Office of the Chief Executive
735 Randolph Street, Suite 1900
Detroit, Michigan 48226

July 28, 2021

The Honorable
Board of Directors
Great Lakes Water Authority

Dear Chairperson Zech and Directors:

Regarding: CEO's Report – July, 2021

The rain event that occurred on June 25-26, 2021 was an unprecedented storm that impacted thousands of people across southeast Michigan. I, as well as this Board of Directors, want to understand what happened in the regional system and how we can improve our operational response moving forward. Our member partners deserve that and so do those who have been directly affected.

At a news conference that I gave on July 2, 2021, I provided a detailed breakdown of our initial observations from the June rain event. The internal investigation that we are conducting, as well as the independent investigation being conducted by Board, will examine the system's performance and GLWA's response. These reports should take 60-90 days to complete, and we will be transparent with the outcomes.

In the interim, myself and the GLWA executive team, are continuing to participate in community and city council meetings across our service area, a broad cross section of media opportunities, as well as having discussions with our member partners regarding near term opportunities to work together to optimize the performance of our assets while we seek long-term solutions. We are also scheduled to participate in an upcoming meeting of the Detroit Planning Commission, which will include a multi-agency discussion of planning for flood management.

It is important to reiterate that the amount and intensity of the rain overwhelmed the system, as it would have overwhelmed any combined collection system. The deluge of precipitation amounted to approximately eight inches of rain in less than less than 19 hours; this is more than double the National Oceanic and Atmospheric Administration (NOAA) standard published for utilities.

The regional system was intended for wastewater collection and treatment and has been, to-date, oriented to ensuring environmental protection. These increasingly frequent and overwhelming rain events have raised the question of what our utility's role is in flood control moving into the future. They have also brought forward how reliant we are on our other utility partners. We have begun to have the discussion with these partners about the issues we encountered and how we move forward.

For those who have been directly impacted by the recent rain events, I urge you to take advantage of every opportunity you have to file a damage claim, including with your individual homeowners insurance, FEMA, your local service provider, as well as GLWA.

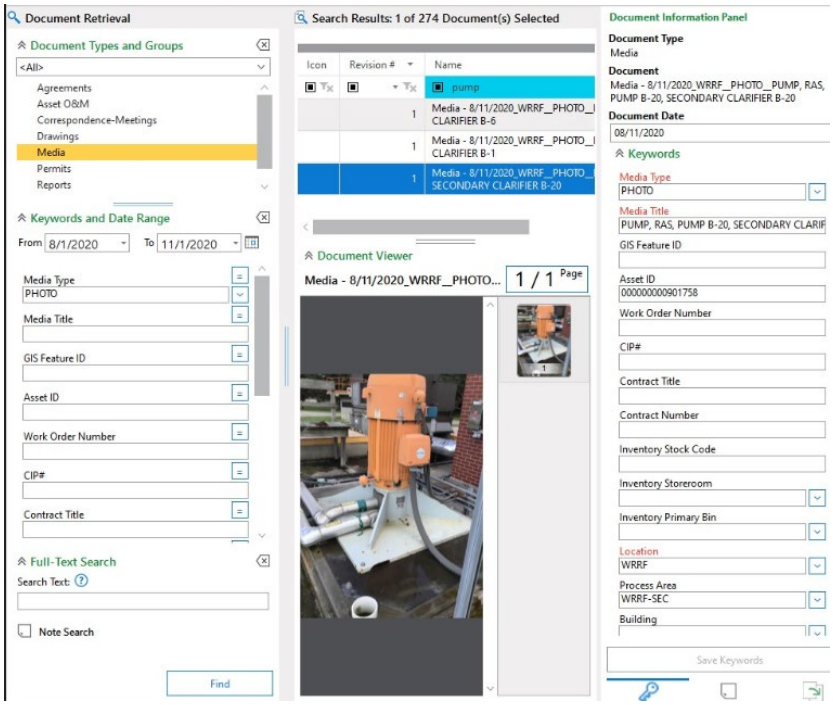
I want to thank the men and women of GLWA who worked tirelessly throughout the June 25-26 rain event, as well as throughout the entire year to ensure our system operates to the best of its ability. You are the embodiment of One Water, One Team!

Continuing with team recognitions, I want to express my thanks to the Wastewater Operations team for once again not only meeting but surpassing the federal and state goal of a 40 percent reduction in phosphorus loading in our effluent from the 2007-08 benchmark. Our final 2020-201 total phosphorus loading in our effluent was 415.96 tons, well below the regulatory goal of 469.8 tons. This is an incredible accomplishment that continues GLWA's commitment to environmental stewardship.

Finally, I wanted to share with you an interesting Satellite Leak Detection technology trial/pilot project the Energy, Research and Innovation Team is embarking on with some 30 of our member partners. The project will evaluate the use of satellite-based radar technology to detect drinking water leaks in the water transmission/distribution systems. The technology is very similar to the satellite technology that has been used to discover pockets of water on the moon and on Mars. Essentially, as the satellite passes overhead, the radar detects the presence of chlorinated water on or near the ground. By overlaying the detected areas on a system water distribution map, the "locations of interest" can be identified for subsequent investigation.

PLANNING SERVICES

Asset Management Group



GLWA's Asset Management Strategic Organization offered OnBase training organized by its Asset Management Enablers Team (AMET), on June 29, 2021. OnBase is a secure centralized document repository software and designated as GLWA's official digital repository for "records". It provides a platform to store final published documents as "One Source of Truth" accessible by all GLWA team members across the organization through multiple access points such as Outlook, Work and Asset Management system, and Geographic Information System. Document types can include drawings, operations and maintenance manuals, pictures, images, standard operating procedures, etc. which can be stored in the native formats eliminating the need to maintain documents in multiple formats at various locations.

The training was facilitated by Organizational Development and provided by Information Technology's (IT) Business Productivity Systems Team. It was attended by 45 team members from across the organization. The training was recorded and will be available to all GLWA team members via the Learning Management System. A frequently asked questions pamphlet is also being developed and will be available for future reference.

The use of OnBase as a repository for asset management-related documents and the associated training is another step in GLWA's asset management journey for better document management and control.

Capital Improvement Planning Group (CIP)

We continued to make remarkable advancements on the Program Management Plan (PMP) during June. AECOM helped lead the way by finishing the "Design" PMP chapter and initiating the "Construction" chapter. These chapters were developed over multiple review sessions during which team members engaged in meaningful discussions, provided comments, and contributed valuable feedback on existing and desired processes. In July, we plan to finalize the "Construction" PMP chapter and initiate discussions on the "Schedule and Budget" PMP chapter.

PLANNING SERVICES (continued)

The CIP Group worked closely with IT and the Procurement Team on the Project Management Information System (PMIS) request for proposal, which was released on June 22nd. A PMIS solicitation meeting will be held in July and Bids will be open in August. Once selected, the implementation of a PMIS system is anticipated to assist the core CIP Delivery Team in streamlining the program workflow. Meanwhile, we will continue to utilize the CIP portal and the PowerBi Dashboard to track projects and develop the annual Fiscal Year 2023-2027 CIP Plan update.

The CIP Group has started full speed ahead launching efforts for the Fiscal Year 2023-2027 CIP Plan update. The process launched in June by hosting multiple refresher training sessions for all Project Managers and users of the CIP in the CIP Portal. The CIP Group also met with individual project managers to update CIP projects forecasting for CIP budgets and schedules. It should be noted that this year the CIP team made significant enhancements to the annual CIP update process to ensure a more streamlined and user-friendly experience. The flexibility of these new enhancements provides the users with enhanced access to analytics and forecasting from a project, program, and systems view. The adaptability of these tools is expected to support the CIP Group in the preparation of the Fiscal Year 2023-2027 CIP Plan. The CIP Group also initiated an effort to evaluate the CIP project scoping and prioritization methodology. More information on this topic will be forthcoming.

Systems Planning Group

As the summer months are quickly passing, the Member Outreach Team has begun working with each workgroup to determine their preferred meeting method, as we look toward 2022 and begin to plan. GLWA is committed to making any in-person meeting a hybrid meeting so that members can also participate virtually if they choose. However, some groups might want to continue meeting only virtually. We look forward to engaging with each workgroup and its participants to determine the best path forward for each group.

The Member Outreach Team is assisting the Energy, Research & Innovation group to roll out a satellite leak detection pilot program to member communities. On June 15th, a special meeting was held to provide an overview of the technology and answer any questions members might have. There is no extra cost to participate in this pilot, the Energy, Research & Innovation group will fund the basic level of technology; optional/additional features would be funded by individual community partners. Currently, over 30 communities have expressed their desire to be a part of the pilot. Click here to read an overview of the technology and the questions with answers from the June 15th meeting.

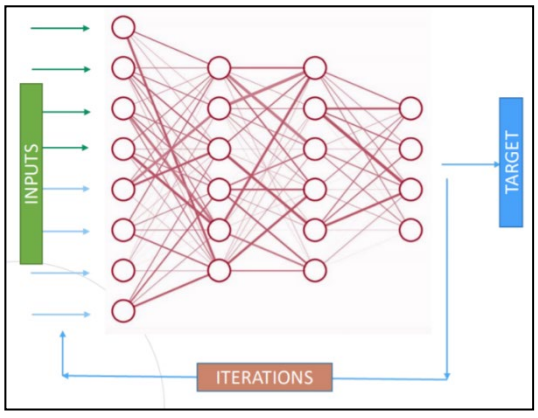
PLANNING SERVICES (continued)

A special Water Analytical Work Group (AWG) meeting was held on June 22nd to provide a status update on the 96-inch water transmission main relocation project. The project team walked through various elements of the project such as stakeholder coordination and engagement. The AWG will continue to be kept up to date as the project progresses.

