



Office of the Chief Executive

735 Randolph Street, Suite 1900
Detroit, Michigan 48226

April 26, 2023

The Honorable
Board of Directors
Great Lakes Water Authority

RE: CEO Report – April 26, 2023

Dear Chairperson Hendrix and Directors:

I will begin my report this month with an update on our ongoing litigation with the city of Highland Park. On April 4, 2023, the Michigan Supreme Court denied Highland Park's application for leave from the Michigan Court of Appeals Opinion dated August 18, 2022. Then, on April 20, 2023, the Wayne County Circuit Court indicated that it would issue an order reinstating the full \$19 million judgment, plus interest.

We were pleased with these actions. As we have maintained throughout this litigation, an examination of the merits of the case clearly indicates that the city of Highland Park is obligated to pay and is deficient in paying for the water, sewer, and industrial waste control services it receives from Detroit and now, GLWA. These decisions reaffirm that Highland Park has the same obligation to pay as the other member partners in the regional system.

Over the last week or so, I am sure that you've heard several statements being made by Highland Park. I want to address the most serious one first – GLWA has no plans to shut off water service to the city. Additionally, I want you to know that Highland Park's wholesale charges from GLWA are calculated and billed in the same manner as all other GLWA member partner communities. They are, in no way, arbitrary.

Challenges exist within Highland Park's infrastructure which contributes to the city's total cost being different from other GLWA member partners, including the amount of water lost through leaks in their local pipes. The city's system loses more water out of their local water pipes each day than 40 other GLWA communities use individually. For some perspective on these daily water losses, for every gallon of water consumed by a Highland Park resident, two gallons leak out of Highland Park's water system.

GLWA stands ready to resume facilitation with the city of Highland Park as instructed by the trial court and remains committed to working with all parties involved to come to an amicable solution within the timeframe outlined by the Court. Once the judgment is paid, GLWA will reimburse the other member partners that have incurred additional charges for the city of Highland Park's non-payment.

As we enter the spring wet weather season, our teams are focused and ready to address weather patterns as they occur. We had an extremely wet beginning to spring in Michigan, with March having the highest average daily flow (764 million gallons a day) at the Water Resource Recovery Facility (WRRF) since January 2020. This included a five-day period from March 4 - 8 which more than one billion gallons per day was treated at the WRRF, totaling 5.9 billion gallons for the event. In addition, three CSO facilities treated 159 million gallons during this period, indicating excellent performance by the collection system in directing flow to the WRRF for the highest possible level of treatment.

A further wet weather event from March 31 – April 7 totaled 9.6 billion gallons at the WRRF (including another seven-day period of pumping over one billion gallons per day), with seven CSO facilities treating a combined 1.5 billion gallons during this event. This brings the entire total treated volume at the WRRF to just above 11 billion gallons over seven days. To provide context, the average flow for the WRRF over seven days is 3.8 billion gallons. So, from March 31 - April 7, approximately 250 percent more than the average flow was treated at the WRRF. This was the longest and highest-volume wet weather event since May 2019. I want to thank the men and women of the WRRF and our CSO facilities for their hard work keeping the system operating at peak performance!

Keeping with the resiliency theme, I wanted to share that we have named Field Services Director Todd King to the newly created position of System Resiliency Officer. In this new role, Todd will lead cross-functional resiliency efforts such as the Southeast Michigan Flood Resiliency Study, field implementation of our Linear System Integrity Program, and support our energy resiliency efforts. He will also be responsible for the establishment and functions of a new GLWA Resiliency Council. Todd will report directly to the Chief Executive Officer.

We have also recently named two incredibly talented team members to new roles within GLWA. General Counsel Randal Brown takes on the additional role of Deputy Chief Administrative and Compliance Officer. Also, Financial Services Area Chief of Staff Kim Garland has been named Deputy Chief Financial Officer. These roles add much needed depth to our teams, and I know that Randal and Kim will increase the value we provide to our member partners and team members in their new capacities.

I will end my report as I do each month by calling out the hard work and dedication of our team members. I am excited to share that for the second straight year, GLWA has been selected by both the Michigan Chapter and the National American Public Works Association (APWA) as the winner of their Project of the Year. This year we were honored in APWA's Emergency Response category for our team members' overall response to the 120-inch water transmission main break that occurred in August 2022. Everyone should be extremely proud of this acknowledgement of our team members' efforts to ensure that we kept water flowing to those impacted by the break on the largest pipe on our regional water system.

PLANNING SERVICES

Asset Management Group (AMG)

GLWA has successfully recruited Steve Dutschke as the new Asset Management Director leading the Enterprise Asset Management Group in the Planning Services Area. Steve is excited to rejoin GLWA as Director of Asset Management. Hailing from the land of Asset Management (Australia), Steven's professional background includes implementing operational, reliability, and maintenance programs in the water, oil and gas sectors in Australia, Canada, and the USA.



Steven rejoins GLWA after spending 3 years working with Kennedy/Jenks implementing reliability programs for water and wastewater providers across the USA. He brings a wealth of knowledge and experience in Asset Management and will be instrumental in progressing GLWA on its Asset Management Journey. While not working, Steve chases after two young kids, coaches soccer, rides bikes and one day will get back into kite surfing.

With the wrap-up of the 14 Mile Road pipeline renewal project, GLWA's ***Linear System Integrity Program (LSIP)*** continues with assistance from our consultant, HDR of Michigan. The LSIP focuses on improving the reliability of our water transmission and wastewater interceptor systems by developing a program to proactively assess the condition of in-service pipelines and identify recommended renewals to reduce the impacts of failures. The LSIP team completed the Data Collection and Management Plan (DCMP), which outlines the data management tools and procedures that will be used by GLWA. The DCMP is a living document and will be updated as new procedures are developed and implemented.

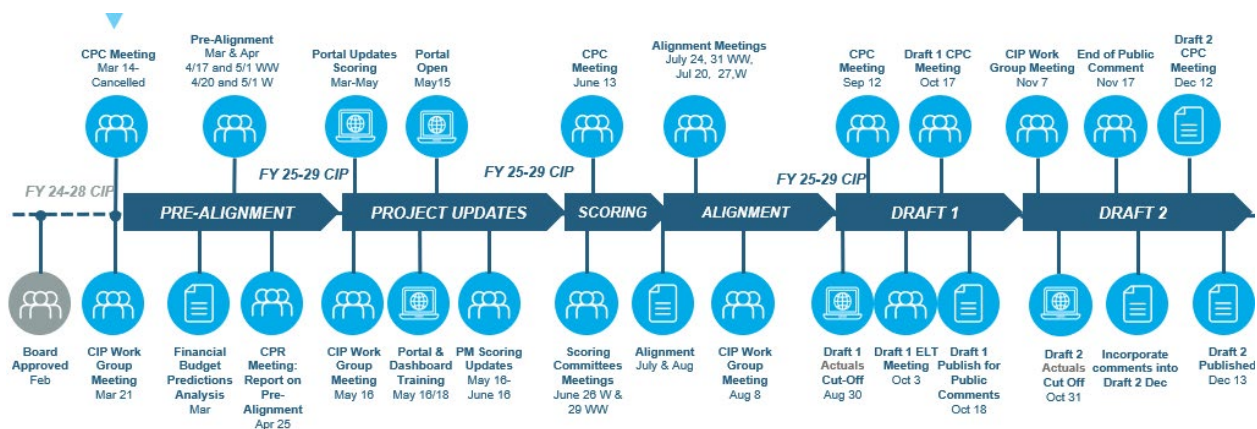
Planning for the condition assessment of the 120-inch transmission main between the Lake Huron Water Treatment Plant and the Imlay City Booster Pumping Station continues. Planning for condition assessment of the pipelines involves multiple GLWA groups working together, including Field Services, Water Engineering, Water Operations, Asset Management, System Analytics Meter Operations, and Systems Control Center.

Capital Improvement Planning Group (CIP)

Over the past month, the CIP Team has been working on streamlining the five-year CIP planning life cycle. It sought feedback from core CIP delivery teams and held lessons-learned sessions to improve the CIP portal (interim Project Management Information System) and develop an initial FY 25-29 CIP roadmap.

PLANNING SERVICES (continued)

To encourage timely project cost and schedule updates, the CIP team partnered with program management consultants, AECOM, to host a lunch and learn session at WRRF, presenting practical applications of project controls through case studies.



Currently, the CIP team is completing Chapters 11 and 13 of the Project Management Program (PMP) on safety and public information and stakeholder management with the support of AECOM. They are also working on Chapter 15, CIP planning, and documenting streamlined approaches that are being adopted. The team is initiating the implementation and rollout of the PMP with the transition and hiring of new Managers of Life Cycle Project Managers and other new team members. The rollout will include video training, testing, and Q&A sessions.



The CIP team is actively pursuing new talents to fill open positions and support CIP delivery. The CIP continues to grow as we have extended offers to three new team members who will likely be joining the CIP team in April.

PLANNING SERVICES (continued)

Systems Planning Group

A ***Watershed Hub Stakeholder Webinar*** was hosted on March 1, 2023. The overall purpose of the webinar was to provide updates on GLWA's individual and collaborative efforts to improve water quality monitoring. Dan Gold presented on the status of initiatives, and representatives from the U.S. Geological Survey presented on the implementation of the Regional Water Quality Monitoring Program, and how to access data on the USGS National Water Dashboard (<https://dashboard.waterdata.usgs.gov>).

