	260510	Conveyance System Repairs- CSO Outfalls Rehabilitation - Phase 5	\$10,000,000
Construction	260903	WRRF Front Entrance Rehabilitation	\$3,300,000
Construction	O&M	Plumbing Shop Rehabilitation	\$1,500,000
Projects moved to Procurement Team (Preparing for solicitation on Bonfire)			
Construction	170904	Phase II Wholesale Water Meter Pit Rehabilitation and Replacement Project - 60 new meter sites	\$16,000,000
Professional Services	O&M	Service- All Pumps for CSO Facilities Three Year Contract with Two - One Year Renewal	\$2,200,000
Professional Services	O&M	Professional Technical Services for Sewer Meter Support	\$8,500,000
Construction	114017	Springwells WTP 1958 Flocculator Replacements	\$22,945,000
Professional Services	O&M	Property and Casualty Insurance Brokerage and Ancillary Services	\$1,250,000
Professional Services	O&M	Grounds Maintenance Service	\$4,600,000

Vendors should continue to monitor [Bonfire](#) for solicitation updates.

Acronyms		
WRRF: Water Resource Recovery Facility	CSO: Combined Sewer Overflow	WTP: Water Treatment Plant

Office of the General Counsel – December, 2022

- ***Legislative Updates:*** The Office is monitoring infrastructure spending bills at the federal and state level.
- ***Gordie Howe International Bridge:*** GLWA submitted its relocation reimbursement request to MDOT and received MDOT's response. GLWA received a favorable decision from the Administrative Law Judge on GLWA's reimbursement request and is awaiting further discussions with MDOT.
- ***June and July Rain Events:*** The Office is providing legal support in response to the significant rain events in June and July. To date, 13 lawsuits were filed against GLWA related to the rain events. A subrogation lawsuit was filed against GLWA in the past month.
- ***Trenton Water Main:*** The Office is negotiating the transfer of the 24-inch water main to GLWA.
- ***Contract Negotiations:*** The Office is working with member partners to draft a new model sewer contract. Office staff completed the Designated Management Agreement with SEMCOG. The water contract negotiation team will conclude the 2022 contract alignment/reopener negotiations for all 84 member partners plus Detroit in October 2022. Administrative items and contract approvals will continue through approximately February 2023. The Office negotiated a 30-year wastewater disposal services contract with Evergreen-Farmington Sanitary Drain Drainage District.
- ***Environmental and Workplace Safety Compliance:*** The Office continues to work with the COO and team leaders from both the water and sewer systems to comply with regulations and to respond to any alleged violations.
- ***Record Retention Policy:*** The Office is drafting a record retention policy for GLWA.
- ***Industrial Pretreatment Program ("IPP"):*** The Office continues to work with the Industrial Waste Control ("IWC") Group and external stakeholders on finalizing and implementing an updated IPP. The updated IPP Program was submitted to EGLE on October 7, 2022 and approved on December 6, 2022. The Office also continues to provide assistance on PFAS and PFOS matters.
- ***Real Estate:*** The Office is working to secure easements and acquire properties related to various water and sewer projects. Each real estate transaction will be presented to the Board for approval when they are fully negotiated.
- ***Member Outreach:*** The Office continues to be an active participant in Member Outreach sessions.

- **Main Relocations:** The Office continues to support water operations in its discussions with community stakeholders regarding water main relocations.
- **Civil Litigation and Arbitrations:** The Office continues to vigorously defend actions against GLWA, including a class action lawsuit regarding IWC charges. GLWA received a favorable ruling against Highland Park in the 2014 litigation, restoring GLWA's judgment against Highland Park.
- **Labor Relations:** The Office continues to provide legal advice to Organizational Development on labor relations and employment matters.
- **Procurement:** The Office continues to assist GLWA's Procurement Team negotiate contracts, change orders and amendments and interpret contractual provisions. The Office is also assisting with the Procurement Policy's Procedures and updating GLWA's template contracts. The Office is part of a cross-functional team working to complete significant revisions to the GLWA construction contract, including consideration of using an entirely new contract format.

Statistics:

Contracts approved as to form:	37
Contracts drafted or revised:	117
Subpoenas/Information requests received:	5
Subpoenas/Information responded to:	5