The Water Management Best Practices Work Group heard from both GLWA and the Detroit Water & Sewerage Department (DWSD) at their meeting on June 23rd. Representatives from Organizational Development and Human Resources from each organization shared their practices for recruiting and retention. GLWA's training specialist, Jetaun Coleman, provided an overview of the One Water Institute and the various changes that have recently taken place.

Members are invited to attend a series of webinars hosted by Aquasight that focus on the AURA smart water technology platform. The webinar series will feature communities that are adopting analytics, AI, and automation in their daily workflows and will focus on success stories from communities using the AURA system for water quality management, flow & pressure management, flushing management, in-home leak detection, reporting, early warning system and much more. The first webinar is being hosted on July 20th at 2:00 p.m., where participants will hear from the City of Warren about how they are using the platform. As a reminder, GLWA provides the base model of AURA to member communities at no extra charge. AURA is a GIS-based smart water platform developed by Aquasight. The platform has built-in visualization, data analytics, and artificial intelligence. It merges pressures, flows, water quality data, GIS files, hydraulic models, and smart meter data where available. Currently, over 30 GLWA communities have opted into the tool.

The Wastewater Analytics Task Force (WATF) met on June 10, 2021. Kassem Ajami of GLWA provided an update about ongoing meter replacements throughout the service area. This was followed by a joint presentation from Dante Zettler of LimnoTech and Dax Blake of Xylem on modeling efforts for the Long Term Control Plan. The LTCSO team is recommending an update to the Regional Wastewater Collection System (RWCS) model to include incorporating a neural network to efficiently screen optimization alternatives. The next WATF meeting is scheduled for August 19, 2021.



The June 29, 2021, Watershed Hub Work Group meeting began with an update from Dan Gold of GLWA on the Wastewater Master Plan's Regional Water Quality Monitoring Plan, microbial source tracking and real-time monitoring pilot projects, and the investigational E. coli grid-sampling plan. This segued into a discussion led by Annette Demaria of Alliance of Rouge Communities (ARC), about next steps for the investigational sampling plan now that it is being supported with a grant from EGLE. The group reflected on its

PLANNING SERVICES (continued)

first-year achievements and discussed priorities for year two. Two goals were identified for the second year of the Watershed Hub: the successful completion of the EGLE grant, and beginning to develop a framework, and potentially a software solution, for consistent regional MS4 reporting related to post-construction standards and sharing best practices. The next Watershed Hub Work Group meeting will take place on July 13, 2021.

The Regional Collaboration Group (RCG) met on June 24, 2021. Fritz Klingler of FKE and Karen Ridgeway of ASI gave a presentation on the Wastewater Master Plan's proposed Northwest Interceptor to Oakwood Interceptor Connector project that would allow flow to be diverted from the downstream portion of the NWI to the Oakwood Pump Station. Multiple alternative routes for the connector are currently being studied. This was followed by a presentation from Carrie Tuner and Dante Zettler of LimnoTech that focused on their Framework for Design Conditions and Control Targets as part of the Long Term Control Plan update project. The next RCG meeting will take place on August 5, 2021.

June 2021 Member Outreach Meeting Attendance	
Meeting	**# Attended**
One Water Partnership (6/3)	116
Wastewater Analytics Task Force (6/10)	34
Water Analytical Work Group (6/22)	72
Water Management Best Practices Work Group (6/23)	21
Regional Collaboration Group (6/24)	14
Watershed Hub Work Group (6/29)	10

Systems Analytics and Meter Operations Group (SAMO)

At the July 20, 2021, Analytical Work Group (AWG) meeting, the Units of Service and System Water Audit project team provided an update on the status of the Phase 3 tasks, followed by an in-depth review of Task 2, Transmission System Analysis – Virtual Zones and Task 3, Wholesale Meters - Retail Sales vs Wholesale Volumes.

Task 2, Transmission System Analysis task involved finalizing the review and analysis of the virtual zones that have been set up in the Wholesale Automatic Meter Reading (WAMR) system, please see figure below. In this analysis, the input volume from pump stations is compared to the

PLANNING SERVICES (continued)

sum of consumption through the downstream WAMR meters, in each zone. This analysis helps identify water loss through the transmission mains in the zone.

Key Takeaways:

- Virtual zones provide a valuable tool for Transmission System Analysis
- Three virtual zones are functional
- No significant transmission main losses identified so far
- Work in progress for four additional virtual zones identified by the SAMO team

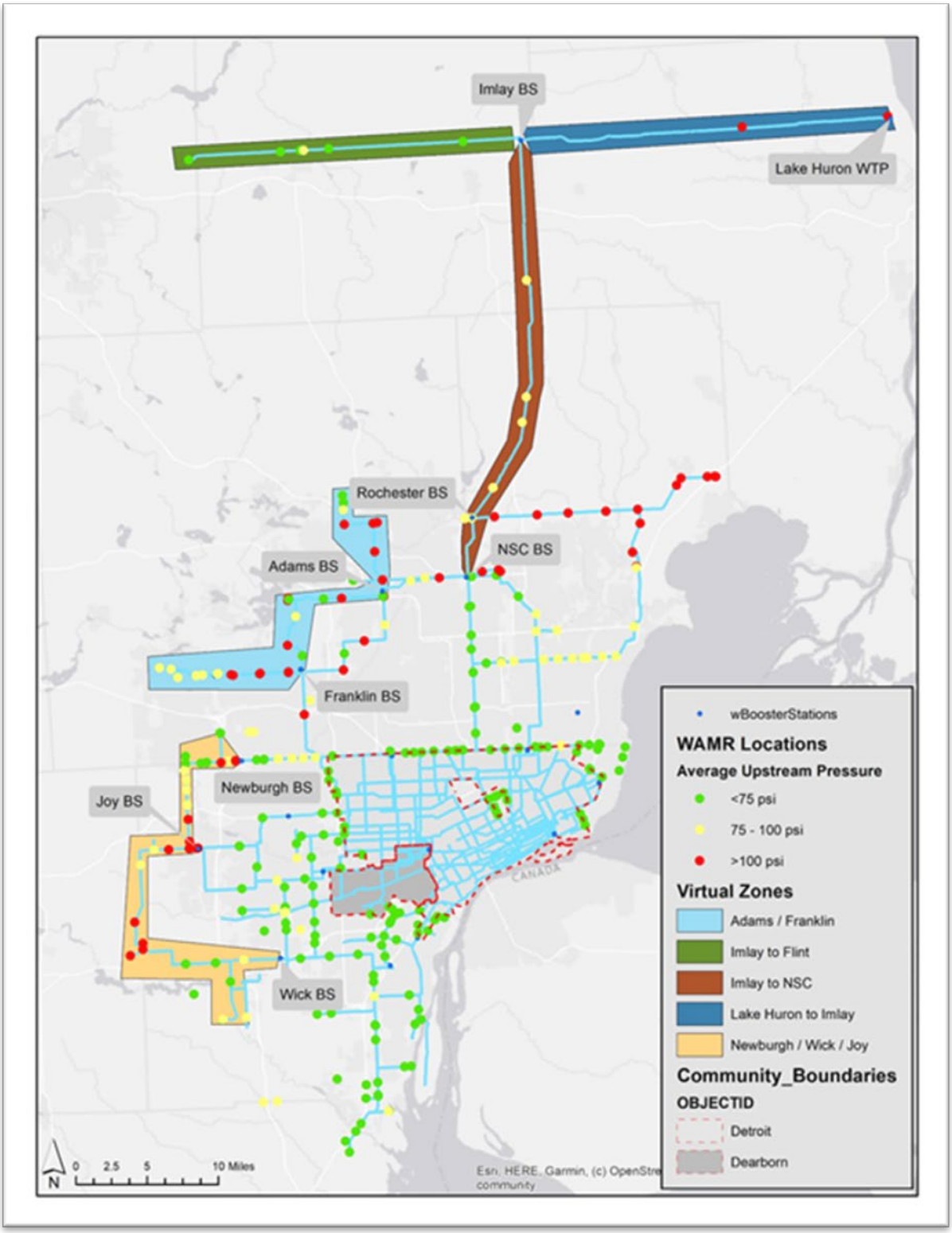


Figure: Virtual Zones in the GLWA Transmission System

PLANNING SERVICES (continued)

Task 3, Wholesale Meters – Retail Sales vs Wholesale Volumes task was requested by Member Partners. GLWA through Member Outreach requested three (3) years of data from Member Partners; including retail sales, billing frequency, number of connections, length of distribution mains, and billing adjustments. The data sharing was voluntary with a promise to keep the results anonymous. This analysis helps flag discrepancies between wholesale volume billed by GLWA and retail sales for a Member Partner. Please see the figure below with anonymized results that were shared with AWG.