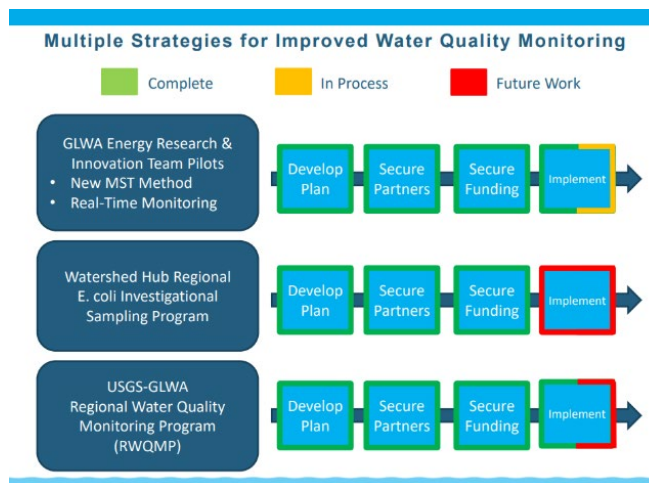
This program was developed initially as part of the 40-year Wastewater Master Plan to collect long-term regional water quality data. Phase 1 of the program was activated in 2021 and includes eight sites in the Clinton, Rouge, and Detroit Rivers. Phase 2, planned to be active in spring 2024, will add another 15 sites identified in collaboration with the Watershed Hub Work Group.

Members of the ***Communications & Education Work Group*** met virtually on March 2, to learn about a new lead-focused toolkit developed on behalf of Michigan's Statewide Drinking Water Advisory Council, engaged in a roundtable discussion, and previewed the new Water Residential Assistance Program (WRAP) communication materials. GLWA's Public Affairs team also shared highlights from a recruiting campaign running on popular local radio stations.

The ***Water Charge Methodology Review Subgroup*** met on March 3, 17 and 31 to hear member-proposed refinements to distance and elevation and to review related analyses. The Subgroup also discussed possible approaches, within and outside of the methodology for uniquely situated members.

In coordination with the GLWA Affordability & Assistance team, a new group, the ***WRAP Member Partner Advisory Panel***, met on March 6. Participants included Member Partners and representatives from community action agencies Wayne Metro, Macomb Community Action, and United Way. The meeting's purpose was to provide stakeholder feedback on WRAP and to learn about recent program changes, including a new Income-Based Plan which caps an eligible resident's water bill at approximately 3% of the household income.

On March 15, members of the ***Water Management Best Practices*** work group met to shape two events hosted at GLWA's Water Works Park facility on May 4 and May 11 to introduce high school students to careers in the water sector. The group is also planning an Operator Best Practices Workshop focused on valve exercising, hydrant maintenance, and water main flushing in fall 2023.



PLANNING SERVICES (continued)

The ***Capital Improvement Program*** work group met virtually on March 21 for members to learn about GLWA's newly launched Vendor Performance Assessment process, hear a status update on the Capital Program Management project, and welcome new cross-functional CIP delivery team members working in the water and wastewater engineering teams. Development of the next CIP, FY 2025 – 2029 is underway, with CIP project scoring meetings planned for the end of June. Alicia Schwartz, GLWA, and Bryan Peckinpugh, DWSD, each shared highlights of infrastructure grant funding pursuits.

What is a Vendor Performance Assessment (VPA)?

A Vendor Performance Assessment is a scored survey used to analyze and assess the performance of a Vendor/Contractor throughout the execution of a contract.

More than 80 members gathered in person and via live stream on March 23, 2023, for the first ***One Water Partnership*** meeting of 2023. Representatives from DWSD, Oakland County Office of Water Resources Commissioner, GLWA, and AWWA Michigan Section described their respective organizations' work on water affordability. Patricia Butler of GLWA's Organizational Development team provided information about apprenticeship and intern programs. CEO Sue Coffey recognized Cheryl Porter as the incoming national President of the American Water Works Association, presented the True Partnership award to Kevin Johnson, DPW Director for Macomb Township, and expressed appreciation for new retiree Mary Lynn Semegen's contributions as a dedicated protector of water quality for the region.

The next One Water Partnership meeting will be held on June 22, 2023, at Madonna University in Livonia.

In addition to regular work group meetings, GLWA and the Member Outreach team hosted several ***Special Meetings*** in March.

On March 9, members were invited to a **Water Pressure Workshop** where GLWA team members provided an overview of the infrastructure components that make up the regional water system. Emphasis was on the considerations that must be evaluated when making a change to pressures in the regional system, due to its interconnectedness and complexity. In the coming months, GLWA will connect directly with Member Partners who have pressure change requests to discuss their specific situations.



About 30 members, most with Human Resource responsibilities, met in person on March 15 for an inaugural **HR Roundtable**. The group worked collaboratively to surface ideas and strategies to combat recruiting and retention challenges facing the water sector across the region. At the group's suggestion, GLWA will convene another meeting in the second quarter of 2023, to begin working together to increase awareness of infrastructure jobs.

PLANNING SERVICES (continued)



On March 29, GLWA in alignment with its role as a hub utility, brought together members with national experts to learn about the opportunities available to support communities in preparing for future flood risks in a **Flood Mitigation & Resiliency Planning Workshop**. Presenters included James Sink and Brian Killen (FEMA), John Hurley (Marsh McLennan), and Scott Stockert (MSP). The meeting concluded with a panel discussion where members had an opportunity to ask more detailed questions.

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 construction work at 55-meter pits that have metering and/or meter pit condition concerns. Last month, coordination meetings were held with the City of Bloomfield Hills, Burtchville Township, and Northville Township. The planned work has been completed at 52 of the meter pit locations and is underway at another three locations. The group is working with the Procurement group to solicit bids for the second contract of this program. This contract will provide metering and instrumentation upgrades and complete meter pit rehabilitation at 58 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

The Water Resource Recovery Facility (WRRF) operations complied with the Water Quality Standards for April 2023. An unauthorized Primary Effluent (PE) discharge resulting from ILP-1 tripping out, occurred during a wet weather event on March 31.

March 2023 had the highest average daily flow at the WRRF since January 2020, averaging 764 MGD. This included a five-day period from March 4 – March 8 where over 1 billion gallons per day (1,000 MGD) was treated at the WRRF, totaling 5.9 billion gallons for the event. Three CSO facilities treated 159 million gallons during this period, indicating excellent performance by the collection system directing flow to the WRRF for the highest possible level of treatment. A further wet weather event from March 31 – April 7 totaled 9.6 billion gallons at the WRRF (including another seven-day period of pumping over 1 billion gallons per day), with seven CSO facilities treating a combined 1.5 billion gallons during this event. This brings the entire total treated volume at the facility to just above 11 billion gallons over seven days. To provide context, the average flow for the WRRF (550 MGD) over seven days would have equated to 3.8 billion gallons.

WASTEWATER OPERATING SERVICES (continued)

On March 31 - April 7 approximately 250% more than average flow was treated over the same period at the WRRF. This was the longest and highest-volume wet weather event since May 2019.

Maintenance



Secondary clarifier B-19 drained and cleaned for rehabilitation pictured above

The Secondary Team continues to perform the rehabilitation of the secondary clarifiers. With 25 clarifiers, the team's goal is to perform a rehab of five clarifiers a year so that each clarifier will not go longer than six years without having needed work done on it. The clarifiers are critical in ensuring proper secondary treatment requirements of our National Pollutant Discharge Elimination System (NPDES) permit. The outlined schedule maximizes equipment reliability and allows for greater operational flexibility.

The Primary Team started a project to add local disconnect switches to the bar screens in Pump Station 2. The addition of these disconnects makes maintenance of the equipment safer and more efficient. In the past, the bar screens had to be locked and tagged out (LOTO) at the breaker in the Motor Control Center (MCC) but can now be done locally on the equipment. This makes it easier for Maintenance Technicians to LOTO the equipment and to visually verify that the equipment is safe to work on.



New local disconnects installed for the bar racks at Pump Station 2

WASTEWATER OPERATING SERVICES (continued)

Process Control Center (PCC)

Installation of the new Rosemont Level Transmitters

The transmitters replaced the existing capillary tubes and the square root loop powered indicators for the Venturi M-19 and M-20 projects, which gives a true value for the levels. Additionally, a preventive maintenance program was created so they can be flushed monthly.



Replacement of the Uninterriuptible Power Supply (UPS)Units

The new UPS units for the Ovation System located in Sludge Complex A-ACC3 which provides back-up power in case of a power outage were installed. The old units had exceeded their useful life.

Labs



Ferric Storage Tanks at Pump Station 2 (PS2)

This month a new ferric chloride system is coming online at Pump Station 2 (PS2). The new system will allow dosing at five injection points. This will increase flexibility and add injection points at the wet wells. The goal is to increase mixing and thereby improve phosphorus removal efficiency. Chemists are being trained on how to operate the pump skids using the local operator interface at PS2 as well as remote control through Ovation. For one week, the system is being run on water to allow the team to become more familiar with the system before introducing ferric chloride at the anticipated start date of April 18.

WASTEWATER OPERATING SERVICES (continued)

Engineering and Construction

Wastewater Projects in Design or Miscellaneous:

CIP Design

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

60% drawings will be submitted in April. The team is currently negotiating a scope change with the design consultant. This project will be bid out for construction later this year.

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

The final design drawings and specifications are completed. The funds approval is currently being processed with GLWA Finance and we anticipate providing the bidding documents for procurement in April 2023. This will be advertised through the JOC.

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

This project is progressing towards a 90% design submittal in May. The team negotiated a contract change for additional engineering services related to advanced planning. This amendment will go before the Board in April for approval. The design team will continue to progress the project towards our May milestone, and it is anticipated to provide construction documents to Procurement later this year.

CIP 222001, Contract No. 2204604 – Oakwood District Intercommunity Relief Sewer

Construction for this project is on hold. GLWA submitted for various grants for the funding of this project. GLWA continues to advance easement and permitting with various project stakeholders.

CIP 260210, Contract No. 2201041 – Design for Rehab of Ashland Relief, Linwood, Lonyo, Second Avenue and Shiawassee Sewers

This project focuses on inspection and rehabilitation of the above-named sewers. The project was approved by the Board in December 2022 and a Notice to Proceed was issued for February 6, 2023. The project kickoff was held on March 7, and the design team is currently developing plans and coordinating with impacted entities for inspection of the sewers.

CIP 260903, Contract No. 2201744 – WRRF Front Entrance Rehabilitation

This project design focuses on improvements to the front entrance of the WRRF. It adds pull outs for buses, an overhead canopy with solar panels, new guest parking, and a more streamlined entrance for our GLWA staff. This project is currently out for bid. The pre-bid conference was attended by two contractors, and bids are currently due April 18.

WASTEWATER OPERATING SERVICES (continued)

CIP 273001, Contract No. 2103225 – Hubbell Southfield CSO Facility Improvements

Received revised Appendix A from both vendors on March 20. RFP evaluations are due this month.

CIP 277001, Contract 1902908 – Baby Creek Outfall Improvements Project

Site improvements designs have been reviewed and approved. The design-build team identified structural deficiencies with the pre-cast planks for the access opening and is currently working on a proposal to provide new, structurally sound planks that will be utilized whenever cleaning operations are not being completed. Debris removal operations are anticipated to commence in April 2023, with inspection of cleaned areas, and simultaneous repair of observed defects occurring at the same time.

Non-CIP Design

TOES 35T, Contract No. 2202034 – Sludge Pumps 21 through 24 Motor/Drive Improvements

The project was kicked off in February and the basis of the design report was submitted and reviewed by the project team in March. Feedback is being provided to the designer and we will be progressing towards the 30% submittal sometime in May 2023.

TOES 39T, Contract 2201974 – Secondary Clarifiers & B House Piping & Meter Improvements

The project was kicked off in March by the design team. The design team will be onsite in April to begin assessing the identified process buildings adjacent to the secondary clarifiers, commonly referred to as the B-houses, for inclusion in the design documents. They are also currently working to develop initial project setup submittals to GLWA for review/approval.

Wastewater Projects in Construction

CIP Construction

CIP 211006, Contract 2103350 – Pump Station 1 (PS-1) Improvements (WRRF)

The PS1 contract was approved at the January Board meeting. The Contract was executed and a Notice to Proceed was issued to Weiss Construction. Shortly after, GLWA was notified that the SRF funding will be eligible for this project requiring the team to work on changing the terms to ensure compliance with SRF funding requirements. GLWA and Wade Trim successfully negotiated a Change Order with the Contractor to add State Revolving Funding (SRF) requirements to the project. This change order qualifies the project to receive SRF funding, and principal forgiveness will be submitted for Board approval in April. GLWA is collaborating closely with the Michigan Department of Environment, Great Lakes, and Energy (EGLE) in the process of this change and following federal requirements.

WASTEWATER OPERATING SERVICES (continued)

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

Excavation of launch and receiving pits has been completed and boring/jacking work is in progress to construct a temporary thickened sludge line under the rail spur. The temporary sludge line is planned to be in service by the first week of May to improve the WRRF secondary solids transfer and allow chemical cleaning of the permanent sludge line. The Contractor is completing electrical wiring verification, and is in the process of starting-up, testing and commissioning the new PS-1 ferric chloride pumping system. Decommissioned ferric chloride tanks 3 and 4 have been demolished and their concrete bases are being removed, while demolition is proceeding for tank 2.



Jack/Bore Receiving Pit Excavation



Ovation Fiber Terminations

CIP 211011, Contract No. 2201762 - Pump Station 1 Rack and Grit HVAC System Upgrade (WRRF)

Pump Station 1 Rack and Grit HVAC System Upgrade contract was approved at the January Board meeting. The Contract was executed and a Notice to Proceed letter dated March 1, 2023, was issued to Clark Construction. The construction kickoff meeting was conducted on March 2. The major scope of work includes removal and replacement of roof mounted Air Handling Units, exhaust fans and associated appurtenances.

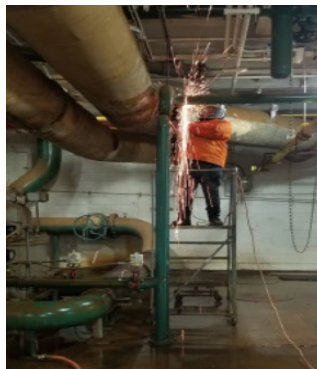
CIP 213007, Contract CON-197 – WRRF Modification to Incineration Sludge Feed Systems at Complex II (WRRF)

Work under this contract is more than 98% complete. The Contractor has completed work to address most of the issues/deficiencies identified during the trial operation, including chute and plow modifications as well as repairs of screw hopper 14A. The failed motor for belt conveyor P-7/8 has been removed and sent out for repairs, with return and reinstallation expected by mid-April to allow the north conveyors to be returned to service for further testing. Temporary repairs of strainer backwash piping leaks have been completed, and Black and Veatch has provided a redesign intended to prevent future leaks due to excessive abrasion within the pipes and valves.

WASTEWATER OPERATING SERVICES (continued)



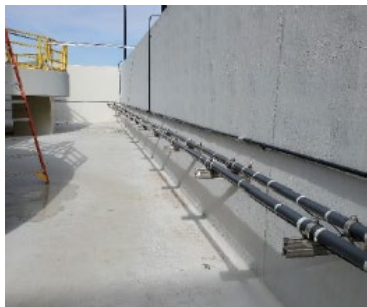
Screw Hopper 14A Auger Repairs



Strainer Backwash Piping Leak

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

Heat tracing has been installed on the replacement ferric chloride discharge piping. Insulation is to be installed on this piping the first week of April in preparation to begin water testing and commissioning of the new PS-2 ferric chloride system by April 10, 2023, to allow 30-day testing to begin in mid-April. Instrument wiring is being terminated. The Contractor is also working to resolve C2E Hach sampling equipment and associated pipe clogging and flow issues. Doors, roof sheet-metal, painting and floor coatings have been completed in the ML-1 sampling area, and the new ML-1 sample pump has been started up.



Heat-Traced Ferric Chloride Piping



ML-1 Sample Pump Start-Up

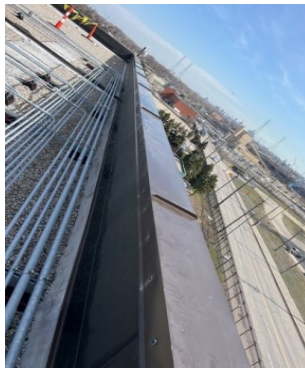
CIP 216006, Contract 1903601 and 1903598 – Assessment and Rehabilitation of WRRF Yard Piping and Underground Utilities (WRRF)

The designer CDM Smith has completed the 75% design for 15 improvements with further investigation being conducted on the remaining six improvements. Workshops were conducted for Operations and Maintenance staff followed by a field walkthrough of the improvements. Two meetings were held with the Michigan Department of Environment, Great Lakes, and Energy (EGLE) where the Basis of Design Report (BODR) and permitting requirements were discussed. The project is working to create 75% construction estimates, Construction Quality Assurance/Quality Control (QC), and identify a construction schedule for the order of the individual projects over the next couple years.

WASTEWATER OPERATING SERVICES (continued)

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

All above-grade buildings assessment under this project has been completed, waiting to receive assessment reports from the Contractor. The Contractor is working on accessing tanks as they are available from Operations. The New Administration Building (NAB) leak repairs are ongoing and anticipated to be completed during the week of April 10. PS-1 Rack and Grit building corbel repairs are scheduled to start soon. Tunnel assessment beneath the administration building over to Incinerator Complex 1 has been added to the scope of the project.



SST-4 Assessment



NAB water leak repair

CIP260204, Contract No. 2103688 – Rehabilitation of Connors Creek Sewer Systems (RWCS)

This project has recently transitioned to Wastewater Engineering from Field Services. This project is performing grouting, rebar coating, and spot repairs from 6 Mile, south under the airport. CIPP liner segments between 8 Mile and 7 Mile are anticipated to be installed in April and May of 2023. The Wastewater Engineering team is evaluating the Contractor's schedule and forecasting, and will be further engaging them as this project moves forward.