Key Takeaways:

- The survey represented approximately one-quarter of WAMR customers (by meter count and volume)
- No negative Non-Revenue Water (NRW) indicated
- One customer with high and rising NRW
- Some customers with low NRW

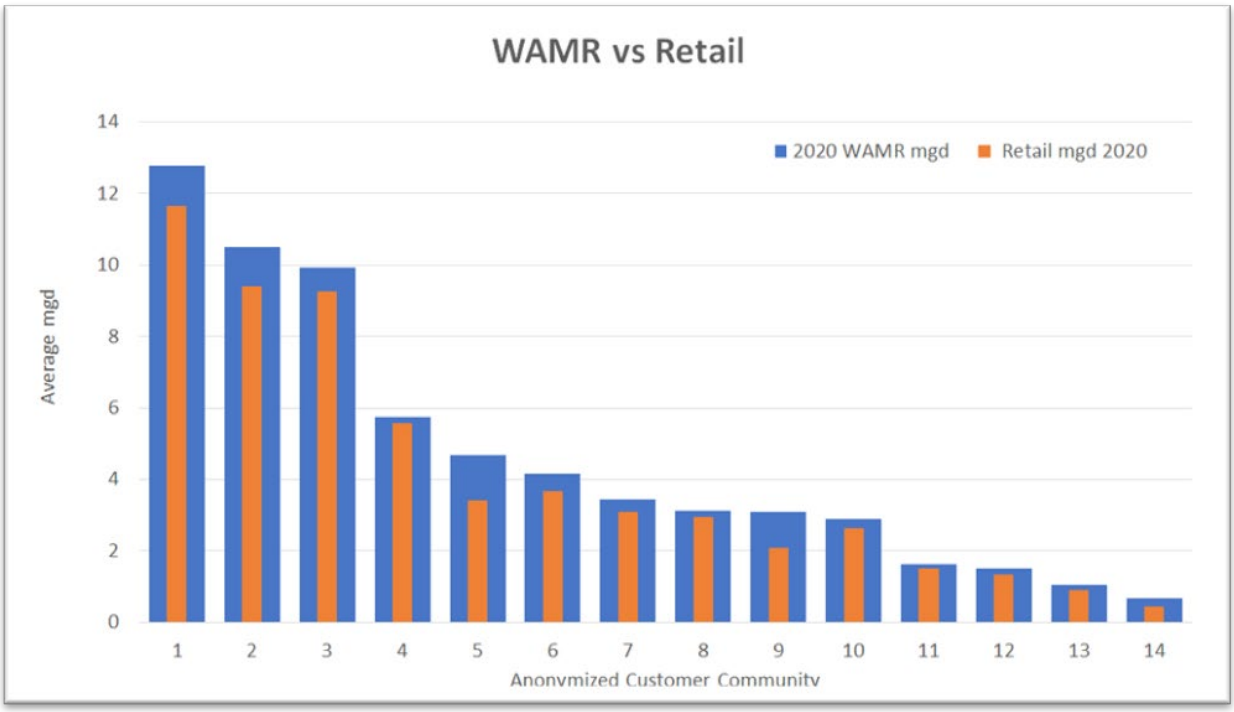


Figure: Retail Sales vs Wholesale Volumes - Anonymized Analysis

As part of the Units of Service and System Water Audit, Phase 3 project, GLWA's System Analytics & Meter Operations through Member Outreach Program will hold a virtual workshop for Member Partners on Non-Revenue Water Benchmarking on August 18, 2021, 9 am-12 pm. The workshop will be led by consultants from Black & Veatch, nationally recognized experts in water auditing, using the American Water Works Association's (AWWA) recommended water audit method as their framework.

PLANNING SERVICES (continued)

Based on feedback from the Member Outreach Survey, the workshop will provide an introduction to the AWWA Water Audit Methodology and a demonstration of how to complete the AWWA

Free Water Audit Software. All aspects of the water audit will be addressed in this three-hour workshop, with an emphasis on how to use the performance indicators within the software to guide non-revenue water management strategies to improve system efficiency.

WASTEWATER OPERATING SERVICES

Wastewater Operations

The team successfully meet and exceeded the federal and state goal of 40% reduction of our effluent Phosphorus for fiscal year 2020-21. Our final total of phosphorus was 415.96 tons, well under the goal of 469.8 tons.

Water Resource Recovery Facility (WRRF) complied with the Water Quality Standards for June 2021 except for the following violations.

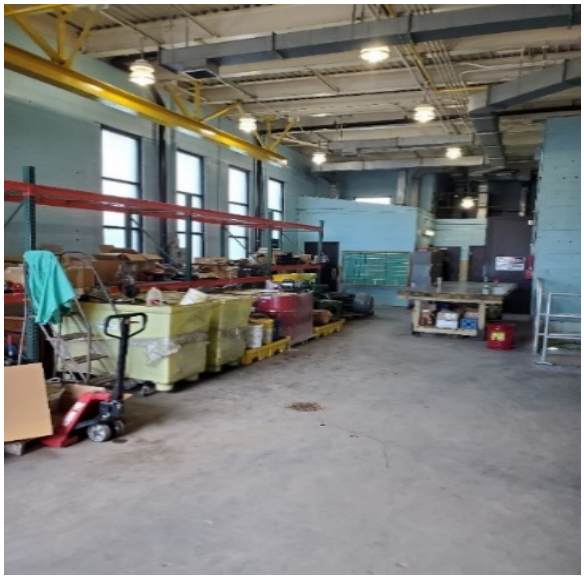
- The Conner Creek CSO basin had an exceedance of the fecal coliform limit on June 21. The event average fecal coliform count was 1220/100 ml, and the limit is 400/100 ml. Total residue chlorine readings were good for the whole event, but the first two samples collected had extremely high fecal counts.

- Total suspended solids (TSS) samples for June 27 were not analyzed before they expired. Three results will be reported as "lab error": TSS for primary effluent, TSS for secondary effluent, and TSS percent removal for Secondary Effluent.

WRRF and CSO Clean-Up Week

The WRRF and CSO teams were active and eager participants in the annual spring clean-up that took place from June 7th to June 13th. Esther Baptiste, Professional Administrative Analyst to Chief Operating Officer was the project manager for the 2021 Clean-Up week. Utilizing 5S principles, workspaces and storage areas were cleaned and organized which serves to make the areas safer, improve maintenance efficiency, and boost team morale. The clean-up efforts were also a fantastic team-building exercise, as everybody got involved and worked together to improve the overall

cleanliness of the campus. A few of the many areas that were cleaned were the Complex A maintenance garage, the Primary maintenance storage barn, and Copeland Street (overgrowth of rubbish and trash removal) Also, facilities electric team member Stephen Shuk, EICT-E and apprentice Shane Clarke, EICT-EA did a great job with cleaning efforts in the Electrical Building (EB) 1. In total, WRRF and CSO team members utilized five 30yd dumpsters for trash, three 40yd scrap metal dumpsters, two 55-gallon barrels, and five gondolas for disposal during the clean-up week. Each team did a wonderful job, and we look forward to next year's event.



WRRF Complex A maintenance garage and the Primary maintenance storage barn.

WASTEWATER OPERATING SERVICES (continued)

Copeland Street Before and After Clean-Up efforts

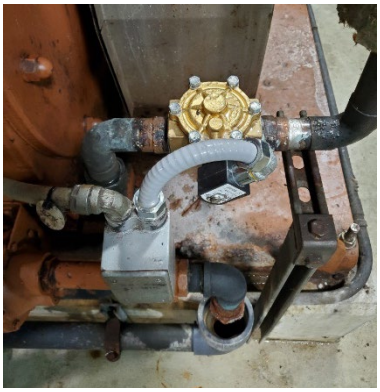
Electrical Building 1 (EB-1) before and after clean-up efforts

Moreover, significant effort and focus were provided to management of our documents. This effort focused on both digital and physical organization. To highlight one of the major efforts, the CSO Team had six team members (Chris Nastally, Kashmira Patel, Matt Krieger, Chris Wilson, Jonathan Arbaugh, and Brooke Ballard) focused their efforts in the Document Control area on the fourth floor in the Administration building. There were approximately 20 gondolas worth of outdated or obsolete O&M manuals, or already scanned submittal or project documents (other than drawings) that were purged from the area. Also, the team boxed up documents requiring scanning to prepare for the upcoming Document Control scanning project to expedite document removal from WRRF to permit the fourth-floor rehabilitation project to move quickly. Please see the before and after photos below of the Document Control area, and some before/after images of network organization.

Document Control before and after clean-up efforts

Maintenance

The Primary Team made modifications to the liquid drives of the sludge pumps in Sludge Pump Station 3. These modifications added a solenoid valve in the liquid drive line to allow for automatic operation and the ability to isolate flow remotely. This will prevent unnecessary secondary water in Sludge Pump Station 3 by automatically isolating water when the pump is not running and will also make operation of these sludge pumps easier by not having to manually operate the liquid drive water line. The new solenoid valves installed minimize wasted cooling water flow while also providing more operational flexibility.



WASTEWATER OPERATING SERVICES (continued)

Dewatering Team Leader, John Clark, took the initiative to replace the side drains on the belt filter presses with a new design. The new side drains will make it easier for operations to keep the belt filter presses clean which will prolong the life of the equipment. Mr. Clark's willingness to pursue a project for the good of the entire maintenance and operations teams, as well as provide savings long-term, is a great example of the "One Water, One Team" mindset.

The WRRF team is meeting PM goals during the pandemic with efficiency and continuous improvement and with particular focus on optimizing the PM process and incorporating team input.

The WRRF precision maintenance team performed a maintenance review of the PM strategy for emergency generator maintenance, which included review of automatic transfer switch operation and PM test witnessing. The PM's have been updated and optimized to include more value-added test and load simulations to ensure continuity of operations during power outages.

Two emergency generators at the WRRF

Process Control Center (PCC)

WRRF Ovation Graphics Upgrade: High Performance Graphics

The Team continued to hold workshops and review beta mockup Visio graphics that are part of the design process for the new high-performance graphics. Twelve (12) graphics have been submitted, reviewed, and commented on. These trial graphics will be edited to reflect all participants comments and then be re-submitted for approval prior to their actual construction, installation, and testing.

Alarm Analysis

The Team has been reviewing alarm configurations and field investigating problematic alarms. A trauma analysis was completed as a tool to assist in identifying these alarms. The analysis identified alarms with high occurrences or with extensive durations. This triage effort goal is to reduce the alarming quickly by addressing the 10% of alarms that are the worst offenders. On completion of this first wave of analysis a complete static rationalization will occur to ensure that the entire alarm database is consistently and optimally configured.