CIP 260207, Contract No. 2004082 – Rehabilitation of the Woodward Sewer (RWCS)

This project has recently transitioned to Wastewater Engineering from Field Services. This project is behind schedule in part due to supply chain delays and other reasons. We are working through the Notice to Cure process to assist the contractor in getting their operation back on schedule. Major submittals for ordering slip lining pipe and installation of CIPP lining are being prepared by the Contractor to facilitate the work being executed in the field. The Wastewater Engineering team is evaluating the Contractor's schedule and forecasting, and will continue to engage them and their bonding company to move this project forward.

WASTEWATER OPERATING SERVICES (continued)

CIP 260614, Contract No.

1902224 – CSO Facilities Structural Improvements (CSO)

68% of the structural improvements have been completed at all CSO facilities, including additional repairs through Change Order No.1. The Contractor is working at Hubbell-Southfield, Puritan-Fenkell, Oakwood, Conner Creek, Leib, St.Aubin and Belle Isle. Work is almost 93% completed at Baby Creek, Belle Isle, and 7 Mile facilities. The walkway at Leib was delivered to the site but based on Wade Trim and NTH's inspection, it was sent back to the shop for welding repairs.



Crack repairs at 7 Mile



Expansion Joint Repairs at CON

CIP 260901, Contract No. 2101878 – WRRF Hazmat Building Rehabilitation

This project was approved at the February Board meeting. We anticipate a notice to proceed date at the beginning of April 2023. This project seeks to improve the Hazmat building, add parking for emergency vehicles, add space for training, and security monitoring, as well as site improvements adjacent to the facility. The HAZMAT team is currently temporarily relocating their team members and equipment to other locations throughout the plant to facilitate construction. The Wastewater Engineering team would like to specifically thank Mike Gaydos and his team for their initiative and drive to get the team temporarily located and preserve all their equipment and the important services they provide to the GLWA WRRF.

CIP 260902, Contract No. 2101879 – Renovation of the 4th floor at the WRRF

Construction activities like installation of ceiling grids throughout the floor, toilets and bathroom partitions, control wiring for data drops, Terrazzo floor, borders and wall base are progressing at the site. The existing communication room on the 4th floor is being enlarged to accommodate additional data cables.

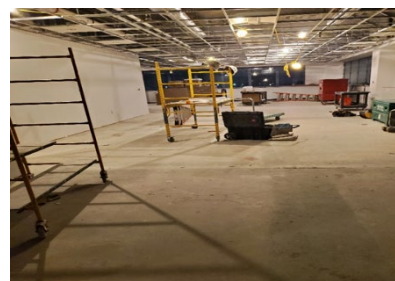


Photo above shows ceiling grid being

CIP 260905, Contract No. 2203675 – WRRF Plumbing Shop Improvements

This project provides improvements to the WRRF Plumbing shop as far as the building exterior, building roof, establishing a rain garden, and contractor laydown areas adjacent to the plumbing shop building. The building will house materials for the Logistics and Materials team and allow more proper organization of stored materials, and easier access to them. This project went out to bid for construction in March 2023. Construction bids are due mid-April.

WASTEWATER OPERATING SERVICES (continued)

CIP 276002, Contract No. 2104157 - Replace Makeup Air Unit No. 2 at Conner Creek CSO

The installation and startup/testing of the new makeup air unit No.2 (MAU-2) has been completed along with controls and integration with the building management system. The Contract achieved substantial completion on March 23, 2023.



Newly Installed Makeup Air Unit 2 shown above

Non-CIP Construction

JOC 3C - Contract No. 2100574 - Baby Creek CSO Bypass Gate Automation

The original scope of work for this project was to integrate the bypass gates into the Ovation control system. Additional work for replacing some of the level sensors has been issued through change orders. All the work has been completed and the project achieved its Substantial Completion on March 13, 2023. The final completion date of the project is June 30, 2023.

JOC Task 70 – Contract No. 2002464 – Complex A Gallery SFP-2 Pump Replacement

Change Order No. 1 was issued under this task to install a 3-inch diameter drain line on the 18-inch diameter sludge feed piping for Sludge Storage Tank No. 5 and Sludge Storage Tank No. 6. The Change Order No. 1 was completed on March 31, 2023. The base contract scope of work has not started because of supply chain issues. Change Order No.2 is being processed for extending the contract time.



New 3-inch diameter drain lines installed for the 18-inch diameter Sludge Feed Piping for Sludge Storage Tanks 5 and 6, JOC Task 70.JOC Task J2-01

Contract No. 2202079 – Pump Station 1 (PS1) Upper Wet Well Stairwell Repairs (WRRF)

The contractor has completed the demolition phase of the work. The contractor has completed the concrete form work and is ready to pour the concrete.

CSO Control Program

CSO Operations

The CSO team has been very busy during the month of March with continued wet weather discharges. We experienced discharge overflows from the following facilities:

- Hubbell-Southfield, Conner Creek and Oakwood totaled 203 MG of total discharge volume
- Also captured flow at Leib SDF, St. Aubin SDF, and Baby Creek SDF

WASTEWATER OPERATING SERVICES (continued)

To continue our development efforts with maintenance training for our Plant Technicians, we have reached out to our local vendors for pump maintenance training. The technicians will be undergoing training that will include Fluid Dynamic and Theory of Pump Operation, Pump Styles: Vertical Turbine, Horizontal Split Case, Submersible, Vertical Mixed Flow, Frame Mounted End Suction, Vertical Inline Multi-Stage, Positive Displacement, Bearing Types, Roller, Ball, Journal, Kingsbury Thrust Bearing Care and Reliability, Pump Packing and Mechanical Seals, Vibration Basics, Maintenance Best Practices

What is great about this pump overview training, is that the submersible pumps that we use at the CSO's will be on display for explanation and discussion.

CSO Maintenance

The overhaul of the chemical pumps at Leib and St. Aubin are just about complete. Our vendor is waiting for parts to arrive to complete the remaining two of 11 pumps. This was a preventive effort the team initiated for the pumps to be disassembled on site to be examined prior to being rebuilt. Our Team Leader Robert King requested maintenance for both facilities using our pump service contract, prior to the upcoming wet weather season.



The actuators at Conner Creek CSO for the relief and launder gates are becoming obsolete, and it is very difficult to procure associated parts. The team has begun a replacement program for the Rotork units, with a goal of four per year; two Relief and two Launder.



CSO Service/Contracts

The team had the road at Oakwood repaired. The road around the basin was washed away from the downspouts, bringing the rain from the top of the basin to the road. A more permanent solution is forthcoming via CIP (WRRF Engineering).



There was a kickoff meeting with Osborne Engineering at Oakwood to install unit heaters in the stairwells. Over the years, we have experienced burst pipes at the facility in the stairwells of the basin as well as the sanitary pump station during the winter months. The team will be presented with recommendations for heating the stairwells with equipment that is compatible to sanitary environment as well as necessary electrical requirements in accordance to National Fire Protection Associations.

WATER OPERATIONS

Administration

Treatment Plant Operator features Jeff Dorsey

We would like to recognize Jeffrey Dorsey, GLWA Maintenance Director, for his innovative initiatives and dedication to improving the maintenance program at GLWA.

In a recent article published in *Treatment Plant Operator (TPO)* magazine, Jeffrey was recognized for his innovative leadership and commitment to improving the maintenance program at GLWA. He has introduced several initiatives to streamline maintenance operations, including the implementation of predictive analytics to schedule maintenance tasks, leading to a significant reduction in equipment downtime and improved program efficiency.



Jeffrey's dedication to developing and empowering his team has played a key role in the success of the maintenance program at GLWA. He has introduced training programs and initiatives to help team members grow their skills and knowledge, resulting in a more skilled and knowledgeable maintenance team. Congratulations Jeffrey, on this well-deserved recognition!

Springwells Water Treatment Plant

Visit to Clemson Engineering Hydraulics

Team members from Water and Field Services visited Clemson Engineering Hydraulics (CEH) in Anderson, South Carolina to inspect a physical model of the Springwells 1930 Mixing Chamber. This work was performed under Contract No. 1802774 "Springwells Water Treatment Plant 1930 Sedimentation Basin, Sluice Gates, Guides, and Hoist Improvements" with Kokosing Construction.

The 1930 Mixing Chamber is the first stage of the 1930 Treatment Train. Here, alum is introduced, and baffle walls are used to mix the alum with the raw water and produce floc which will settle out in the sedimentation basins.

The Michigan Department of Environment, Great Lakes, and Energy's (EGLE) most recent Sanitary Survey for Springwells, highlighted a need to better understand how well the Mixing Chamber was performing. A physical model was determined to be the best way to evaluate the Mixing Chamber's performance.

A physical model is a scale model of a facility that acts hydraulically the same as its full-size counterpart. CEH designs, builds, and tests these physical models for many clients; previous GLWA facilities they have performed modeling of the Springwells Low and High Lift Stations, Northeast Water Treatment Plant sedimentation basins, and many pump/lift stations.

WATER OPERATIONS (continued)

The visit allowed for a close inspection of the model to verify it matched as-built conditions and to trial different alternatives to improve the Mixing Chamber's performance.



Pictured left to right:

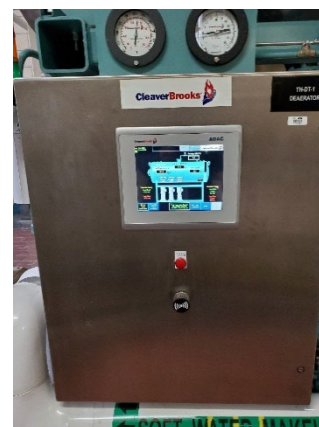
1. GLWA staff at CEH (left to right) Peter Bommarito, Justin Kietur and Peter Fromm
2. Detail of the physical model with dye injected to show water flow
3. Overview of the 1930 Mixing Chamber physical model

Heating System Updates

The ongoing changes at Springwells have included the heating system. The steam generator surge and Deaerator (DA) tanks have been replaced. The new surge tank can monitor levels and make the necessary changes to ensure that the tank has the proper water levels. In the past this would have to be done by closely monitoring the tank and making manual adjustments as needed.

The new surge tank has monitors on it that will show operating conditions upstairs on the DA control screen. The new DA tank is touchscreen operated. This allows you at one screen to pull up all operating conditions with both the DA and surge tanks. The DA tank has three pumps that will rotate (lead/lag/2 on) as demand requires.

The ability to go to the control screen of the DA tank and get all the relevant information you may need is a great upgrade and saves time. A lot of the manual tasks that had to be performed in the past are now done electronically, leaving the water technician to handle other duties. The new DA and surge tanks allow for more efficient operation of the heating system.



DA tank control screen

WATER OPERATIONS (continued)

Pre-Incident Planning Tours

The week of March 20, 2023, the Northeast Plant conducted multiple pre-incident planning tours with the Detroit Fire Department (DFD). The purpose of the tours is to familiarize the new DFD staff with the Northeast Water Treatment Plant in the event of an emergency.

There were approximately 60 Detroit firefighters on site to participate in the tour, due to the size of the group, the tours were scheduled over multiple days. Two team members from each shift served as tour guides for the DFD firefighters.



During the tours, the firefighters were able to familiarize themselves with the layout of the plant, which they were able to learn where and which types of hazardous materials are housed at Northeast. DFD firefighters were informed of the protocols and procedures for specific types of hazardous materials in the event of an emergency, and learned which hazardous materials to avoid. Also, the hazmat certified firefighters only, were able to go inside the chlorine room to view its layout while the other firefighters were able to view the chlorine room from the observation area.

Following the tour, team leader Annie Philip presented DFD with an overview of the Emergency Response Plan along with handouts of the safety data sheets (SDS).

Good job to the team members at the Northeast Water Plant for making this event successful!



WATER OPERATIONS (continued)

Energy, Research, Innovation and Transformation

Research

Water Environment Federation (WEF) Forum 2023: Intensification of Resource Recovery (IR²)

Dr. John Norton presented a session on the GLWA biosolids research and development program and described some of the recent research projects they have won, including the Department of Energy-funded “feasibility assessment of hydrothermal liquefaction of biosolids” and the US EPA-funded “pollutants in biosolids” study.

Norton then moderated a utility roundtable session with five utility research leaders, including those from Denver Metro, Hampton Roads Sanitation District, Metropolitan Council Environmental Services (greater Minneapolis St. Paul), and Raleigh-Durham, North Carolina. This roundtable was a question-and-answer event, with each utility describing their views of resource recovery and their desires for consultant engagement. The event then provided consultants a chance to provide advice to utilities what they found either frustrating or useful when working with consultants.

Water Works Park Pilot Plant

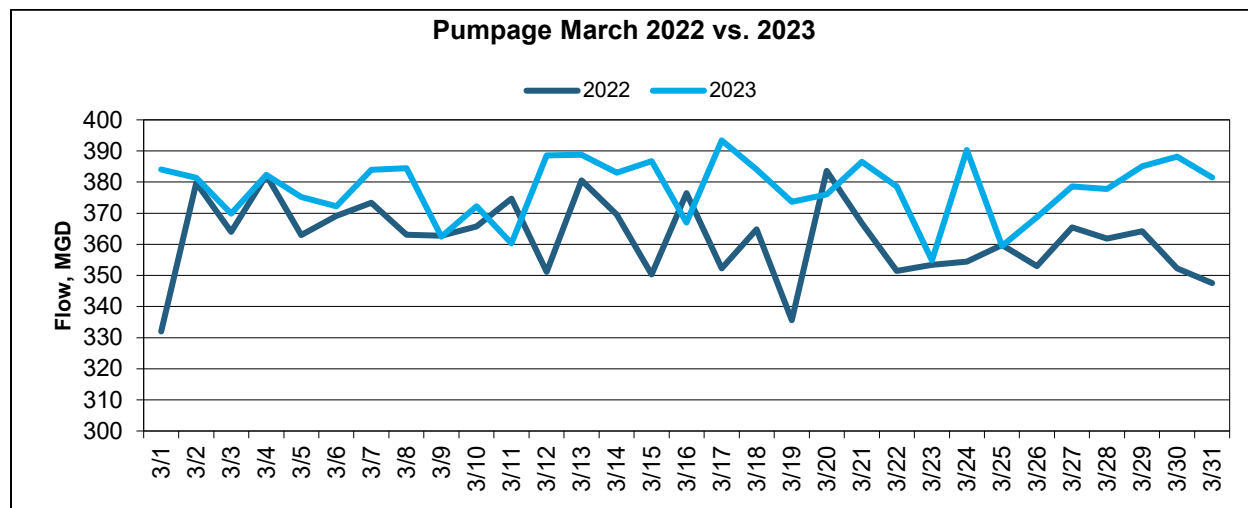
Dr. Dienne Tolofari, conducted a pilot plant training session for the team from Wayne State University which included Civil and Environmental Engineering Professors Drs. Carol Miller and Yongli Wager, post-doctoral researcher Shweta Singh, graduate student Megan Seay, and undergraduate student Kelvin Selegan. The training was divided into three parts with the first part including explanation of principles and theories that are applied throughout the treatment process, and the functions of each of the components of the treatment train was conducted on Wednesday, March 23, 2023. The second and third parts of the training are scheduled for a later date with the team. The aim of these training sessions is to provide the students and researchers with the relevant knowledge on the operation of the pilot treatment train which is central to the project work to validate and calibrate the pilot plant as a predictive model of full-scale plant behavior.



WATER OPERATIONS (continued)

Systems Control Center (SCC)

March 2023 pumpage was 4.4 percent higher than 2022



Engineering

Contract No. 2004456 – Phase II 14 Mile Rd Transmission Loop

This phase of the project, referred to as Phase II, involves construction of approximately eight miles of a new 54” transmission main to connect the 8 Mile Road transmission system with the 14 Mile Road transmission system.

Tunnel boring on Haggerty Road in preparation for pipe installation has been completed. Newly installed pipe along M-5 is also now completed as well as the new pipe along I-275.

Contractors have recently begun the installation of the new 54” pipe segments near Haggerty Road and are working westward. They are also working on the micropile installation on Meadowbrook Road between 12 and 13 Mile Roads.

Tunnel progress continues on Grand River and 10 Mile Road.

The first 50’ box culvert located on the bike path of I-275 is nearing completion and preparation is underway for the second 50’ box culvert to be done.

WATER OPERATIONS (continued)



Installation of box culvert on I-275 bike path



Trenches for open cut pipe installation



A look down inside of the receiving shaft



Pipe stage for installation along Haggerty Road

INFORMATION TECHNOLOGY

In the past month, the IT Security team has proactively blocked or thwarted 55,810 spam messages, 19,088 spoofed messages and 17 viruses. Additionally, 3,230 phishing attempts have been caught and 3,328 malware attempts have been blocked.

The IT Infrastructure team, in conjunction with the IT Customer Service Delivery and IT Project Management teams, has completed the implementation of the Voice to Teams integration. With the completion of the project, GLWA employees are now fully integrated with Microsoft Teams for voice and messaging services. The Infrastructure team continues to clean up remaining Cisco phones from all locations and in the process of migrating to Day 2 operations.

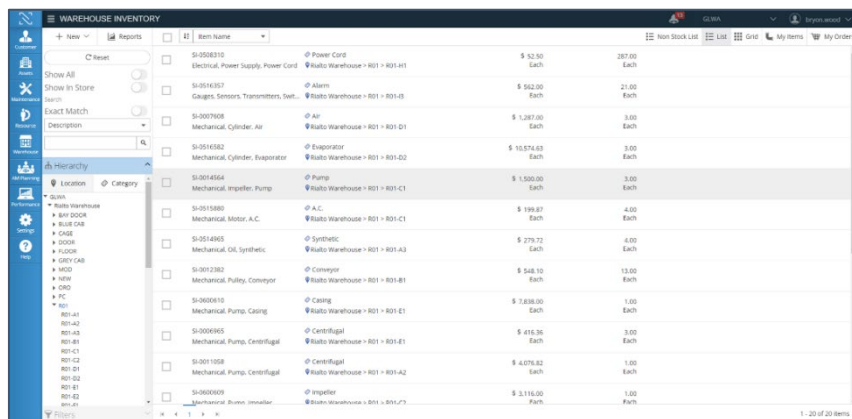
The IT Customer Service Delivery Team completed the implementation of Ivanti Neurons Personal Computer (PC) Remote assistance tool. This new remote tool has replaced our existing tool resulting in cost savings, increased efficiency, and increased productivity for IT team members and all GLWA team members. Unlike the previous tool, IT team members can now troubleshoot issues on team member's PCs whether the team member is working onsite, remote, or hybrid.