Laboratory

The WRRF laboratory team is currently working with the IT team on Laboratory Information Management System (LIMS) enhancements. This project focuses on automating routine reports the laboratory is currently creating manually and sample receipt processes to monitor compliance sampling. Fecal testing was also added to LIMS to allow upload into the Aquasight database.

Moreover, 5S has been completed in six out of nine identified areas in the laboratory. This method includes the five steps of sort, set in order, shine, standardize, and sustain. Zone captains were selected and received additional 5S training for the sustain phase.

Engineering & Construction

Design Engineering

Complex A Sludge Gallery roof leak work is almost complete. Piping work inside the gallery is complete, and the roof slab was poured in early June 2021. A minor leak was noted from the roof, and the contractor located the problem area and is working with a waterproof contractor to address the issue.

Construction Engineering

Contract 1903598 (Construction Manager at Risk for the Assessment and Rehabilitation of WRRF Yard Piping and Underground Utilities) was awarded to The Christman Company on January 15, 2021. This Contract is divided into two phases: pre-construction and construction. Currently, the contract is in the early stage of pre-construction.

The scope of the preconstruction phase is to assess conditions, confirm the locations, and to clean, inspect, and test the condition of the selected nine utilities, including piping and supporting structures. Toward this end, the contractor will be responsible to procure the following: surveyors, excavation services, piping inspections and cleaning, valve inspections and exercising, manhole inspections, and soil testing. The nine utilities and estimated lengths are:

WASTEWATER OPERATING SERVICES (continued)

Utility	Estimated total length (feet)
Potable Water	17,200
Secondary Water	31,200
Screened Final Effluent	11,800
Natural Gas	12,700
Compressed Air	10,300
Steam	3,500
Sewer	55,700
High Voltage Conduit	21,300
Low Voltage Conduit	38,000

The scope also includes:

1. Identify opportunities to reduce the number of electric and water meters.
2. Provide additional valves to isolate utilities for emergencies or maintenance.
3. Create/update the water model (i.e., pipe networks, hydraulics) for the plant's three water systems, incorporate current demands, and right-size the piping.
4. Replace and right-size the natural gas systems.
5. Incorporate these utilities into GLWA's GIS system.
6. Develop field-verified documentation for the new and existing utilities being assessed.

Once all the information is collected, recommendations for rehabilitation or replacement of buried utilities will be made through a separate design contract.

Contract 1903598 - Pre-Construction Phase Milestones:

Allocated amount to assess conditions of utility:	$4,863,051.00
Notice to Proceed	January 15, 2021
Final Completion Date	March 17, 2023

Once the pre-construction phase is complete and the design drawings are generated for the rehabilitation/replacement of utilities and structure, the construction phase starts.

Contract 1903598 - Construction Phase Milestones:

Allocated budget for construction	$15,995.000.00
Notice to Proceed (Tentative-TBD)	May/2023
Final Completion Date (Tentative-TBD)	May/2024

A complementary design Contract 1903601 (Yard Piping Engineering Services) was issued to CDM Smith Michigan, Inc. in conjunction with Contract 1903598 which set forth the scope of the utility Condition Assessment Plan to prepare the design documents and assist in the pre-construction and construction phases of Contract 1903598.

WASTEWATER OPERATING SERVICES (continued)

Current Activities:
Contract 1903598 is in its early assessment phase. Surveying is the only activity currently in progress. By late July 2021, excavation and CCTV inspection of sewers, soil testing, leak detections, manhole inspections, and other method of utility condition assessment methods will commence.

Surveying Crews establishing coordinates of existing utilities

Currently, WRRF Construction Engineering manages about 25 active construction projects/tasks. Construction of the Sludge Conveyance Improvements project (CON-197), rehabilitation of various sampling stations and Pump Station No.2 Ferric Chloride system (CON-222A), Pump Station No.2 Pumping Improvements Phase 1 (PC-795), and Rehabilitation of Ferric Chloride system at Pump Station No.1 and Complex B Sludge Lines (Contract 2002190) are all progressing at site. Several Job Order Contract Tasks are also under construction now.

CSO Control Program

The CSO Team is working on the following projects:

CIP 260621, Contract Number 2004666 – Conner Creek Canal Dike Improvements. This project is presently in the submittal phase and kicked off on June 15, 2021.. Extensive coordination with the City of Detroit was made, and the DPW permit review process was expedited. We would like to thank the city of Detroit and DWSD for their assistance, coordination, and cooperation in the efforts to shepherd this project through all hurdles. This project was advertised in March and approved by the GLWA Board of Directors by June 21, 2021, and the notice to proceed received. Thank you to GLWA procurement and GLWA Legal for your assistance in getting this one quickly through.

WASTEWATER OPERATING SERVICES (continued)

CIP 274001, 278001 – Contract Number 2101475 – CSO Facility Improvements Project for Oakwood and Leib CSO Facilities. This project is being performed as a predecessor project for the WWMP (Wastewater Master Plan) efforts to divert flow to the Oakwood and Leib facilities with the Meldrum Diversion and the Northwest Interceptor Diversion projects. This project is also informed by the CS-299 CSO Facilities Assessment project which identified needs to ensure these facilities are prepared to receive flows higher than they have historically after these diversion projects are completed. The RFP draft is about 95% completed and will be provided to Procurement in July 2021.

(TOES) Task 12T – Engineering and CAD Standards. The CSO team continues to coordinate with Water and Wastewater Engineering for this project. CAD standards are moving forward to advance the Wastewater standards. As these standards are finalized, the CSO Team will work with GLWA IT to develop an outward facing website to share all applicable standards with GLWA vendors. All standards will be referenced with standard language on all future RFPs with our intent being that all consultants are delivering the same level of standards to GLWA regardless of the group for whom they are working.

CS-299 – CSO Facilities Assessment Project. This project is anticipated to have all major tasks associated with the Facilities Assessment completed in September 2021. In June, we met with EGLE representatives to discuss the State Revolving Fund (SRF) plans we are planning to have drafted as a part of this project to ensure they meet EGLE's requirements. The SRF plan drafts will be completed at the end of this project and submitted and updated in the future as these projects are performed. We are presently working on evaluating failure mode effects and analysis for all critical equipment and reporting products for this project with Jacobs Consultants.

WATER OPERATIONS

Lake Huron Water Treatment Plant

Replacing an Old Bubbler System

Lake Huron team members took on the task of replacing an old bubbler system. This system controls the filter levels. As you can see in the pictures below, the brackets and selector valves on the old system were rusting and falling off. EICT-I Larry Armstrong along with Maintenance Technicians Christopher Chaskey, Terry Helmold, Jacob Falter, Jamen Burgess, and Jason Anson, all participated in this project. They ordered parts, cut the back plate, hand bent new valve brackets, drilled holes for anchors for the supports, and ran new tubing. This goes to show you, when we are all on the same page we can handle just about any task.

Old Bubbler System

New Bubbler System

WATER OPERATIONS (continued)

Springwells Water Treatment Plant

1930 Filter Plant Returns to Service

View inside the Sedimentation Basin as slow filling started.

Contract No. 1802774 "SPW WTP 1930 Sedimentation Basin, Sluice Gate, Guides, and Hoist Improvements" has completed work in Sedimentation Basins 1 and 2, and the basins have been turned over to the plant for service.

Return to service started with a slow fill of the basins from the effluent side using water that has already passed through another settling basin. As this filling was occurring, filters in the 1930 Filter Plant were washed, and their turbidimeters cleaned and calibrated to make sure they accurately record the quality of the water produced.

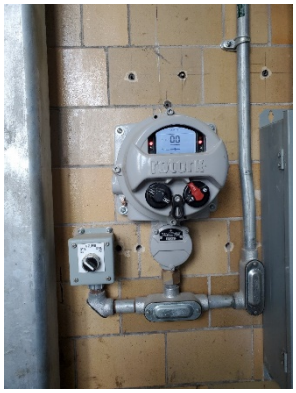
The return of the 1930 Filter Plant will allow the plant to produce more water. Within the next few weeks work in Basins 3 and 4 will be complete and returned to service as well.

New basin slide gate in the fully open position.

Ongoing Improvements at Springwells Water Treatment Plant

The latest upgrade at Springwells not only improves efficiency, but it enhances worker safety as well. The upgrade I am speaking of is the replacement of the influent and effluent gates. In the past, the task of closing and opening the gates was a labor-intensive job that required a crew of experienced workers to connect and then guide the heavy gates whether opening or closing. This task could take several hours to get done because of the massive weight of the gates made them both dangerous and hard to maneuver. So, a lot of time was used to safely complete this task.

Since the upgrade, the task of raising or lowering the gates can be safely accomplished by one employee. The gates are now connected to a lift crane that does not require any connecting by the employee but using a selector switch chooses which gate to raise or lower. With the training provided by the contractor any Water Tech can be sent to open or close the gates. The amount of time saved, as well as the safety this upgrade provides, is a great addition to the Springwells Treatment Plant.



Water Quality

Customer Service: Dealing with a Declining Participate in Distribution Sampling

In collecting the monthly Total Coliform Rule (TCR) samples, our investigators may encounter problems in the field. Every so often they may arrive at a site, business owners or municipality for various reasons decide they no longer wish to participate as a Distribution Sampling Site. The Water Quality investigators and team leaders first try to find a resolution with the business site to keep them as an active location. Sometimes they are unmoved by any solutions proposed and stand fast in not wanting to participate.