INFORMATION TECHNOLOGY (continued)

Team members working offsite are no longer required to connect to the VPN (Virtual Private Network) to allow IT team members to remote into their device to resolve issues or perform software installations, increasing IT's ability to assist team members anytime, anywhere, and anywhere.

The IT Enterprise Asset Management Systems Team along with our consultant partner, NEXGEN, continue to work on the second phase of the Enterprise Asset Management (EAM) implementation, System Configuration. The EAM Cross-Functional Team at GLWA continues to diligently focus on the development of the preventive maintenance (PM) program along with checklists, inspections, and condition assessment forms. It's exciting to see GLWA's data, start to be loaded into NEXGEN as they are migrated from WAM. To date, Asset and Warehouse Inventories have been initially migrated (refer to the image below).

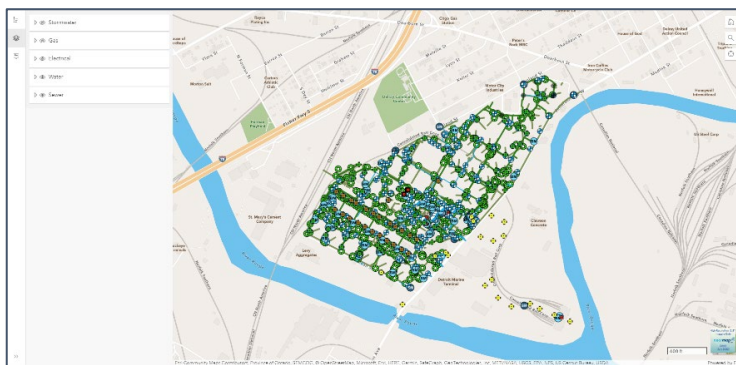
In addition, a mobile device training pilot is underway to prepare for use of Android devices to complete work orders by GLWA team members resulting in increased real-time maintenance data for supporting asset management decision making.



Item Name	Description	Location	Category	Price
SI-000310	Electrical, Power Supply, Power Cord	Warehouse - R01 - R01-A1	Electrical	\$ 12.00 Each
SI-016357	Alarm, Glazers, Sensors, Transmitters, Sw...	Warehouse - R01 - R01-B	Alarm	\$ 502.00 Each
SI-007908	Mechanical, Cylinder, Air	Warehouse - R01 - R01-D1	Mechanical	\$ 1,287.00 Each
SI-016362	Mechanical, Cylinder, Evaporator	Warehouse - R01 - R01-D2	Mechanical	\$ 10,574.00 Each
SI-014564	Mechanical, Impeller, Pump	Warehouse - R01 - R01-C1	Mechanical	\$ 1,500.00 Each
SI-015880	Mechanical, Motor, A.C.	Warehouse - R01 - R01-C1	Mechanical	\$ 199.87 Each
SI-014885	Mechanical, Oil, Synthetic	Warehouse - R01 - R01-A3	Mechanical	\$ 275.73 Each
SI-012382	Mechanical, Pulley, Conveyor	Warehouse - R01 - R01-B1	Mechanical	\$ 548.10 Each
SI-000410	Mechanical, Pump, Casing	Warehouse - R01 - R01-E1	Mechanical	\$ 2,808.00 Each
SI-000965	Mechanical, Pump, Centrifugal	Warehouse - R01 - R01-E1	Mechanical	\$ 475.36 Each
SI-011058	Mechanical, Pump, Centrifugal	Warehouse - R01 - R01-A2	Mechanical	\$ 4,075.82 Each
SI-000009	Mechanical, Runer, Inverter	Warehouse - R01 - R01-A3	Mechanical	\$ 5,116.00 Each

GLWA's Warehouse Inventory in NEXGEN

The IT Enterprise Asset Management Systems Team has imported underground utility features for GLWA's Water Resource Recovery Facility into GIS. This data was collected by CDM Smith via Contract #1903601 and provides useful reference data to GLWA's engineering, operations, and maintenance team members at the WRRF. The data set includes stormwater, gas, electrical, water and sewer underground utilities that are not easily visible at the surface level. A mapping app (refer to above image) is being developed for easier reference of this data and its attachments such as photos, condition assessment reports, etc. This map viewer can be used during design, construction, and maintenance activities as well as day-to-day operations. Currently, the IT PMO is managing 18 active projects and is processing one project request.



GLWA WRRF Underground Utility Map Viewer

PUBLIC AFFAIRS

New Pages on the GLWA Public Website

Three new webpages have been built on the GLWA public-facing website, including Facility Tours, Apprenticeships, and Internships pages. The Tours page works to streamline the process for outside organizations, schools, etc. that are looking to book a tour of GLWA's Water Works Park or Water Resource Recovery Facility. Both the Apprenticeship and Internship sites provide all relevant information for the various opportunities GLWA offers, as well as existing team member testimonials.

Accessibility Widget

Public Affairs has teamed with IT to install accessibility software on our public-facing website, www.glwater.org.

The multi-functional accessibility widget, a small navy circle that opens to a customizable interface, sits in the bottom left corner of every page on our website. Site visitors can select existing user profiles such as Motor Impaired, Color Blind, or Dyslexia, or they can choose from a suite of features to customize their experience to fit their needs. The Artificial Intelligence (AI) - powered widget offers features like increased text size, inverted colors, an audible reader, and more.

AWWA Utility Benchmarking Survey

Public Affairs again led GLWA's effort to respond to the annual American Water Works Association (AWWA) Utility Benchmarking Survey. Information was gathered from across the utility to respond to this national survey. The report and its performance data and trends provide utilities across the country with tools to understand how well they are doing and identify areas for potential improvement. GLWA uses the results of the full report to track its performance, and understand our progress compared to peer utilities.

CEO Facility Visit

The Public Affairs team continues to support CEO Sue Coffey as she conducts her second round of in-person facility visits. She visited Water Works Park on April 4. The day started at 7:00 a.m. with coffee/juice and muffins served for the midnight shift and then continued with a pizza lunch for the day and afternoon shifts. Team members were able to grab some food and have an informal chat with Sue and the rest of the Executive Leadership Team. Coffey also held a group discussion with Team Leaders in order to personally touch a group of leaders within GLWA that directly communicate with our front-line team members. *(See photo below)*

PUBLIC AFFAIRS (continued)



One Water Partnership Streaming

The Public Affairs team executed a high-quality live stream of the One Water Partnership Meeting at The Mint in Lathrup Village on March 23.

The livestream included a multi-camera setup with the capability to display presentation slides during the live presentations. Public Affairs also created special graphics to be used before and after the meeting, and during the lunch break. The livestream allowed more than 30 additional member partners and stakeholders to participate in the program.



PUBLIC AFFAIRS (continued)

Flood Mitigation & Resiliency Planning Meeting

Public Affairs teamed up with Wastewater Operations and the Office of the General Counsel to perform a multiple-camera shoot of the Flood Mitigation & Resiliency Planning Meeting on March 29. Speakers included GLWA's Chief Operating Officer – Wastewater Operating Services Navid Mehram along with representatives from FEMA, the Michigan Department of Environment, Great Lakes, and Energy, and the Michigan State Police.



SECURITY AND INTEGRITY

The Hazmat Unit coordinated and completed a total of 546 hours of training during the month. Security and Integrity conducted training tours of the Northeast Water Treatment Plant with the Detroit Fire Department. Lastly, the group participated in the researching effort for the “Safeguarding Tomorrow Grant Program” that is coordinated through the state of Michigan for mitigation funding.

ORGANIZATIONAL DEVELOPMENT

Performance Team

Apprenticeships

As part of the community outreach strategy, GLWA collaborated with Detroit Employment Solutions Corporation (DESC)/Detroit at Work, the official Workforce Agency for the City of Detroit, to participate in GLWA's onboarding day for apprentices. Detroit at Work shared information with the apprentices on the various wrap-around services offered through their organization. These services assist apprentices with removing barriers to successful employment.

ORGANIZATIONAL DEVELOPMENT (continued)

Progression

The 2022 Progression Cycle closed with a total of 27 team members progressing. Twenty-six team members progressed one level and one team member progressed two levels.

Outreach

As part of the overall strategy to recruit apprentices and interns, GLWA reached over 300 students and job seekers at the following events:

- Wayne State University Concrete Canoe Event (Engineering Students)
- Detroit Public Schools College and Career Readiness event at Breithaupt Career Center
- ***Career Fairs:***
 - o Garden City High School
 - o Canton High School
 - o Focus Hope

Kettering University Water Career Day

Kagle Leadership Initiatives (KLI), a leadership initiative of Flint-based Kettering University, partnered with GLWA for a Water Career Day to introduce future leaders to career opportunities within the water sector. On Saturday, March 25, at GLWA's Water Works Park facility, GLWA team members from Water and Field Operations and Organizational Development provided an overview of GLWA careers in business, finance, marketing, sciences, engineering, IT, and apprenticeships/skilled trades to KLI students and faculty. The Water Career Day Program included:

- o Hands-on displays and engagement
- o Apprenticeships overview and success stories
- o Tour of Water Works Park
- o Question and answer session with GLWA Subject Matter Experts

The program concluded with lunch and a discussion about GLWA career opportunities.

Benefits and Wellness



Blue Cross Blue Shield Wellness Wednesday Meditations

The March 2023 Blue Cross Blue Shield Meditations introduced GLWA team members to breathing techniques and spring scenery.

The four sessions highlighted:

- o Observing the Breath for Relaxation
- o Mindfulness of the Senses
- o Gratitude
- o Workday Reset
- o Setting Intentions

ORGANIZATIONAL DEVELOPMENT (continued)

Mindfulness-Based Stress Reduction (MBSR): Power of the Practice

Ali Turfe, School Psychologist, LLP and certified MSBR teacher with Brown University Mindfulness Center facilitated four interactive sessions and shared how MBSR fits into a comprehensive self-care practice. Team members experienced four formal mindfulness practices and learned three mindfulness practices to reduce stress, refocus attention and interrupt negative thoughts during stressful communication, and increase presence, awareness, and connectivity that fosters well-being in the workplace.



**Mindfulness and
Health Institute**

Blue Cross Blue Shield Drop 5 Virtual Weight-Loss Community

The second quarter Blue Cross Blue Shield Drop 5 Virtual Weight-Loss Community introduced GLWA team members to legacy planning, physical activities, spotlight foods, recipes, and healthy living. The four topics included:

- Estate Planning, Wills and Trusts
- Seven Tips for a Successful Garden
- Popular Functional Training Moves Demonstration
- Brr, Take a Cold Plunge



MissionSquare Education Sessions

MissionSquare retirement plan specialists held virtual meetings via MS Teams for all GLWA team members and in-person one-on-one consultations at the Water Resource Recovery Facility. GLWA team members reviewed their retirement goals, portfolio performance and current financial market impacts.

Kagle Leadership Collaborative



GLWA Water Operations and Organizational Development teams launched a new community partnership with Kettering University's Kagle Leadership Initiatives (KLI).

Each year, KLI increases the number of empowered, informed and proactive youth from the Flint area community to become future leaders and engaged citizens by providing both academic and non-academic support services designed to enhance preparation and access to postsecondary educational opportunities.

The first event was hosted at the Water Works Park facility March 25, 2023. Through the lens of education, technology, and health, three teams of 30 high school and college students are working to complete semester end projects with GLWA as the case study: "How GLWA Provides Water of Unquestionable Quality."

ORGANIZATIONAL DEVELOPMENT (continued)

GLWA team members shared their passion for the water service sector. Lively discussion included an overview of water operations, lab and infrastructure, the importance of One Water One Team, the GLWA apprenticeship experience, employment opportunities in addition to a tour of the facility.

A special thank you to the GLWA team who made the partnership possible: Cheryl Porter, Jordie Kramer, Terry Daniel, Andrae Savage, Patricia Butler, Adino May, Alicia Parker, Au Lisa McGovern, Yolanda Pressley, Vittoria Hogue, Kevin Jackson, Kiana Ward, Terrell Dockery, Kevin Haywood and Sherrian Greenwood.



Training

During the month of March, 196 GLWA team members completed 69 safety courses and 16 non-safety courses for a total of 505 instructor-led training hours.

Staffing

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

Number of New Hires	15
Number of Separations	15
Total Staffing - Regular FTEs (YTD)	977

FINANCIAL SERVICES AREA

March 2023 Audit Committee Recap

The most recent regular monthly Audit Committee meeting occurred on Friday, March 24, 2023. The GLWA Audit Committee binders are publicly available at www.glwater.org/financials/. The meeting included the following topics.

- ✓ A municipal bond market update from the GLWA Municipal Advisor sharing the current state of borrowing to support GLWA Capital Improvement Plan needs.
- ✓ A request to recommend for Board approval amendments to GLWA's current Debt Management policy, a supplemental sales order to address the floating rate index for the Series 2006D variable interest rate bond to ensure ongoing compliance, and a resolution to adopt the DWSD FY 2024 Clean Water State Revolving Fund project plan for two stormwater improvement projects.
- ✓ Recommendations that the Board authorize the GLWA CEO to approve one-year contracts with Water Residential Assistance Program (WRAP) Service Delivery Partners in Macomb, Oakland, and counties outside the Detroit area serviced by Wayne Metro.
- ✓ Review of the December 2022 Monthly Financial Report (Executive Summary 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 Construction Work in Progress (CWIP) report through December 31, 2022.
- ✓ A CFO update including Financial Services Area staffing changes and an update from the Economic Outlook Task Force convened by the CFO to monitor ongoing challenges related to rising costs and labor shortages impacting GLWA water and sewer operations.
- ✓ Circulation of the latest Procurement Pipeline edition for March 2023.

Vendor Outreach Update

On March 13-14, members of the GLWA Procurement Team participated in the Michigan Department of Transportation (MDOT) 42nd Annual Small Business Development Conference. The in-person conference included approximately 200 participants and sought to provide networking opportunities for small and disadvantaged businesses throughout the state of Michigan. Individual panel sessions featured invited state, federal, and local agency representatives who presented information about upcoming procurement opportunities within their area.

GLWA hosted a vendor booth where conference participants were able to talk one-on-one with representatives of the Procurement Team and learn about how to do business with GLWA.



FINANCIAL SERVICES AREA (continued)

Last month, members of the Procurement Team also participated in the Wayne State University APEX Accelerator (formerly Procurement Technical Assistance Center) Meet the Buyers Event on March 29. This in-person event enabled small business owners to connect directly with government buyers and learn first-hand about upcoming procurement opportunities as well as helpful information about how best to do business with government agencies. GLWA was represented alongside 12 different federal, state, and local agencies and met with over 50 vendors throughout the day.



Charges Outreach & Modeling Update

Over the last month, Charges Outreach and Modeling (CO&M) Manager Matt Lane has facilitated member partner check-in meetings with both the City of Flint and the City of Utica. Matt also continues to connect with member partners at GLWA-sponsored meetings and events, including the One Partnership Meeting held at the Michigan First Conference Center in Lathrup Village and the Flood Mitigation and Resiliency Planning Meeting at Madonna University in Livonia. CO&M has also been actively engaged in the Water Charges Methodology Review Subgroup meetings.

Affordability & Assistance Update

Affordability and assistance were the key themes of the March 23rd One Water Partnership meeting. Nickie Bateson and Madison Merzlyakov were able to share additional details on the state's Low-Income Household Water Assistance Program (LIHWAP), as well as highlight the WRAP Income Based Plan.

In late March, Madison Merzlyakov had the opportunity to attend the Young Professionals Summit and Utility Management Conference hosted by the American Water Works Association (AWWA) and the Water Environment Federation (WEF). Multiple sessions focused on affordability and assistance programs. Madison was able to connect with other professionals working on similar programs and was able to share GLWA's experience with the WRAP Income Based Plan.



FINANCIAL SERVICES AREA (continued)

Procurement Pipeline

Attached is the March Procurement Pipeline issue. This month's edition features the Procurement Tip of the Month, "Providing Proof of Insurance in a Timely Manner to Ensure Efficient Contract Execution," as well as information about upcoming GLWA vendor outreach events, who to contact to arrange virtual vendor introduction meetings, and a list of upcoming solicitations.

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

Respectfully submitted,



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

SRC/dlr
Attachments

- December 2022 Executive Summary
- March 2023 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)

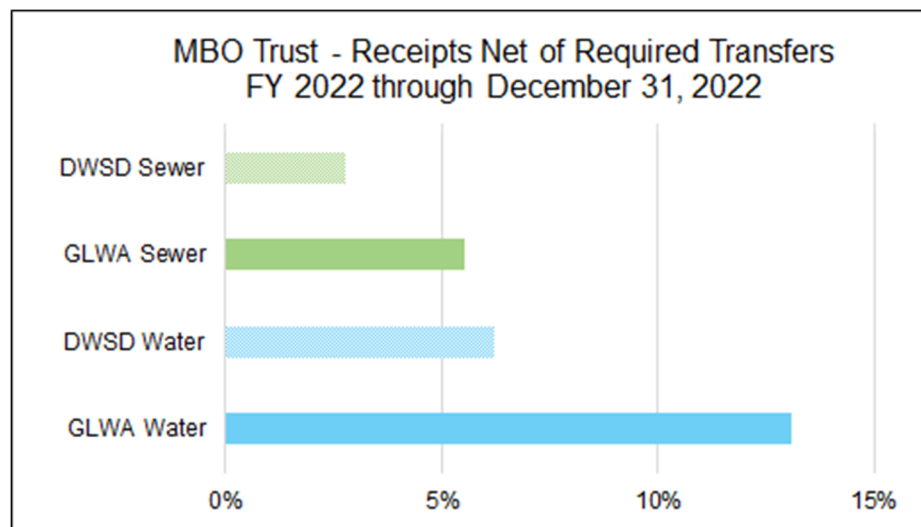
Each variance is monitored by the Great Lakes Water Authority (GLWA) management and, where appropriate, operating and/or budget priorities are re-evaluated. Budget amendments are prepared and presented quarterly based on most current information. This report reflects first quarter FY 2023 budget amendments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

For the current period, wholesale water operations and maintenance, investment income, water capital spend, 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.