In this instance, we naturally accept their request and cease visiting the location. They are removed as a Distribution Sampling Point from our system in Water Quality. We then notify the community of the situation. The location's name, address, and reason for declining to participate are brought to the member partner's attention. When communicating with the community, Water Quality also highlights the number of active sample sites compared to the number of samples needed each month. For example, if there are 5 sites, we can collect 20 samples per month, we can distribute the visits weekly or 4 times per month, but if one of those sites decides to drop out, we are now forced to visit the remaining 4 sites, 5 times per month. Relatively easy math, yet that domino effect can result in causing stressful situations for those remaining sites causing one of them to feel they no longer want to participate as well. Water Quality's goal is to always keep as many sample sites active as possible.

Each year, all the sample sites are selected by that community and added to a TCR Sample Siting Plan (SSP) that is then submitted to Michigan Department of Environment, Great Lakes, and Energy (EGLE) to be reviewed, revised, and accepted. We work closely with the member partner to find adequate sites with the required type of sample sink to replace the removed sample site(s). After chosen, they are resubmitted to be reviewed, revised, and accepted by EGLE in a new SSP, those new sample sites then become active TCR sites.

WATER OPERATIONS (continued)

It may not always be possible to save sample sites, but Water Quality keeps a positive outlook and turn our customer service efforts to that community to ensure we exceed their expectations and efficiently deliver the best water services we can provide.

Southwest Reservoir Chlorination

On June 4, 2021, Water Quality performed a chlorination on Southwest Reservoir #3. The reservoir was taken out of service for internal inspection. The reservoir is a steel tank that holds 10 MG. GLWA Engineering determine the reservoir was in fair condition and needed minor repairs and touch-up painting. The repairs were performed.

Once repairs were made, the Water Quality team was contacted to perform the chlorination process. This was a good opportunity for new team members and team leaders to receive hands-on training on reservoir chlorination. The team was able to enter the reservoir through a side hatch. New team members gained knowledge on safety and how the tank functions on the inside.

After chlorination, the whole team was excited to experience a nice view from the top of the reservoir. This was an opportunity to emphasize the importance of safety when on top of a reservoir, and how the weather can impact safety during chlorination or sampling.

Pictured left to right:

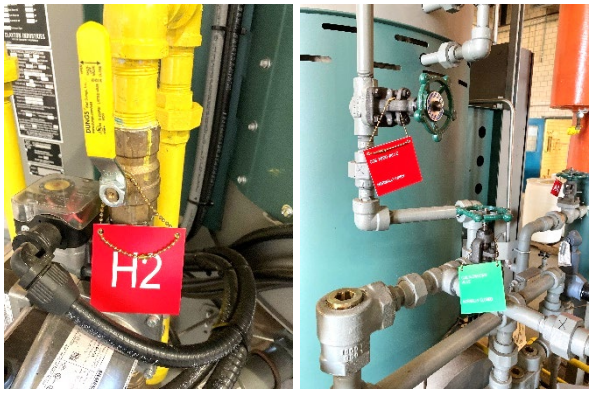
1. *Picture of team on the side entrance of the reservoir after chlorination.*
2. *Picture of team on top of the reservoir*

WATER OPERATIONS (continued)

Water Works Park

Steam Generator Valve Tags

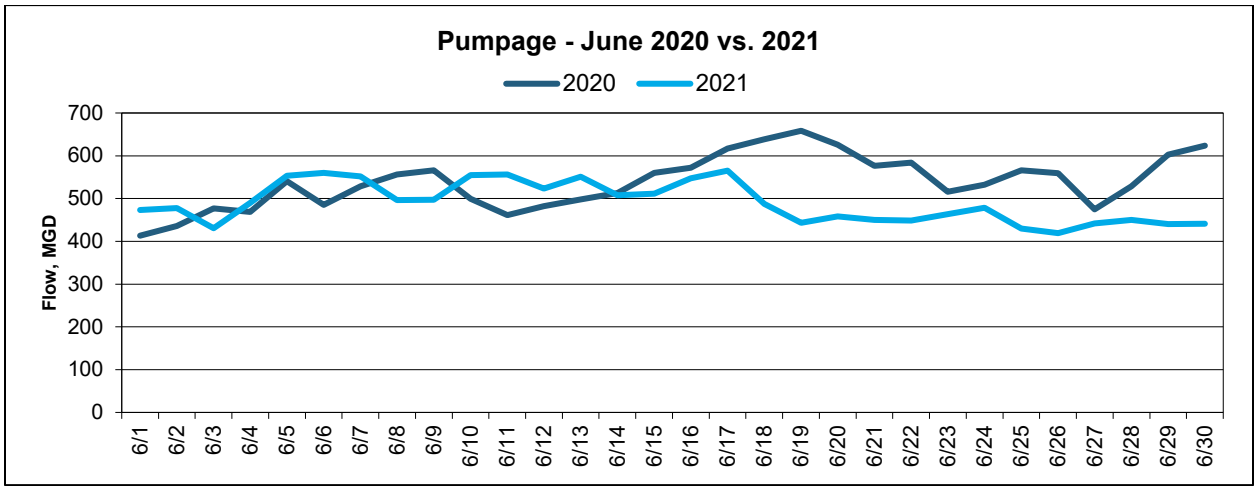
The Clayton Steam Generators have been outfitted with operational valve tags. The valve tags are designed to improve operational efficiency by clearly labeling each valve. The valve tags have the valve ID letters on one side and the descriptive name and normal position on the opposite side. The valves are color coded to serve as a quick visual reference to the valves normal operational position. The red is for normally open valves and green is for normally closed valves.



The valve tags are intended to increase the ease of system operation, and aid in training new water technicians.

Systems Control Center (SCC)

June 2021 pumpage was 9% lower than June 2020.



WATER OPERATIONS (continued)

Energy, Research & Innovation

Research

"Per- and polyfluoroalkyl substances thermal destruction at water resource recovery facilities: A state of the science review"

The GLWA research team recently coauthored their second published paper on Polyfluoro compounds (commonly known as "PFAS") and their fate and transport through sludge incinerators. PFAS compounds are emerging as a significant potential concern for both water and wastewater treatment systems. PFAS are extremely resistant to any sort of degradation, and thus are very hard to treat and remove from water systems. There are already reporting requirements around these compounds, in the drinking water, in the treated wastewater, and in the biosolids from wastewater treatment. This paper focused on the state of knowledge of the transformation of PFAS that may occur during the sludge incineration process. The most common transformation pathway is the conversion of longer chain PFAS compounds into shorter chain PFAS compounds. Other conversion pathways include the addition of oxygen molecules, as well as the breaking apart and recombination of compounds.

See the following link to view the article:
Per- and polyfluoroalkyl substances thermal destruction at water resource recovery facilities: A state of the science review (glwater.org)

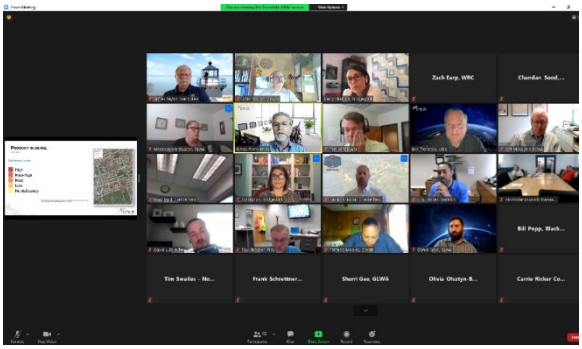
"A Review of Microplastics in Aquatic Sediments: Occurrence, Fate, Transport, and Ecological Impact"

The GLWA research team recently coauthored a review paper on the fate and transport of microplastics within aquatic sediments. This paper was very focused on the transformation and degradation of micro plastic particles, as well as the transport of said particles within aquatic environments and their eventual deposition an aggregation within aquatic sediments. Microplastics are a new and emerging public health concern that may or may not actually have a significant impact on public health or the environment. The challenge is that they are everywhere, and their behaviors and impacts are not very well known. There are significant correlations of microplastics and adjacency to transportation systems, as well as to wastewater treatment plant discharges. However, there also appears to be reasonably significant overland transport of microplastics unrelated to wastewater collection, conveyance, and treatment. In every regard, the data has revealed fairly significant shortfalls in the understanding of these substances.

See the following link to view the article:
A Review of Microplastics in Aquatic Sediments: Occurrence, Fate, Transport, and Ecological Impact (glwater.org)

WATER OPERATIONS (continued)

Innovation



Satellite Leak Detection – technology trial

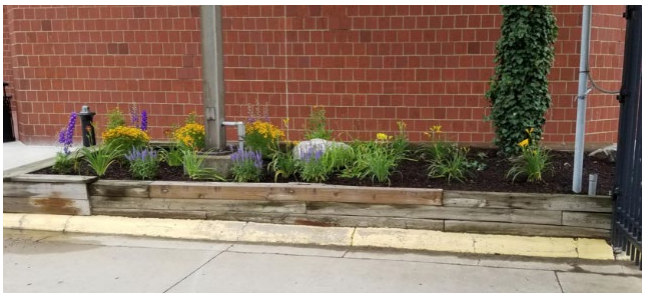
The Energy, Research & Innovation team is sponsoring a satellite leak detection pilot project in conjunction with about 30 of our member partners. The project will evaluate the use of satellite-based radar technology to detect drinking water leaks in the water distribution system. The technology is very similar to the satellite technology that has been used to discover pockets of water on the moon and on Mars. Essentially, as the satellite passes overhead, the radar detects the presence of chlorinated water on or near the ground. By overlaying these regions on a system water distribution map, the "locations of interest" can be identified for subsequent investigation. Several presentations have been given to member partners to invite their engagement in the pilot effort. A recent presentation to GLWA team members and member partners had 73 attendees. Currently, there are almost 50 member partners signed up to participate in the pilot.