As of December 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)	\$174.7	\$174.7	\$176.2	1%	47
Wholesale Water Billed Usage (mcf)	7,252,000	7,252,000	7,344,000	1%	
Wholesale Sewer Billed Revenue (\$M)	\$137.3	\$137.3	\$137.3	0%	49
Wholesale Water Operations & Maintenance (\$M)	\$72.4	\$72.4	\$76.2	5%	5
Wholesale Sewer Operations & Maintenance (\$M)	\$92.0	\$97.4	\$99.3	2%	
Investment Income (\$M)	\$1.2	\$8.7	\$11.2	29%	36
Water Prorated Capital Spend w/SRA* (\$M)	\$77.8	\$97.0	\$104.0	7%	28
Sewer Prorated Capital Spend w/SRA* (\$M)	\$47.2	\$63.0	\$45.6	-28%	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 reports a surplus of \$3.8 million and DWSD Sewer reports a surplus of \$4.1 million of net receipts over disbursements through December 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.
- The total Revenue Requirements are on target through December 2022.
- The total overall Operations & Maintenance expenses are at 51.7% of budget through December 2022 which is slightly above the pro-rata benchmark of 50.0%. This negative variance equates to a dollar amount of \$5.6 million.

Basic Financial Statements (page 9)

- The Basic Financial Statements are prepared on a full accrual basis and reflect preliminary, unaudited results.
- Operating income for December 2022 is \$45.2 million for the Water fund (24.1% of total revenues) and \$55.9 million for the Sewer fund (23.3 % of total revenues).
- Water Net Position increased by \$ 7.8 million, and Sewage Disposal Net Position increased by \$ 5.0 million for the year to date through December 2022.

Capital Improvement Plan Financial Summary (page 27)

- The Water system exceeds the amended 100% Capital Spend Ratio assumption.
- The Sewer system falls short of the amended 100% Capital Spend Ratio assumption.

Master Bond Ordinance Transfers (page 30)

- For December, transfers of \$13.7 million and \$19.0 million were completed for the GLWA Water and Sewer funds, respectively.
- Also, for December, transfers of \$6.0 million and \$6.0 million were completed for the DWSD Water and Sewer funds, respectively.

Cash Balances & Investment Income (page 36)

- Total cash & investments are \$538 million in the Water fund and \$631 million in the Sewer fund.
- Total, combined, cumulative, FY 2023 investment income through December is \$11.2 million.

DWSD Retail Revenues, Receivables & Collections (page 40)

- Water usage through December 31, 2022 is 109.11% and revenues are 105.29% of budget.
- Sewer usage through December 31, 2022 is 105.31% and revenues are 102.01% of budget.
- Combined accounts receivable balances for the water and sewer funds report an increase of \$ 48.3 Million over the prior year.
- Past dues over 180 days make up 68.7% of the total accounts receivable balance. The current bad debt allowance covers 95.3% of past dues over 60 days.

GLWA Wholesale Billing, Receivables & Collections (page 46)

- GLWA accounts receivable past due balance net of Highland Park is 8.56% 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 \$55.1 million. It includes \$41.7 million for wastewater treatment services, \$1.8 million for industrial waste control services, and \$11.6 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 additional, monthly payments since that time totaling \$1.8 million as of December 31, 2022.

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

Welcome to the March 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: Providing Proof of Insurance in a Timely Manner to Ensure Efficient Contract Execution

Timely execution of contracts relies on several parties securing final documents. One final key task is the submittal of the appropriate insurance documents after contract award. Providing proof of the required levels of insurance coverage in a timely manner not only ensures efficient contract execution but enables work on, and payment for, a contract or purchase order (PO) to proceed much faster. Key points about GLWA's requirements and how to fulfill them are listed below.

- ✓ Contractors should proactively engage with the correct individuals within their organizations as well as insurance agents to secure the appropriate coverages ***in advance of contract award***. This helps to ensure that work may proceed in a timely and efficient manner.
- ✓ Insurance requirements are always identified in the solicitation request. It is presumed that the insurance criteria can be met when bids/proposals are submitted. Concerns about insurance requirements may be raised during the Question and Answer phase.
- ✓ The key document that contractors must provide is a "certificate of insurance" (COI). This standard document, issued by an insurance company, provides proof of an insurance policy and coverage levels.
- ✓ Required insurance coverage and amounts must be maintained for the entire term of the PO or contract.
- ✓ Renewal COIs must be provided on an annual basis until all work is completed and the contract can be closed out.

We appreciate the Vendor Community's cooperation with GLWA's insurance requirements.

Any additional questions about submitting your insurance requirements in a timely manner may be directed to the GLWA buyer of record.

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 any GLWA solicitation.

Where to Meet GLWA

GLWA attends vendor outreach events throughout southeastern Michigan. We welcome you to visit us at the following upcoming events.

- Wayne State Procurement Technical Assistance Center (PTAC) Meet the Buyers. March 29 at Lift Detroit. 9am-12pm. Registration details [here](#).
- Michigan Public Purchasing Officers Association (MPPOA) Reverse Trade Fair. April 28. The Lansing Center, Lansing MI. 10:30am-3pm. Registration details [here](#).

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 February 2023 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 March 2023

Category	CIP #	Description/Project Title	Budget Estimate
Water System (next four to nine months)			
N/A			
Wastewater Systems (next four to nine months)			
Construction	211005.2	WRRF Pump Station 2 VFD Replacements	\$7,000,000
Construction	232002	Freud & Connor Creek Pump Station Improvements	\$75,000,000
Design-Bid-Build	261001	WRRF Rehabilitation of Secondary Clarifiers	\$6,000,000
Construction	211007	Pump Station No.2 Bar Racks Replacement and Grit Collection System Improvements	\$82,000,000
Water System (next three months)			
Construction	170802	Reservoir Rehabilitation Construction Services Phase II at Waterworks Park, Northeast, and Booster Stations.	\$35,972,000
Wastewater (next three months)			
Construction	260209	Emergency and Urgent Sewer Repair II	\$12,400,000
Construction	211005.3	WRRF Pump Station 2 Mag Meter Replacements	\$1,000,000
Construction	260802	WRRF Roofing Improvements	\$4,300,000
Projects moved to Procurement Team (Preparing for solicitation on Bonfire)			
Professional Services	O&M	CSO Facility Accusonic Meter Maintenance	\$3,000,000
Professional Services	O&M	Engineering Staff Augmentation	\$7,000,000
Construction	260510	CSO Outfalls Rehab Phase V	\$15,200,000
Professional Services	O&M	Service- All Pumps for CSO Facilities Three Year Contract with Two - One Year Renewals	\$2,200,000
Professional Services	O&M	Property and Casualty Insurance Brokerage and Ancillary Services	\$1,250,000
Professional Services	O&M	Grounds Maintenance Services	\$4,600,000
Professional Services	O&M	Electrical Services Contract	\$6,600,800
Professional Services	O&M	Motor Repair Contract	\$1,800,000
Professional Services	O&M	Pump Repair Contract	\$1,650,000
Professional Services	O&M	Instrumentation and Controls Contract	\$3,011,840
Professional Services	O&M	Electrical Maintenance Services	\$4,127,300.00
Construction	122004	96-inch Water Transmission Main Relocation-Phase II	\$130,000,000.00

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 – April 26, 2023

- ***Legislative Updates:*** The Office is monitoring infrastructure spending bills at the federal and state level.
- ***Gordie Howe International Bridge:*** GLWA filed a notice of claim with the Court of Claims related to its relocation claim.
- ***June and July Rain Events:*** The Office is providing legal support in response to the significant rain events in June and July. Recently, the trial court dismissed most of the lawsuits against GLWA based on governmental immunity. The Plaintiffs are appealing the decision.
- ***Trenton Water Main:*** The Office is negotiating the transfer of the 24-inch water main to GLWA.
- ***Contract Negotiations:*** Office staff completed the Designated Management Agreement with SEMCOG. The Office is negotiating 30-year wastewater disposal services contracts with sewer member partners that do not have a model 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, which will be submitted to the State in the coming months.
- ***Industrial Pretreatment Program (“IPP”):*** 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. Recently, the Michigan Supreme Court denied Highland Park's application for leave to appeal. As a result, GLWA submitted a motion for entry of the judgment against Highland Park, which is currently pending. In the 2020 case against Highland Park, the Michigan Court of Appeals denied Highland Park's leave application challenging the trial court order requiring Highland Park to pay 65% of its receipts to GLWA.

- **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:	55
Contracts drafted or revised:	159
Subpoenas/Information requests received:	7
Subpoenas/Information responded to:	9