Facility Operations

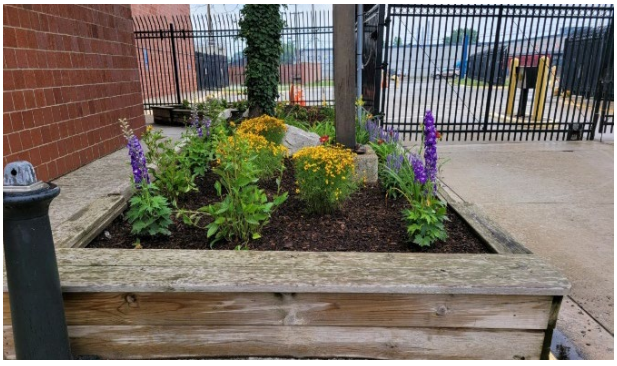
Water Resource Recovery Facility (WRRF) Entrance Landscape Improvements

The Facilities team was requested to "spruce" up the Ragland Entrance at WRRF. The area, which is normally clean and well kept, was power washed and cleaned. The WRRF entrance is refreshed and the WRRF team will take responsibility to ensure plants and sod are watered on a regular basis.

Planter boxes and sidewalks before cleaning up




Planter boxes refreshed, sidewalks cleaned and new sod laid at entrance




Planter boxes refreshed

INFORMATION TECHNOLOGY

In the past month, the IT Security team has proactively blocked or thwarted 15,031 spam messages, 8,857 spoofed messages and 29 viruses. Additionally, 1,829 phishing attempts have been caught and 55 malware attempts have been blocked.

The IT Security team along with the IT Customer Service Delivery team continues to develop a strategy for deploying multi-factor authentication for Office 365. The IT security team has also identified a vendor for a 3rd party vulnerability assessment on the business and security networks. The new anti-virus solution has been deployed to all servers and we continue to develop a strategy to implement to all laptops and desktops.

During the month of June, the IT Business Productivity Team continued multiple efforts to implement and streamline systems to strengthen GLWA's processes, including:

- Preparing six (6) training courses for users of GLWA's work order and asset management software system, WAM, using Adobe Captivate
- Updating the electronic signature capabilities of the forms on GLWA's intranet homepage, One Water Connect, and working with GLWA's Areas to ensure that forms and other documents are posted to the appropriate One Water Connect pages.
- Providing OnBase training to almost fifty (50) team members throughout GLWA, in coordination with GLWA's Asset Management Strategic Organization (AMSO).
- Enabling a new role in GLWA's financial software system, BS&A, for GLWA's Financial Planning & Analysis team to assist with revisions to purchase orders.

INFORMATION TECHNOLOGY (continued)

The IT Infrastructure team has completed the VOIP cutover. Progress continues in the effort to draft the business case and Statement of Work (SOW) for Phase 2 of the Datacenter Modernization Program. Phase 2 consists of multiple projects that include cloud migration, file share appliance replacement and backup platform replacement. A new backup platform has been purchased and a deployment plan has begun to be developed that will enhance our ability to back critical data on the business and security networks to a cloud solution.

The IT Business Productivity Team in conjunction with the IT Enterprise Asset Management Systems Team and Water Operations Area, completed internally developed SharePoint / Power BI solution to replace the Water Quality Team's "Contractor Management" application that was previously deployed on a legacy Java platform. This second of three solutions deployed enables the Water Quality Team to track contractors' sample result information for DWSD and GLWA projects for each job in a contract in order to adhere to drinking water regulations. The remaining legacy Water Quality application "Distribution and Bracketing" is the last application to be replaced with this newer technology.

The IT Enterprise Asset Management Systems Team, along with the Enterprise Asset Management Group and Procurement, continues negotiations with the selected vendor, NEXGEN, for the new Enterprise Asset Management (EAM) system. Negotiations will be wrapped up over the next couple of months. The EAM system implementation kickoff will be soon thereafter.

The IT Enterprise Asset Management Systems Team, along with IT's Change Leadership Consultant, Joan Tobin, completed a EAM functionality survey with subsequent observations to inform the implementation focus as well as training and communication needs throughout the implementation of GLWA's new EAM system. This survey which received over 50 responses across a broad cross-section of the GLWA team and considered nearly 30 major functionality items related to EAM systems. From the survey results, mobile benefits of the future EAM need to be better communicated while augmented predictive maintenance (e.g., infrared, vibration, oil analysis) was of high interest from the surveyed team members.

The IT Enterprise Asset Management Systems Team, along with Procurement, the CIP Group and AECOM, finalized the RFP for a new Project Management Information System (PMIS) which was posted on Bonfire on June 21st. A user-friendly and robust software as a service (SaaS) is being sought to enable and enhance business processes related to our capital improvement program. Proposal responses are due August 6th at noon.

Currently, the IT PMO is managing 31 active projects and is processing 12 project requests.

PUBLIC AFFAIRS

Visit to the WRRF by EPA Administrator Michael Regan

On Thursday, July 8, 2021, GLWA hosted Environmental Protection Agency Administrator Michael Regan, Detroit Mayor Mike Duggan, and U.S. Representatives Debbie Dingell, Rashida Tlaib and Brenda Lawrence at the Water Resource Recovery Facility (WRRF) for news conference to discuss federal investment in water infrastructure and climate resilience, as well as to receive a briefing on GLWA's regional planning and resiliency efforts and the operation of the WRRF. Included in the news conference was CEO Sue McCormick, and the briefing was provided by GLWA's Chief Planning Officer Suzanne Coffey and Chief Operating Officer, Wastewater Operating Services Navid Mehram.

Communications Response to the June/July Rain Events

GLWA has been working to be as transparent as possible with its member partners and the public related to its operational response to the major rain events that occurred June 25-26, 2021, and July 16, 2021. On Saturday, June 26, GLWA Chief Operating Officer Navid Mehram participated in a news conference coordinated by the City of Detroit where he gave initial updates on the utility's response. In addition to responding to a broad cross-section of media inquiries, GLWA took it one step further when it hosted a news conference on Friday, July 2 during which CEO Sue McCormick provided a detailed outline of GLWA's operational response to the June 25-26 rain event. During the press conference, she walked the media step-by-step through GLWA's initial findings and spent approximately 30 minutes answering questions from a variety of reporters. After the news conference, GLWA posted the video of the news conference as well as Sue McCormick's detailed outline of our response on our website, as well as social media channels. In addition to the news conference, CEO McCormick and COO Wastewater Operating Services Navid Mehram participated in numerous interviews on various TV and radio programs. On July 15, 2021, Mehram held a proactive news conference to provide details on GLWA's wet weather readiness in advance of predicted severe weather. The utility also provided real-time updates to the media throughout the rain event.

WRRF Receives 2020 NACWA Peak Performance Award

The WRRF has been awarded a NACWA Peak Performance Award for 2020. The Peak Performance Awards recognizes NACWA member agency facilities for excellence in permit compliance. WRRF was awarded a Silver Award, which is presented to facilities with no more than five violations per calendar year. This is the second consecutive year the WRRF has been recognized with this award.

Utility of the Future Today 2021

GLWA has once again been awarded recognition as a Utility of the Future Today, which honors forward-thinking, innovative water utilities that are providing resilient, value-added service to communities. In 2021, GLWA's organizational culture was reaffirmed as one that emphasizes a collaborative workplace that inspires and embraces continual improvement and learning through a high level of employee, community, and stakeholder engagement. GLWA was also recognized for its work toward energy efficiency. GLWA has been recognized each year since 2018 for a new area of Utility of the Future focus, including biosolids reuse, stakeholder engagement and education, and watershed stewardship.

SECURITY AND INTEGRITY

The Hazmat Unit coordinated and completed a total of 327 hours of training during the month.

Security and Integrity continues participating in the Emergency Operations Center's ongoing COVID-19 Pandemic briefings.

Security & Integrity represented GLWA at the city of Detroit's one day "Hazardous Mitigation Planning" meeting.

Continued the process of updating the 2021 Emergency Response Plan for GLWA.

ORGANIZATIONAL DEVELOPMENT

Apprenticeships

EICT-E: Apprentices have worked on several special projects at the plants throughout the month. They continued their Related Training Instruction through Detroit Electrical Industry Training Center. Apprentices are learning theory and practical concepts such as AC Theory and Voltage Triangle.

Performance

The annual performance reviews were completed in June, and merit was awarded during the month of July. The number of eligible team members who received merit were 888 of which 474 were union and 414 were non-union.

Talent Management

Staffing

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

Number of New Hires	5
Number of Separations	4
[redacted]	
Total Staffing - Regular FTEs (YTD)	999

ORGANIZATIONAL DEVELOPMENT (continued)

Benefits/Wellness

Our retirement plan provider, ICMA-RC, has a new name and rebranded to MissionSquare Retirement. The transition to MissionSquare Retirement is about more than just a name change. It's their response to improving the way they engage with GLWA team members and to better serve our unique needs for financial education, advice and planning for retirement. The improvements include:

New Financial Wellness Center — an enhanced, personalized financial wellness program with access to online educational materials, tutorials and planning
Advancements in investment products and tools — new digital, interactive tools to give a 360° view of your financial picture

Improved digital tools and capabilities — all the tools needed to make managing retirement savings, budgeting and planning easier, in one place.

Training

During the month of **June, 28** GLWA team members completed **17** non-safety courses and **174** GLWA team members completed **40** safety courses. **19** GLWA team members and **2** member partners completed **32** online 360Water courses.

FINANCIAL SERVICES AREA

June 2021 Audit Committee Recap

The June Audit Committee meeting was held on Friday, June 25, 2021. The GLWA Audit Committee binders are publicly available at www.glwater.org. The meeting included the following discussion topics.

- ✓ A Municipal Market Update and Refunding Outlook provided by GLWA financial advisors.
- ✓ Presentation of a report by the Transformation team highlighting several years of projects and efforts across the organization to improve operational safety and efficiency.
- ✓ The monthly CFO Report including a reminder that this will be the third and final year of work by the firm Baker Tilly as the GLWA external financial auditors. The Financial Reporting and Accounting team will be working to draft a scope of services and request for proposal to engage a new firm for the fiscal year ending June 30, 2022.
- ✓ Presentation of the March 2021 Monthly Financial Report (Executive Summary attached).
- ✓ A monthly update on the Business Inclusion and Diversity program activities.

- ✓ Review of the Gifts, Grants and Other Resources Report through May 31, 2021, and the 3rd Quarter Construction Work in Progress Report.
- ✓ Highlights from the June Procurement Pipeline (attached).

Business Inclusion and Diversity (B.I.D.) Program Update

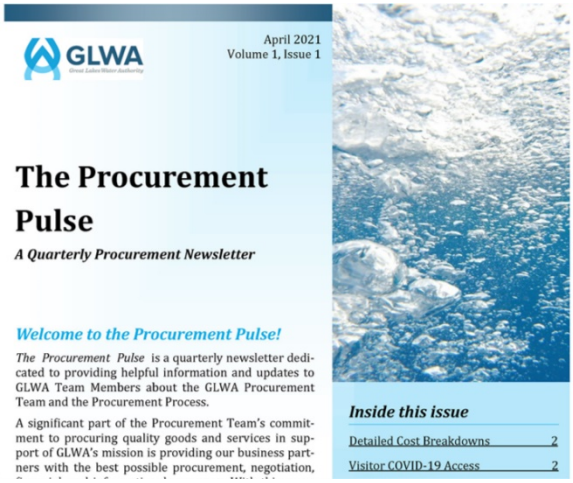
On June 18, 2021, Megan Torti and Michael Lasley were invited to deliver a presentation on GLWA's Business Inclusion and Diversity (B.I.D.) Program to the Michigan Inter-Governmental Trade Network (MITN) Cooperative. This meeting was attended by representatives of government agencies throughout Michigan who were interested to learn more about GLWA's B.I.D. Program, and included the Huron-Clinton Metropolitan Authority, the Ann Arbor Area Transportation Authority, the Southfield Chamber of Commerce as well as the cities of Southfield, Madison Heights, and Farmington Hills. In their presentation on the B.I.D. Program, Megan and Mike overviewed what the B.I.D. Program is and how it maximizes opportunities for small, minority-owned, and economically disadvantaged businesses within GLWA's service territory so that they may effectively compete and do business with GLWA. GLWA's General Counsel Randal Brown was also present to answer questions regarding the legal parameters around diversity and inclusion program in the state of Michigan that GLWA considered while designing the B.I.D Program. GLWA warmly thanks the MITN Cooperative for hosting this event and for all the government representatives throughout Michigan who attended and participated!

FINANCIAL SERVICES AREA (continued)

All FSA Quarterly Meeting

The Financial Services Area held its online quarterly meeting on July 21, 2021. The meeting focused on the GLWA theme of connections before content and helping remind the group

that we are One Water One Team regardless of our work locations. Key meeting topics included an overview of the Procurement team's new internal newsletter "The Procurement Pulse" by Procurement Manager Mike Lasley, updates on Water Residential Assistance Program changes by Treasury Manager Deirdre Henry and Management Professional Jacqueline Morgan, news regarding the Rialto Warehouse move by Logistics Manager Terence Anderson, status of current reconstitution plans by CFO Nickie Bateson and Executive Assistant Phyllis Walsh, and team member announcements regarding new hires, professional certifications, professional board appointments, and personal highlights.


GLWA

April 2021
Volume 1, Issue 1

The Procurement Pulse

A Quarterly Procurement Newsletter

Welcome to the Procurement Pulse!

The Procurement Pulse is a quarterly newsletter dedicated to providing helpful information and updates to GLWA Team Members about the GLWA Procurement Team and the Procurement Process.

A significant part of the Procurement Team's commitment to procuring quality goods and services in support of GLWA's mission is providing our business partners with the best possible procurement, negotiation,

Inside this issue

Detailed Cost Breakdowns 2

Visitor COVID-19 Access 2

FSA Team Acknowledgements

The GLWA Financial Services Area is pleased to acknowledge two team members who have been recognized for their professional accomplishments. Tina Clinkscales, CPPO, CPPB Procurement Management Professional has been appointed President of the Michigan Public Purchasing Officers Association (MPPOA). MPPOA is the local chapter of the Institute for Public Procurement (NIGP). This organization strives to provide opportunities for procurement professionals to network, share experiences and


Professional Certificate

Robert Arbaugh

GLWA
Great Lakes Water Authority

educate themselves on various procurement related topics. Tina has been a part of the MPPOA organization for several years and

has served in the capacity as Secretary and now has the privilege and honor of being the MPPOA President. She is excited about the new opportunity and looks forward to representing GLWA in this capacity.

Robert Arbaugh, CPA, CGMA Financial Planning & Accounting Management Professional recently obtained a Certificate of Data Analytics & Visualization Fundamentals from the Institute of Management Accountants (IMA). The certificate program is designed to reinforce the power of data and how it can be harnessed to gain deeper insight into business performance and to make informed strategic decisions. Robert looks forward to utilizing the knowledge he has gained to further enhance the ongoing GLWA budget development process.

Procurement Pipeline

The July 2021 Procurement Pipeline edition is attached. This month features the GLWA implementation of DocuSign for all contract documents and agreements, badged access requirements for vendors visiting GLWA facilities, how to coordinate virtual introduction meetings with GLWA Procurement, updates on scheduled vendor outreach events, and upcoming solicitations.

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

Respectfully submitted,

Sue F. McCormick
Chief Executive Officer

SFM/rb

Attachments

- General Counsel's July Report
- Procurement Pipeline
- Financial Report Executive Summary

OFFICE OF THE GENERAL COUNSEL – JULY, 2021

COVID-19: The Office supports GLWA's response to the COVID-19 pandemic, including participating in GLWA's COVID-19 Task Force, review of COVID-19 related laws, rules and public health orders.

***NPDES ACO Dismissal*:** The Office assisted in preparing documents to have the ACO dismissed.

***Legislative Updates*:** GLWA continues to cooperate with member partners on the Lead and Copper Rules as well and attend webinars on the subject. The Office is also monitoring a bio-solids bill and water assistance 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 is appealing MDOT's decision.

June and July Rain Events: The Office is providing legal support in response to the significant rain events in June and July.

***Trenton Water Main*:** The Office is negotiating the transfer of the 24-inch water main to GLWA.

Contract Negotiations: GLWA will attempt to secure long term contracts with all communities that are not on the model contract. The Office is working with member partners to draft a new model sewer contract.

***Environmental and Workplace Safety Compliance*:** The Office continues to work with the COO and team leaders from both the water and sewer systems to comply with regulations and to respond to any alleged violations.

***Record Retention Policy*:** The Office is drafting a record retention policy for GLWA.

***Industrial Pretreatment Program*:** The Office continues to work with the Industrial Waste Control ("IWC") Group and external stakeholders on finalizing and implementing an updated IPP. To date, 99% of the communities have passed a concurring resolution and GLWA made a presentation to the City of Highland Park's City Council, which is the only community that has not passed a concurring resolution. The Office is also providing assistance on PFAS and PFOS matters.

Real Estate: The Office is negotiating easements related to support the 14 Mile Road redundancy project, Baby Creek CSO infrastructure improvement project. The Office is negotiating the acquisition of property for the Newburgh pump station. The office is negotiating easements related to 96" watermain relocation and the Woodward Sewer Project.

***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. One lawsuit was filed against GLWA related to the June 25-26 rain event in the past month.

***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:	28
Contracts drafted or revised:	91
Subpoenas/Information requests received:	6
Subpoenas/Information responded to:	8

Procurement Pipeline

Great Lakes Water Authority (313) 964-9157 www.glwater.org **July 2021 - Volume 29**

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

Procurement Process Update: DocuSign

Effective July 6, 2021, the GLWA Procurement Team will now route all contract documents and agreements requiring the signature of vendors through a software application called DocuSign.

DocuSign is a widely used tool that enables users to digitally sign and manage all documents securely in one unified workspace. This software also allows for the efficient distribution and tracking of documents through the signatory process and helps to ensure that this process is faster and easier for both vendors and the GLWA Procurement Team.

For vendors doing business with GLWA, DocuSign provides several benefits that streamlines the procurement and contract process:

- ✓ Vendors will no longer need to print, sign, scan and then send important documents, saving resources and time;
- ✓ When a document requires review and signature, vendors will receive automatic email notifications and a link from DocuSign;
- ✓ Easily sign from iOS, Android, and Windows devices while on the go;
- ✓ Fully executed documents are automatically provided to those in the routing process.

Please note that while vendors will need to set up a DocuSign account and create an electronic signature, vendors are not required to download or purchase DocuSign software to utilize its features for GLWA-related contracts and documents. If you have any additional questions about using DocuSign, contact the GLWA Buyer of Record.

Visitor COVID-19 Badged Access Requirements to Remain in Effect Until September 1, 2021

On June 29, 2021, GLWA issued Coronavirus Update #130 to the vendor community detailing that GLWA's current Visitor COVID-19 Access Requirements and Safety Protocols will remain in effect until September 1, 2021. During this time, GLWA continues to strongly encourage COVID-19 vaccination for all who may safely receive it. For a detailed overview of the mandatory access requirements and safety protocols for Badged, Non-Badged, and Delivery Driver Access to GLWA facilities and project worksites, please carefully review Coronavirus Update #130 which is available on the GLWA Vendor Webpage. Any additional questions regarding GLWA's Visitor COVID-19 Access Requirements may be directed via email to Michael Lasley and Megan Torti. We appreciate the vendor community's cooperation and continued efforts to help ensure workplace safety for all.

Virtual Introduction Meetings with GLWA

If you are interested in learning more about doing business with GLWA, contact us at GLWAVendorOutreach@glwater.org to schedule a vendor introductory meeting. Topics include helpful 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.

Where to Meet GLWA

GLWA attends vendor outreach events throughout southeast Michigan. We welcome you to join us at the following upcoming events:

- ✓ Pure Michigan Business Connect (PMBC) and Flint & Genesee Economic Alliance PTAC Virtual Meet the Buyer Event (tentatively scheduled for August 12, 2021).
- ✓ Macomb Regional PTAC Virtual Meet the Buyer Event on August 19, 2021.

What's Coming Down the Pipe? *Current Solicitations:* Be sure to register in Bonfire for new solicitations and contract award information. *Upcoming Procurements: Next Three to Nine Months* - See page 2

Visit GLWA online! See the Vendors page at www.glwater.org or contact us via email at procurement@glwater.org.

Upcoming Solicitations July 2021

Category	Description	Budget Estimate
Water System (next three months)		
Engineering	North Service Center Pumping Station Improvements (CIP #132016)	$10,000,000
Design Build	Belle Isle Seawall Rehabilitation (CIP #116005)	$1,740,000
Design	Reservoir Inspection, Design, Construction Administration, and RPR Services (CIP #170802)	$5,400,000
Progressive Design Build	Water Works Park High Lift Pumping Station Modernization (CIP #115007)	$89,000,000
Wastewater System (next three months)		
Design Build	Control System Upgrade – St. Aubin, Leib, and 7 Mile CSO Facilities (CIP #360619)	$7,000.000
Construction	Generator Improvements (Controls upgrades, Generator modifications) (JOC) (CIP #260622) (CSO)	$1,000,000
Construction	Hubbell Southfield CSO Basin Pipe Hanger Replacement	$1,500,000
Construction	HAZMAT (Hazardous Material) Building Renovation	$1,500,000
Maintenance Services	Facilities Maintenance Services	$17,000,000
Water System (next four to nine months)		
Progressive Design Build	Lake Huron WTP Instrumentation and Filter Control Improvements (CIP #111006)	$21,000,000
Construction	Roof Replacement – Lake Huron WTP and Southwest WTP (CIP #171500)	$3,000,000
Wastewater System (next four to nine months)		
Professional Services	Virtual Tour and Laser Scanning Services	TBD
Design	Pilot Netting Facility Project (CIP #270001) (CSO)	TBD
Construction	Rehabilitation of CSO Outfall Backwater Gates (CIP #260510)	$5,000,000
Construction	WRRF Administration Building 4th Floor Renovation	$2,500,000
Construction	Pump Station #1 Screenings Building HVAC Improvements (CIP #211006)	$1,000,000
Construction	Connor Creek Sewer System Rehabilitation (CIP #260208)	$24,400,000
Design Build	WRRF Rehabilitation of Intermediate Lift Pumps (ILPs) 1 & 2 and Modifications to Aeration Decks 1 & 2 to Incorporate Biological Phosphorus Removal and Step Feed (CIP #212008)	$60,000,000
Construction	WRRF Pump Station #1 Improvements (CIP #211006)	$55,000,000
Design Build	WRRF Structural Improvements (CIP #216011)	$12,000,000
Deign Build	Sewer Repair Contract (CIP #260209)	$22,400,000
Construction	Rehabilitation of Northwest Interceptor from 8 Mile Road to Warren Pierson (CIP #260295)	$7,000,000
Design	Architectural & Safety Improvements to CSO Facilities	$1,400,000
Enterprise (next three months)		
Professional Services	Document Scanning and Management Services (WRRF, Conner Creek, Enterprise)	TBD

Vendors should continue to monitor Bonfire for solicitation updates.

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

GLWA Great Lakes Water Authority

Financial Report
Executive Summary Dashboard
for the Month Ended March 31, 2021

Key Financial Metrics

The table below provides key report highlights and flags the financial risk of a budget shortfall by year-end as follows:

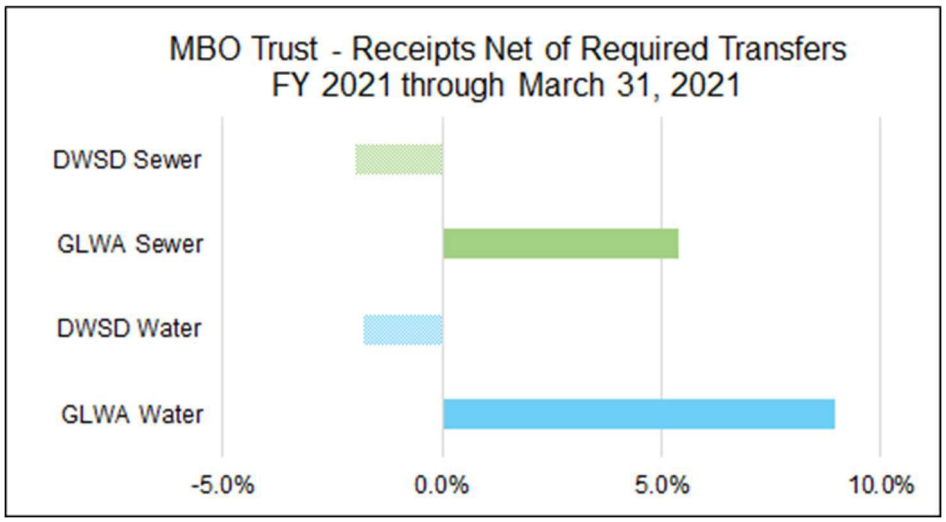
No Risk (green) - Potential (yellow) - Likely (red)

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.

As of March 31, 2021				
Metric	FY 2021 Budget	FY 2021 Actual	Variance from Financial Plan	Report Page Reference
Wholesale Water Billed Revenue ($M)	$237.2	$242.6	2%	47
Wholesale Water Billed Usage (mcf)	10,234,000	10,699,000	5%	
Wholesale Sewer Billed Revenue ($M)	$201.8	$201.8	0%	49
Wholesale Water Operations & Maintenance ($M)	$100.6	$91.5	-9%	6
Wholesale Sewer Operations & Maintenance ($M)	$136.7	$121.5	-11%	
Investment Income ($M)	$5.2	$5.8	12%	37
Water Prorated Capital Spend w/SRA* ($M)	$83.0	$97.0	17%	28
Sewer Prorated Capital Spend w/SRA* ($M)	$62.0	$64.0	3%	29

*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 52)



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). DWSD Water and Sewer report shortfalls of $1.3 million and $4.3 million respectively through March 2021. DWSD management is reviewing plans to resolve the current year shortfalls and has proposed a formal plan to end the FY 2021 fiscal year with positive net cash flows.

The current DWSD loan receivable balance for fiscal years 2017 and 2018 is $12.9 million.

Budget to Actual Analysis (page 3)

- The third quarter budget amendment which was approved by the GLWA Board on May 26, 2021 is reflected in the FY 2021 Amended Budget columns on the tables in the March 2021 Budget to Actual report.
- The total Revenue Requirements are on target through March 2021.
- The total Operations & Maintenance expenses are at 67.3% of budget through March 2021 which is reasonably within the pro-rata benchmark of 75.0%.

Basic Financial Statements (page 10)

- The Basic Financial Statements are prepared on a full accrual basis and reflect preliminary, unaudited results.
- Operating income for March 2021 is $74.1 million for the Water fund (28.6% of total revenues) and $117.4 million for the Sewer fund (33.1% of total revenues).
- Water Net Position decreased by $6.3 million, and Sewage Disposal Net Position increased by $26.8 million for the year to date through March 2021.

Capital Improvement Plan Financial Summary (page 27)

- The Water and Sewer system activity are both exceeding the 75% Capital Spend Ratio assumption.

Master Bond Ordinance Transfers (page 30)

- For March, transfers of $12.8 million and $17.6 million were completed for the GLWA Water and Sewer funds, respectively.
- Also for March, transfers of $4.5 million and $8.1 million were completed for the DWSD Water and Sewer funds, respectively.

Cash Balances & Investment Income (page 36)

- Total cash & investments are $498 million in the Water fund and $455 million in the Sewer fund.
- The total combined cumulative investment income for FY 2021 through March is $5.8 million.

DWSD Retail Revenues, Receivables & Collections (page 41)

- Water usage through March 31, 2021 is at 92.60% and revenues at 93.87% of budget.
- Sewer usage through March 31, 2021 is at 94.01% and revenues at 98.84% of budget.
- Combined accounts receivable balances for the water and sewer funds report an increase of $27.6 million over the prior year.
- Past dues over 180 days make up 65.9% of the total accounts receivable balance. The current bad debt allowance covers 100% of past dues over 180 days.

GLWA Wholesale Billing, Receivables & Collections (page 46)

- GLWA accounts receivable past due balance net of Highland Park is less than 4.0% of the total accounts receivable balance.
- The Highland Park past due balance is $47.0 million. It includes $35.8 million for wastewater treatment services, $1.8 million for industrial waste control services, and $9.4 million for water supply services. In FY 2021, Highland Park has made five payments totaling $2.6 million through March 2021.

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